Research Article

Video Self-Modelling as an Interactive Learning Tool in enhancing Student's Engagement in Physical Activity

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ABSTRACT

This study sought to investigate the students' perception on the video self-modelling as an interactive learning tool in enhancing their engagement in physical activity in terms of its acceptability, usability, functionality, frequency and relevance, their level of students' engagement in physical Activity as in their authentic engagement, strategic compliance, intellectual engagement, social engagement and behavioral engagement. Furthermore, this also examine the significant relationship between Video self-modelling As an Interactive Learning Tool and Student Engagement in Physical Activity. The researcher utilized the constructed survey questionnaire to the selected Grade 11 and Grade 12 Senior High School Students of San Isidro National High School, General Luna, Quezon, to gather data needed in the study. The participants were selected through stratifies sampling technique. Furthermore, the mean, the standard deviation and Pearson r were used as statistical tool. It was revealed that the students accept the video-self modeling as it is easy to use, rich in content, and interesting interactive tool in PE subject. Further, through video-self modeling, the students develop positive behavior, improved existing skills, performed well in physical activities, was motivated, understand the lesson, and boost the confidence and self-esteem, Moreover, the video-self modelling as an interactive tool has significant relevance to the students engagement.

Keywords: *Physical Activity, Students Engagement, Video Self-Modelling*

Introduction

In particularly the researcher would like to work on video self-modelling as an interactive learning tool in new normal that also can use in face to face mode of teaching that will enhance the student's engagement in physical activity of the students in PE 11 and PE 12. During pandemic to analyze the situation of the students in giving their output in First Quarter just using a module it result a poor performance. Finding out the students' and concerns from parents, which are substantiated by home visits, are

some of the cited reasons given the module's complexity and its restriction to these situations, The existing modality does not suit students' desired learning preferences, and another they are still undergoing an adjustment process. In addition one of the common reason of the students on having a poor performance in PE11 and PE12 even if its face to face it's because of the shortage of allotted time that they have in PE. In Senior High School, Physical Education subject is only have one hour meetings in one week in total of four meetings in one month.

Stated in the study of E.Ivala and G. Gachago (2012) Teachers need to explore inventive methods of instructing and learning, especially ways that advance learners commitment. To keep providing quality education, the Department of Education offers self-learning modules to assure the attainment of the specified most important learning competencies. This encouraged independence among the students in carrying out the tasks. Modules, however, are constrained to the topics, ideas, and methods for approaching exercises and practical works. Information in modules might be challenging for some learners to understand while the in-person engagement in a classroom setting is not available to distance learner's regular classroom, where they can frequently see and hear the teacher and other students.

There are duties and responsibilities that are unique to teachers. Simple to transition from a face-to-face classroom learning system to an online one as necessary new online learning experiences combined with a learning method that has never been used before. During the introduction of online learning, there were difficulties and issues with inequality in learning (Murphy, 2020).

Crowe (2015) claims that teachers find it challenging to develop a wide range of effective educational materials that fit the needs of each learner while face to face is the required competencies. Teachers have always been seen as having a significant influence on student engagement in discussions about engagement. When teachers lead group activities in the classroom, one of their primary goals is to engage students and help them learn. However

how it will be happened if according to the DepEd interaction with the students is not allowed and time allotment is not enough.

Physical education include subjects that move the body, improve individual health and/or physical skills, reduce stress, and overcome mental limitations. Numerous studies have reported that the interaction between students and educators in online courses is inferior to that in traditional classroom settings, making student engagement difficult. In point of fact, physical education classes assist individuals in developing motor skills, encourage student cooperation, and foster social interactions through group or competitive events. However, because the teacher and the students are physically and spatially separated, online PE classes may not provide the students with these educational benefits. (Yu and Jee, 2020)

In an interview, Senator Pia Cayetano suggested that DepEd officials visit. find creative solutions to ensure that subjects in physical education will continue to learners be instructed in. (Philippines Senate, 2020) Based on an unnumbered MELCs-aligned teacher-made films, audio lessons, and interactive e-materials may enhance the necessary curriculum, according to a DepEd letter issued on July 21, 2020. For each kind of instruction, a learning resource is available.

