TikTok, Teaching Tool in Physical Fitness Activities for freshmen during Covid-19 Pandemic

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Abstract

The World Health Organization (WHO) declared Corona virus disease 2019 to be a Public Health Emergency of International Concern on January 30, 2019. Many countries adopted the strategic approach on how to protect physical and mental health by testing people with symptoms and proper dissemination of accurate health information by health authorities. According to Pan[23], digital technology is essential in the educational landscape amidst the crisis. Educational institutions begin to examine blended learning instructions using social media as an alternative delivery model for distance learning. TikTok is the aesthetic of fun between visual and digital cultures of spaces Harvey[12], the objective of the study was to determine the effects of TikTok on the performance of the students in physical activities during the pandemic. The researchers employed quasi-experiment research using a pretest-posttest design. Participants of the study were 110 freshman students of a public university in the City of Manila during the 1st semester of SY 2020-2021. Based on the study there was a significant difference in the performance between traditional and TikTok ways of learning and teaching and TikTok enhanced the physical fitness activities and grades of the students.

Keywords: TikTok, teaching tool, physical fitness activities, freshmen

INTRODUCTION

The World Health Organization (WHO) declared Corona virus disease 2019 (COVID-19) to be a Public Health Emergency of International Concern on January 30[1] and a pandemic on March 11, 2020 [2]. COVID-19 presents with respiratory symptoms (cough, sneezing, and sore throat), along with fever, fatigue, and myalgia. Spread through droplets, contaminated surfaces, and asymptomatic individuals [3] at the end of April, over 3 million people have been infected globally. Many countries need to adopt the strategic approach on how to protect physical and mental health by testing people with COVID-19 symptoms and proper dissemination of accurate health information about COVID-19 by health authorities.

In April 2020, the global population was under lockdown to slow the spread of Covid-19[4], news stories opinion pieces, and memes circulated in mainstream online media proclaiming the commonly shared experience of staying at home during the Corona virus crisis. It was found out to be boring and increasing one's productivity and creativity to avoid boredom was the solution. Other claims that TikTok was 'the perfect medium for the splintered attention spans of lockdown' [5].

Thailand, Vietnam, Indonesia, and the Philippines, are on the same economic and socio-cultural boat and are now facing the same COVID-19 challenges in education. What comes with these problems, however, is the opportunity to improve the way we think about education and implement permanent and sustainable changes that will enhance the quality of our educational systems. The Philippines needs a clear set of policies and guidelines based on an innovative educational framework. This also requires a careful and sincere assessment of the country's readiness to offer learning programs that demand more than the traditional requirements. As the Philippines ventures into a new mode of learning, several factors need to be considered. This includes context, teacher capacity and situation of the learner, and efficiency of the learning environment. These are, of course, on top of the more obvious issues of internet speed, cost of materials,

and mode of delivery. The best way to move forward is to design a strategy that engages teachers, students, parents, school administrators, and technology-based companies. This collaborative response based on a collective vision is the solution this novel problem warrants [6] .

The emergence of social technologies and created online activities which have both advantages and disadvantages on the social and educational community was discussed. An innovative interaction can take place between the classic and virtual community, however, it is unknown whether the future will struggle and challenge human learning and social relationships in the digital age[7]. The identified challenges with e-learning are accessibility, affordability, flexibility, learning pedagogy, life-long learning, and educational policy. Many countries have issues with an Internet connection and access to digital devices, while, in many developing countries, underprivileged children are unable to afford online learning devices. Therefore, it has become essential for students to engage in offline activities and self-exploratory learning. Lack of parental guidance, especially for young learners, is another challenge, especially if both parents are working. There are practical issues around physical workspaces conducive to different ways of learning. The motivated learners are relatively unaffected in their learning and they only need minimal supervision and guidance, while the less motivated students who are weak in learning face difficulties. Some academically competent learners from economically disadvantaged backgrounds are unable to access and afford online learning. The level of academic performance of the students drops due to reduced contact hours for learners and a lack of consultation with teachers when facing difficulties in learning [8]. Teachers and students should be oriented on the use of different online educational tools they should be encouraged to continue using such online tools to enhance teaching and learning even after the COVID-19 pandemic.

Educational institutions begin to examine BL instructions. "How is blended learning impacting the teaching and learning environment?" That question continues to gain traction as investigators study the complexities of how BL interacts with cognitive, affective, and psychomotor components of student behavior and examine its transformation potential in education. The teaching and learning environment is embracing several innovations and some of these involve the use of technology through blended learning. The introduction of blended learning (a combination of face-to-face and online teaching and learning) initiatives is part of these innovations. Blended learning effectiveness has quite several underlying factors that pose challenges [9]. Kintu, *et.al.* [10].

The Philippines is not new to BL as it is already being offered in some schools and universities in the country, Education Secretary Leonor Briones said, the country's preparedness to implement alternative learning modalities amid the COVID-19 pandemic has no doubt. DepEd is currently working on the transition modality of the teaching and learning process, from the conventional "face to face" to BL Higher education institutions (HEIs), both public and private, have also had to adjust to the new situation where face-to-face interaction and mass gatherings are prohibited. Everyone, from the operations and support service units to administrators and teachers, had already adjusted to work-from-home arrangements.