To the issues that raised above, the difficulties in transition of face to face learning into a self-learning modules and online class which do not attained the required competencies of the physical education subject, the researcher decided to conduct a study on developing interactive learning tool to resolve the issues that arise in the new normal and face to face due to shortage time allotted in subject. The material to be develop aims to determine the effectiveness of video self-modelling in enhancing student engagement in Physical Activity.

Methods
Research Design
The study used descriptive correlational research design in finding answers to the specific problem presented in this research, regarding the main purpose of this research which is to determine the level of engagement of students

in physical activities using video self-modelling. A survey questionnaire was utilized on how students perceived the use of video self-modelling in class, and likewise short interview was conducted to know some issues and challenges that students encounter while they are using the video self-modelling.

Correlational research, according to Euclid Seeram (2021), is a sort of non-experimental study that enables prediction and explanation of the relationship between variables. Although there is a dearth of literature on correlational research, certain texts and articles provide a thorough explanation of this methodology.

The purpose of a correlational research design is to examine the direction and strength of relationships between variables. It is also made to examine how changes in one characteristic or phenomenon relate to changes in another.

Sampling and Ethical Considerations

The researcher used the stratified random sampling techniques in choosing the respondents. This involved in division of group or subgroup to lessen the group. San Isidro National High School – General Luna, Quezon has 397 Senior High School Students. Out of the 397 students, there were 105 learners who were randomly selected in every group to answer the survey question and for the interview.

Research Instruments

The study uses survey questionnaire as its main instruments and Interview to students as a supporting evidence in the gathered data.

Construction of Survey Instruments. To Identify the student's level of engagement in the Physical Education the researcher used a questionnaire that base on the students Acceptability, Usability, Functionality, Frequency, and Relevance in using Video-self modelling. Example questions in Usability. The use of Video-self modelling in the subject increases my motivation towards it? This may measure how student use video-self modelling.

Validation of Constructed Survey Instruments. To ensure the validity and reliability of the survey questionnaire, the researcher requested the expertise of some PE Teachers that has an expertise in the research like the Master Teacher or the Head to validate the questionnaire. The said instrument were suggested to content validation by the adviser and panel members. All the suggestions, recommendations of experts on the fields PE and research were incorporated in the final copy of the questionnaire before its administration.

Data Analysis

The researcher compiled all the result of the survey questionnaire and an interview to data matrix and then forward it to statistician to overview of the data could provide the exact answer to the problem of the study after the approval of the statistician and adviser, the data matrix was send to the statistic center to appropriate statistical treatment of data.

Results and Discussion
Acceptability

The research participants' test results were evaluated and measured using the mean and standard deviation. The result in Table 1 shows how students perceived video self-modelling as an interactive learning tool in physical activity in terms of acceptability of the selected senior high school students. The overall mean (M = 3.38, SD = 0.55) interpreted as Agree (Acceptable) means that generally, the respondents considered the use of video self-modelling as an interactive learning tool in their subject physical education in performing Physical Activity. Table 1 revealed the students Agree (Acceptable) that video-self modelling helps them the students in creating output in PE subject (M = 3.48, SD = 0.50), it is enjoying and exciting to use in performing PE activities (M = 3.40 , SD = 0.58), video-self modeling is a useful engaging tool for the PE subject (M = 3.47, SD = 0.52), it is simple and convenient in learning while collaborating with my classmates (M = 3.37, SD = 0.56), and it is easy to use, rich in content and interesting interactive tool in PE subject (M = 3.29, SD = 0.55). This further indicates that most of the senior high school students of the school under study agree in using video self-modelling as an interactive learning tool in physical activity as indicated in their responses ranges from 3.37 to 3.48 interpreted as to agree (Acceptable).

According to the study of Galatsopoulou, F., Kenterelidou, C., Kotsakis, R., & Matsiola, M. (2022) videos may be included into a variety of active learning situations to increase student engagement and motivation while also fostering a fun, friendly, and welcoming learning atmosphere. Videos are acknowledged as a learning innovation and are thought to be considerably valuable, as mentioned by students in the study's conclusions. They like utilizing them in various learning environments and find them fun and simple to use.

Table 1 Students Perception on Video Self-Modelling as Interactive Learning Tool in Physical Education in terms of Acceptability

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. Video-self modelling is enjoying and exciting to use in performing PE activities	3.40	0.58	Agree
2. Video-self modelling is a useful engaging tool for the PE subject	3.37	0.52	Agree
3. Video-self modelling is simple and convenient in learning while collaborating with my classmates	3.37	0.56	Agree
4. Video-self modelling is easy to use, rich in content and interesting interactive tool in PE subject	3.29	0.55	Agree
5. Video-self modelling is helpful in creating output in PE subject	3.48	0.50	Agree
OVERALL	3.38	0.55	Agree

Usability

Presented in Table 2 how students perceived video self-modelling as interactive learning tool in physical education in terms of Usability. The overall mean (M = 3.26, SD = 0.66) interpreted as agree (used) means that generally, the respondents considered the use of video self-modelling as an interactive learning tool in their subject physical education in performing Physical Activity is very useful. Table 2 showed that students agree (used) that they used video-self modeling because it helps them develop their physical fitness (M = 3.37, SD = 0.65). 3. Students agree (Used) they can easily complete their performance task in PE using video self-modelling (M = 3.28, SD = 0.70). Students agree (used) that they used video-self modeling because it motivates them more to record their self-doing physical activities than a traditional task (M = 3.27, SD = 0.71).

Agree (used) that they can easily understand the topic in PE subject (M = 3.24, SD = 0.55), and students felt very confident creating their own video in performing physical activities (M = 3.13, SD = 0.65). This indicates that students agree (used) that using self-video modelling is useful in the students' lesson and in enhancing the students' engagement in Physical activities.

According to Baudry et al., reported by Trabelsi (2021), the results of their study revealed that, even in the absence of an instructor, both male and female students' gymnastics skills increased after utilizing video-self modeling to self-regulate their learning. This improvement could be attributed to the development of a trustworthy internal reference, which is necessary for a deeper understanding of the skill and tracking progress, as a result of the repeated viewing of VSM, which were continuously accessible throughout learning situations.

Table 2 Students Perception on Video Self-Modelling as Interactive Learning Tool in Physical Education in terms of Usability

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. I use Video Self-modelling because I can easily understand the topic in PE subject	3.24	0.55	Agree
2. I use Video Self-modelling because I felt very confident creating my own video in Performing Physical Activities	3.13	0.65	Agree
3. I use Video Self-modelling because I am able to complete easily my performance task in PE with the use of video self-modelling	3.28	0.70	Agree
4. I use Video Self-modelling because it helps me develops my physical fitness	3.37	0.65	Agree
5. I use Video Self-modelling because it motivates me more to record my myself doing physical activities than a traditional task	3.27	0.71	Agree
OVERALL	3.26	0.66	Agree

Functionality

Demonstrated in Table 3 how the students perceived video self-modelling as interactive learning tool in physical education in terms of functionality. It demonstrated that the overall mean (M = 3.27, SD = 0.59) with verbal interpretation of Agree (Observed) indicates that video self-modeling help the students understand the topic or lesson in Physical Education. It also boosts the students' confidence and entertained them in doing the Physical activities.

In addition, Table 3 demonstrated that students agree (Observed) that video self-modelling as interactive learning tool in physical education in terms of functionality showed that it helps the student to fully understand the topic in Physical Education (M = 3.32, SD = 0.58), video-self modelling is entertaining when students doing Physical Activities (M = 3.29, SD = 0.55), it helps the student in gaining confidence to engage in physical activity in front of a large audience (M = 3.29, SD = 0.63), and video-self modelling is a learning strategy that helps the students to increase their interest towards engaging in physical activities (M = 3.27, SD = 0.62). Students agree (observed) that video-self modeling is giving student maximum attention in different physical activities (M = 3.20, SD = 0.54). This further indicates that video-self modelling is a great help to the students in enhancing the existing skills in Physical activities.