The social media platforms can be used by teachers as learning tools, as well as look at what advantages and challenges social media platforms provide. The digital technology app Tiktok is one of the fastest-growing social media platforms in the world which presents an alternative version of online sharing. It allows users to create short videos of special movements and dance steps significant to health and fitness which the physical education was anchored with music, filters, and some other features. It was initially launched as Dautin in September 2016 in China but in the following year, it was launched by Byte Dance for markets outside China. "Tiktok and Douyan" both use the same software but maintain separate networks to comply with Chinese censorship restrictions Isaksson, Sarah [11],

TikTok is part of what Harvey[12] calls the 'aggressive architecture' of the wider Internet. TikTok, though, can be seen as an extension to what Natalie Coulter[13] calls the aesthetic of fun between visual culture and to the adult postfeminist digital culture of spaces like Tumbler which are defined by what Kanai[14] terms an 'upbeat, resilient-but-relatable effective framework. Indeed, D'Amelio shares many similarities with the celebrities and protagonists of popular culture that I have examined both in appearance and in her passion and talent for dance. [15]

The teachers and students are exploring the use of digital technology for blended learning, the researchers of this study recommend the adoption of the social media app TikTok as a teaching tool instruction to enhance participation and knowledge of the students particularly in physical fitness activities in physical education.

Statement of the Problem
The objective of the study was to determine the effects of TikTok as a teaching tool for the physical fitness activities of students in tertiary education amidst the COVID-19 pandemic.
Specifically, it sought answers to the following:
1. What are the students' performances in physical fitness activities in the pretest using a traditional way of teaching and learning?

2. What are the students' performances in physical fitness activities in the posttest using the TikTok way of teaching and learning?
3. Is there a significant difference between the pretest and the posttest of the students 'performances in physical fitness activities?

Hypothesis Testing

There is no significant difference between the pretest and the posttest of students' performances in physical fitness activities.
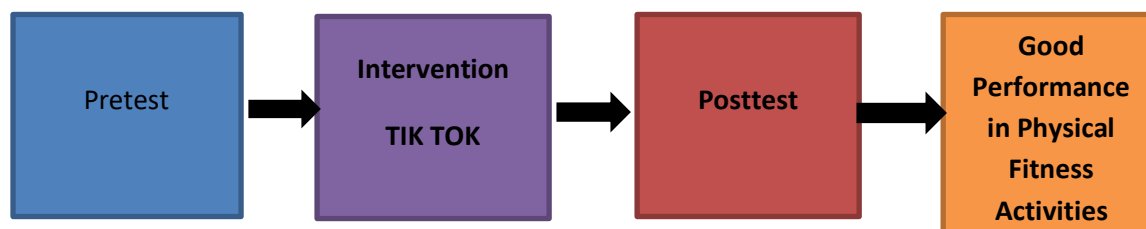
Research Paradigm:

Figure-1: Research Paradigm of the study

Using social media or digital learning can increase the students' engagement in terms of behavioral, affective, and cognitive development [22], digital technology is very important now a day and very evident in the utilization of social media even among youth, Ervin [19], the online learning environments provide freedom and flexibility in the way learners participate in courses and content. Creating engaging online learning environments in which all members of the learning community feel connected is essential to developing enriching online learning experiences for all parties involved in the learning experience [21]. Moreover, the advancement of digital technology in today's educational environment is evident in the utilization of virtual learning like TikTok.

According to Chawinga [16], the inclusion of the social media app TikTok in education encouraged the students to achieve independent learning while enjoying the task activity. It is used as an alternative delivery model for distance learning. The video-sharing social network began in China in 2016 and allows users to create and post short videos in a short period (30 to 60 seconds) with accompanying music and audio-visual effects. This is a helpful medium for instruction for teachers, especially in teaching physical education. [5]

Methodology

The researchers employed the quasi-experimental of a pretest-posttest method of research. Quasi-experiment was conducted to evaluate the effects of TikTok on the physical fitness activity performances of the respondents. Pretest-posttest was used to compare participants and measure the degree of change occurring as a result of treatments or interventions. The students were instructed in traditional or usual ways during the first nine (9) weeks of the semester (Midterm period) and the second remaining nine (9) weeks (Final Term period) with the use of the Social Media Application TikTok. The participants of the study were 110 freshman students of Universidad de Manila, a locally funded university in Manila, during the first semester of SY 2020-2021 in physical fitness activities (PE 1 Movement Enhancement). The data collected were tallied and tabulated with the use of SPSS Version 20. The formula used was the following:

Frequency and Percentage Distribution – this was used to present the academic performance of the student during the traditional way and the intervention of TikTok as a teaching tool in the physical fitness activities of freshmen students in their PE class.

T-test –was used to determine the significant difference in the academic performance of the students using the traditional way and Tiktok.

RESULTS AND DISCUSSION

The results, discussion, and interpretation of data were presented and interpreted in conformity with the sequence of the statement of the problem.