Apparently, Johnson, W. & Hagler, H. (2021), video self-modeling (VSM) is a strength-based intervention technique that enables a student to watch a "movie" of themselves performing a previously difficult behavior or activity. The students can serve as a role model in his or her own film by scaffolding supports and then removing those supports.

Table 3 Students Perception on Video Self-Modelling as Interactive Learning Tool in Physical Education in terms of Functionality

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. Video-self modelling is a learning strategy that helps me to increase my interest towards engaging in physical activities	3.27	0.62	Agree

Indicators	Mean	Std. Deviation	Verbal Interpretation
2. Video-self modelling is giving me maximum attention in different physical activities	3.20	0.54	Agree
3. Video-self modelling is helping me to fully understand the topic in Physical Education	3.32	0.58	Agree
4. Video-self modelling is entertaining when I am doing Physical Activities	3.29	0.55	Agree
5. Video-self modelling is helping me in gaining confidence to engage in physical activity in front of a large audience	3.29	0.63	Agree
OVERALL	**3.27**	**0.59**	**Agree**

Frequency

Table 4 revealed how the students perceived video self-modelling as interactive learning tool in physical education in terms of frequency. It revealed that students agree (practice) they always watch or create a video self-modeling to perform their activities in Physical Education and engage their self in daily physical activities with overall mean of 3.33 and standard deviation of 0.52.

Table 4 revealed that students agree (practice) that students always watch or create a video self-modelling to quickly finish the task in Physical Education (M = 3.35, SD = 0.54), student finish task in PE and create more interactive video (M = 3.33, SD = 0.58), student watch or create a video self-modelling to engage in daily physical activity in PE subject (M = 3.33, SD = 0.49), shoot short video in PE (M = 3.32, SD = 0.51), and students understand the lesson in Physical Education (M = 3.31, SD = 0.49). This further indicates students always watch or create video self-modelling to enhance their engagement in daily physical activity, do a self-regulated learning and finish the task in Physical Education.

In order to enhance their motor skills and knowledge in physical education classes, students can use digital video to view demonstrations, document their learning behaviors, and create portfolios, according to Zhang and Li (2018).

Table 4 Students Perception on Video Self-Modelling as Interactive Learning Tool in Physical Education in terms of Frequency

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. I always watch or create a Video Self-Modelling to understand the lesson in physical education	3.31	0.49	Agree
2. I always watch or create a Video Self-Modelling to finish my task in PE and create more interactive video	3.33	0.58	Agree
3. I always watch or create a Video Self-Modelling to quickly finish the task in Physical Education	3.35	0.54	Agree
4. I always watch or create a Video Self-Modelling to shoot short video in PE	3.32	0.51	Agree
5. I always watch or create a Video Self-Modelling to be engage in daily physical activity in PE subject	3.33	0.49	Agree
OVERALL	**3.33**	**0.52**	**Agree**

Relevance

In Table 5, it showed that students agree (relevant) that students believe that video-self modelling increases their understanding on difference physical activity (M = 3.41, SD = 0.49), improves students confidence in performing physical activities (M = 3.41, SD = 0.51), helps students to be a creative in learning physical activity (M = 3.39, SD = 0.55), serves as an interactive learning tool in PE subject (M = 3.37, SD = 0.52), and satisfies student needs in learning physical activities (M = 3.34, SD = 0.53). This indicates that students believe that having the self-video modelling increases the student's confidence, satisfies need, and help to perform better in Physical Education activities. Table 5 showed how the students perceived video self-modelling as interactive learning tool in Physical Education in terms of relevance. It showed that in overall (M = 3.38, SD = 0.52), students agree (relevant) and believed that video-self modelling increases the students understanding and improve confidence in performing different physical activity.

Based on the study of Rao, K. et al (2015), video-Self Modeling initiatives have also demonstrated promise as a kind of intervention for teaching students social and behavioral skills. For students to practice developmentally appropriate social skills and desired behaviors, creating a VSM project can offer genuine situations. Since the student engages in the desirable behaviors while producing the film, the process of making the movie becomes a positive behavioral support.

Table 5 Students Perception on Video Self-Modeling as Interactive Learning Tool in Physical Education in terms of Relevance

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. I believe that Video-self modelling increases my understanding on different physical activity	3.41	0.49	Agree
2. I believe that Video-self modelling serves as interactive learning tool in PE subject	3.37	0.52	Agree
3. I believe that Video-self modelling satisfies my needs in learning physical activity	3.34	0.53	Agree
4. I believe that Video-self modelling improves my confidence in performing physical activities	3.41	0.51	Agree
5. I believe that Video-self modelling helps me to be a creative in learning physical activity	3.39	0.55	Agree
OVERALL	**3.38**	**0.52**	**Agree**

Authentic Engagement

Table 6 demonstrated the level of students' engagement in physical activity in terms of authentic engagement. Students strongly agree (Highly Engage) that student felt so happy and satisfied when perfectly executed their physical education performance (M = 3.50, SD = 0.56), students felt that physical activity in their PE subject helps them to be confident (M = 3.46, SD = 0.56), student always consider the performance in physical education as a challenge that helps them to improve personal development (M = 3.46, SD = 0.56), students discovered new things about their abilities through their participation in physical activity (M = 3.44, SD = 0.55), and students enjoy engaging in various physical activities since they help me stay healthy and fit (M = 3.42, SD = 0.55).

The overall mean and standard deviation (M = 3.46, SD = 0.55) means in terms of authentic engagement students agree (engage) that they were happy and satisfied in doing the performance in Physical Education and leads them to perfectly execute the task and challenges given to them. In addition, students discovered new things and increases their self-confidence.

According to the study of Li, L et al (2022), A post-training survey revealed that the participants' preference for using their own voice as instructional material resulted in a feeling of success and satisfaction.

Table 6 Level of Students' Engagement in Physical Activity in terms of Authentic Engagement

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. For me as student I felt so happy and satisfied when I perfectly executed my physical education performance	3.50	0.56	Strongly Agree
2. For me as student I felt that physical activity in our PE subject helps me to be confidence	3.46	0.56	Agree
3. For me as student I enjoy engaging in various physical activities since they help me stay healthy and fit	3.42	0.55	Agree
4. For me as student I always consider my performance in physical education as a challenge that helps me to improve personal development	3.46	0.56	Agree
5. For me as student through my participation in physical activity, I discovered new things about my abilities	3.44	0.55	Agree
OVERALL	**3.46**	**0.55**	**Agree**

Strategic Compliance

Table 7 showed the level of students' engagement in physical activity in terms of strategic compliance. It showed that students agree (engage) that they always do their task because grades were involved so they participate in PE performances (M = 3.39, SD = 0.58). Students agree (engage) that they do their task because due to their teacher's appreciation so they give all their effort when accomplishing tasks in PE subject (M = 3.37, SD = 0.54), and when it comes to getting the best scores, students actually excel in physical education (M = 3.29, SD = 0.68). However, students agree (engage) that they do their task because they always give their best effort to please their classmates (M = 3.16, SD = 0.72), and student always excel in PE performance because of being popular (M = 2.97, SD = 0.81).

The overall mean and standard deviation (M = 3.24, SD = 0.69) means that students agree (engage) that in terms of strategic compliance students always do their tasks because of involvement of grades, teacher's appreciation to the effort, to get best scores, and to please their classmates.

Participants in Bolger's research (2017) believed that most of their abilities had improved as a consequence of using video self-modelling approaches, which increased their degree of reflective practice and increased their sense of self-efficacy in terms of their professional competence.

Intellectual Engagement

Table 8 presented the level of students' engagement in physical activity in terms of intellectual engagement. It showed that students agree (engage) that they enjoy performing task because when they were performing physical activities, they try to connect what they had learn with their own experiences (M = 3.45, SD = 0.50), students enjoy performing task because when they engage in physical activity they make an effort to understand its significance (M = 3.42, SD = 0.50). In addition, students agree (engage) that even though performing is not students passion, they know it

helps them to improve their ability in performing task (M = 3.40, SD = 0,55), when students engage in certain activities, they consider how they might be applicable in the real world (M = 3.38, SD = 0.51), and students enjoy performing task because they constantly consider different methods to improve their abilities while they were engage in physical activity (M = 3.36, SD = 0.50).