Table 1 Students' performance in the pretest using the traditional way of teaching and learning

Grades	Equivalent grades	F	%
98-100	4.00	1	0.9
95 – 97	3.25	3	2.73
92 – 94	3.50	15	13.64
89 – 91	3.25	17	15.45
86 – 88	3.00	37	33.64
83 – 85	2.75	25	22.73
79 – 82	2.50	12	10.91
Total		**110**	**100%**

Table 1 shows that during the traditional way of teaching and learning only one or 0.9% of the respondents got a grade of 98-100 with an equivalent grade of 4.00 and 12 or 10.91% got the lowest grade of 79-82 with an equivalent grade of 2.50. However, the majority of the students or 33.64% got a grade of 86-88 with an equivalent grade of 3.00.

According to [8] the academic performance of the students dropped due to reduced contact hours for learners and lack of consultation with teachers when facing difficulties in learning. Lack of parental guidance, especially for young learners, is another challenge, as both parents are working. There are practical issues around physical workspaces conducive to different ways of learning. The innately motivated learners are somehow unaffected in their learning as they need minimum supervision and guidance, while the financially deprived students who are weak in learning face difficulties. Some academically competent learners from economically disadvantaged backgrounds are unable to access and afford online learning. Although the popularity of online learning programs is clear, the effectiveness of these learning environments is less apparent. It is difficult to conclude the efficacy of online learning programs throughout because of different variables contributing to different delivery methods of online learning platforms and programs across the globe [17, 18].

Table 2 Students' performance in the posttest using the TikTok way of teaching and learning

Grades	Equivalent grades	F	%
98-100	4.00	25	22.72
95 – 97	3.25	4	3.64
92 – 94	3.50	43	39.09
89 – 91	3.25	24	21.82
86 – 88	3.00	6	5.46
83 – 85	2.75	5	4.54
79 – 82	2.50	3	2.73
Total		**110**	**100%**

Table 2 reveals that after the TikTok way of teaching and learning only three (3) or 2.73% got the lowest grade of 79-82 with an equivalent of 2.50. There were twenty-five (25) students or 22.72 who got the highest grade of 98-100 with an equivalent grade of 4.00. However, the majority of the students forty-three (43) or 39.09% got a grade of 92-94 with an equivalent grade of 3.50.

According to Chawinga [16], the social media app TikTok inclusion in education encouraged the students to achieve independent learning while enjoying the task activity. Social media can be an alternative delivery model for distance learning and TikTok was 'the perfect medium during the lockdown. This is one helpful medium for teachers, especially in teaching physical education [5] the online learning environments provide freedom and flexibility in the way learners participate in courses and content [19], the students are enjoying also the use of it in their self-expression to communicate their thoughts and feelings.

Table 3 Significant difference in the students' performances in the pretest and posttest using traditional way and TikTok (N=110)

Group	Mean	SD	t-value	p-value	Interpretation
Traditional	93.1	3.23	−3.942	0.000	significant
Tiktok	94.8	3.54			

Table 3 states that there is a significant difference in the students' performances using the traditional way and Tik Tok in teaching and learning physical fitness activities. With the t-computed value of **-3.942,** it is evident that the performance of the students was better after the intervention of TikTok.

This supports the theories of Ervin[19] that online learning environments provide freedom and flexibility in the way learners participate in courses and content. Creating engaging online learning environments in which all members of the learning community feel connected is essential to developing enriching online learning experiences for all parties involved in the learning experience[20]. Moreover, the advancement of digital technology in today's educational environment is evident in the utilization of virtual learning like TikTok.[21] That online educational programs break barriers to learning for many students who may not be able to attend classes physically. Pedagogically, the use of TikTok as a supplementary tool for teaching instruction to communicate with the students allowed the continuity of learning away from school classrooms. The utilization of emerging technologies promises a good future by overcoming the traditional barriers in maintaining social contact, support exchange, and information acquisition. TikTok reshapes everyday lives, including work and education. The pedagogical perspective characterizes physical education to have a specific potential in promoting social responsibility and social learning, students learn to play a part in sportive cooperation, communicating appropriately as well as helping to shape typical situations of cooperation and competition responsibly when moving and playing in sports.

CONCLUSIONS

The objective of the study was to determine the effects of TikTok as a teaching tool for the physical fitness activities of students in tertiary education amidst the COVID-19 pandemic. Based on the findings of the study the students' grades were lower during the traditional way of teaching as reflected on their grades in the pretest. Distance learning affects the academic performance of the students due to reduced contact hours for learners and a lack of consultation with teachers when facing difficulties in learning. Lack of parental guidance, especially for young learners, is another challenge, as both parents are working. There are practical issues around physical workspaces conducive to different ways of learning. Although the popularity of online learning programs is clear, the effectiveness of these learning environments is less apparent.

However, after the intervention of TikTok, the students got higher grades in the post-test. The students enjoyed their lessons while doing Tik Tok. Their talents and abilities were developed using TikTok. The social media app TikTok inclusion in education encouraged the students to achieve independent learning while enjoying the task activity. Social media can be an alternative delivery model for distance learning and TikTok was "the perfect medium during the lockdown". The researchers, therefore, conclude that TikTok is a good teaching and learning tool for physical fitness activities in tertiary education.

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