Table 9 showed that in terms of intellectual engagement students agree (engage) that they enjoy performing tasks In Physical activities with an overall mean of 3.40 with standard de-

viation of 0.51. This indicates that students' intellectual engagement improves the skills of the students in physical activities using the video self-modelling.

Mancuso, E., Haggard, M., LaBouff, & Rowatt, W. (2020) found that a range of qualities related to knowledge acquisition, including as reflective thinking, the desire for cognition, intellectual engagement, curiosity, intellectual openness, and open-minded thinking, were correlated with intellectual humility. IH was also linked to a decrease in social vigilantism, which could encourage group learning.

Table 7 Level of Students' Engagement in Physical Activity in terms of Strategic Compliance

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. I'll always do my task because when it comes to getting the best scores, I actually excel in physical education	3.29	0.68	Agree
2. I'll always do my task because I always excel in PE performance because of being popular	2.97	0.81	Agree
3. I'll always do my task because I always give my best effort to please my classmates	3.16	0.72	Agree
4. I'll always do my task because since grades are involved, I participate in PE performances	3.39	0.58	Agree
5. I'll always do my task because due to my teacher's appreciation, I give all my efforts when accomplishing tasks in PE subject	3.37	0.54	Agree
OVERALL	**3.24**	**0.69**	**Agree**

Table 8 Level of Students' Engagement in Physical Activity in terms of Intellectual Engagement

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. I enjoy performing task because when I am performing physical activities, I try to connect what I am learning with my own experiences	3.45	0.50	Agree
2. I enjoy performing task because when I engage in physical activity, I make an effort to understand its significance	3.42	0.50	Agree
3. I enjoy performing task because I constantly consider different methods to improve my abilities while I engage in physical activity	3.36	0.50	Agree
4. I enjoy performing task because when I engage in certain activities, I consider how they might be applicable in the real world	3.38	0.51	Agree

Indicators	Mean	Std. Deviation	Verbal Interpretation
5. I enjoy performing task because even though performing is not my passion, I know it helps me to improve my ability in performing task	3.40	0.55	Agree
OVERALL	**3.40**	**0.51**	**Agree**

Social Engagement

Table 9 revealed the level of students' engagement in physical activity in terms of social engagement. It revealed that students agree (engage) that performance is much better because physical activity is more enjoyable for students with their group companions (M = 3.40, SD = 0.58), with peer tutor helped me to be better in physical activities (M = 3.35, SD = 0.55), with the assistance of my classmates, I can handle some physical exercises with ease (M = 3.33, SD = 0.53), it's more interesting in engaging in physical activity with the assistance of my peers (M = 3.32, SD = 0.58), and when physical activity is grouped, I quickly picked up the steps in our performance task (M = 3.29, SD = 0.53).

The overall mean of 3.34 with standard deviation of 0.56 indicates that in terms of social engagement, the level of students' engagement is agree (engage). This further indicates that the students' performance become better with the help of peers, groupmates, and colleague. In addition, with the assistance of others the performance in physical activity becomes more enjoyable.

The author Ewens, K. (2016) defines video self-modeling (VSM) as a method for teaching a specific skill using technology. VSM entails videotaping the student practicing the skill, with adult and peer prompting as necessary.

Table 9 Level of Students' Engagement in Physical Activity in terms of Social Engagement

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. Performance is much better because with the assistance of my classmates, I can handle some physical exercises with ease	3.33	0.53	Agree
2. Performance is much better because when physical activity is grouped, I quickly picked up the steps in our performance task	3.29	0.53	Agree
3. Performance is much better because with peer tutor helped me to be better in physical activities	3.35	0.55	Agree
4. Performance is much better because It's more interesting in engaging in physical activity with the assistance of my peers	3.32	0.58	Agree
5. Performance is much better because physical activity is more enjoyable for me with my group companions	3.40	0.58	Agree
OVERALL	**3.34**	**0.56**	**Agree**

Behavioral Engagement

Table 10 showed the level students' engagement in physical activity in terms of behavioral engagement. It showed that the students agree (engage) that as a student they actively participate in providing physical activities in their school (M = 3.29, SD = 0.60). Students agree (engage) that as a student they were an active participant of school activities such as dance, sports, and etc. (M = 3.23, SD = 0.61), as

a student they always arrive early for several physical activities in school (M = 3.22, SD = 0.64), students consistently show up to various school events, especially if they benefit their own wellness (M = 3.20, SD = 0.70), and students provide their services as a volunteer for school events like sports and different physical activities (M = 3.03, SD = 0.73).

In terms of behavioral engagement, the level of students' engagement in physical activity is agree (engage) having the overall mean of 3.19 with standard deviation of 0.66. This indicates that the students' active participation increases for the benefit of their own wellness and for the services they rendered in the school.

In the study of Xu, B., Chen, N.S., & Chen, G. (2020) found that students with teacher facilitation showed significantly higher behavioral and cognitive engagement.

Based on the study of Rao, K. et al (2015), video-Self Modeling initiatives have also demonstrated promise as a kind of intervention for teaching students social and behavioral skills. For students to practice developmentally appropriate social skills and desired behaviors, creating a VSM project can offer genuine situations. Since the student engages in the desirable behaviors while producing the film, the process of making the movie becomes a positive behavioral support.

Table 10 Level of Students' Engagement in Physical Activity in terms of Behavioral Engagement

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. As a student I am an active participant of school activities such as dance, sports and etc.	3.23	0.61	Agree
2. As a student I actively participate in providing physical activities in my school	3.29	0.60	Agree
3. As a student I provide my services as a volunteer for school events like sports and different physical activities	3.03	0.73	Agree
4. As a student I consistently show up to various school events, especially if they benefit my own wellness	3.20	0.70	Agree
5. As a student I always arrive early for several physical activities in school	3.22	0.64	Agree
OVERALL	**3.19**	**0.66**	**Agree**

Relationship between Video Self-Modeling as an Interactive Tool and Students Engagement in Physical Activity

Table 11 showed the relationship between video self-modelling as an interactive tool and student engagement in Physical Activity. It showed that the variables Acceptability and Authentic Engagement were significantly and moderately positively correlated (r = 0.508, n = 105, p < 0.01). The variables acceptability and strategic compliance (r = 0.545, n = 105, p < 0.01), acceptability and intellectual engagement (r = 0.544, n = 105, p < 0.01), acceptability and social engagement (r = 0.435, n = 105,

p < 0.01), and acceptability and behavioral engagement (r = 0.531, n = 105, p < 0.01) were all significant and moderately positively correlated. This means that as the level of acceptability increases, the student's engagement in physical activity also increases.

In terms of usability and students engagement, the variables authentic engagement (r = 0.561, n = 105, p < 0.01), strategic compliance (r = 0.579, n = 105, p < 0.01), intellectual engagement (r = 0.435, n = 105, p < 0.01), social engagement (r = 0.372, n = 105, p < 0.01), and behavioral engagement (r = 0.505, n = 105, p < 0.01) were all significant and moderately

positively correlated at 0.01 level of significance. This means that as the usability of video self-modelling increases, the student's engagement in physical activity increases.

From the functionality of the student and students' engagement, authentic engagement (r = 0.528, n = 105, p < 0.01), strategic compliance (r = 0.500, n = 105, p < 0.01), intellectual engagement (r = 0.554, n = 105, p < 0.01), social engagement (r = 0.452, n = 105, p < 0.01), and behavioral engagement (r = 0.473, n = 105, p < 0.01) were all significant and moderately positively correlated at 0.01 level of significance. This means that the perspective of the students in video self-modelling as an interactive tool increase, the student's engagement also increases.

In terms of frequency and the students' engagement, authentic engagement (r = 0.633, n = 105, p < 0.01), strategic compliance (r = 0.432, n = 105, p < 0.01), intellectual engagement (r = 0.631, n = 105, p < 0.01), social engagement (r = 0.517, n = 105, p < 0.01), and behavioral engagement (r = 0.542, n = 105, p < 0.01) were all significant and moderately positively correlated at 0.01 level of significance.

In the variables students' relevance on video self-modelling and students' engagement in physical activity, authentic engagement (r = 0.643, n = 105, p < 0.01), strategic compliance (r = 0.517, n = 105, p < 0.01), intellectual engagement (r = 0.693, n = 105, p < 0.01), social engagement (r = 0.568, n = 105, p < 0.01), and behavioral engagement (r = 0.515, n = 105, p < 0.01) were all significant and moderately positively correlated at 0.01 level of significance. This indicates that students' perception increase with the help of video self-modelling, the students' engagement in physical activities also increase.

Table 11 showed the indication that there's a significant relationship between Video Self-Modelling as an Interactive Tool and Student Engagement in Physical Activity. The application of video-self modelling helps the students' engagement in physical activity to be more enhance and develop.

According to Carmichael, M., Reid, A., & Karpicke, J. (n.d), the introduction of video into a course framework may affect students' inclinations to interact with the course contents. Students claim to use video in focus groups and surveys to enhance their learning and prepare for tests. Video is undoubtedly a more effective medium than textual materials for conveying practical information since it allows for visual "how-to" demonstrations. The display of real knowledge can also act as a trigger in problem-based learning, as was already indicated. These films provided examples of how to use principles to address issues in molecular biology. It should be mentioned that footage was made available along with.

Table 11 Relationship between Video Self-Modeling as an Interactive Tool and Students Engagement

VIDEO SELF-MODELLING	STUDENTS ENGAGEMENT				
	Authentic Engagement	Strategic Compliance	Intellectual Engagement	Social Engagement	Behavioral Engagement
Acceptability	.508**	.545**	.544**	.435**	.531**
Usability	.561**	.579**	.435**	.372**	.505**
Perspective	.528**	.500**	.554**	.452**	.473**
Frequency	.633**	.432**	.631**	.517**	.542**
Perception	.643**	.517**	.693**	.568**	.515**

Conclusion

There is significant relationship between video self-modelling as an interactive Learning Tool and Student Engagement. Thus, the null hypothesis was rejected.

Recommendations

The study revealed that video-self modeling as interactive tool and students' engagement in physical activity is significant and moderately

positively correlated. Thus, the following recommendations are hereby presented:

1. The school heads are suggested to encourage their teacher to use and always equip video-self modelling in their physical education subject especially in their different physical activities in developing students' engagement in physical activity.
2. The teacher are also recommended to motivate their students to enhance their skills in creating video self-modelling.
3. The Physical Education teachers are also suggested to be guided current research findings/result in involving the students in using video self-modelling in physical education subject to maintain the students engagement in different physical activity even it has a short period of time and also students boosts their self-confidence in performing and self-esteem were maintained.

Acknowledgment

References

Bellini & Akullian., Graetz, Mastropieri, & Scruggs., Sigafoos, O'Reilly, & de la Cruz, (2007): Evaluating the Effectiveness of Video Instruction on Social and Communication Skills Training for Children With Autism Spectrum Disorders: A Review of the Literature Retrieved from: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.869.8343&rep=rep1&type=pdf

Bolger, J. (2017). Video self-modelling and its impact on the development of communication skills within social work education. Journal of Social Work, 14(2), 196–212.

Carmichael, M., Reid, A., & Karpicke, J. (n.d). Assessing the Impact of Educational Video on Student Engagement, Critical Thinking and Learning: The Current State of Play. The Sage Publishing

Chester, Buntine, Hammond, & Atkinson, (2011) Evaluation of Online Video Usage and Learning Satisfaction: An Extension of the Technology Acceptance Model. https://www.erudit.org/en/journals/irrodl/1900-v1-n1-irrodl03927/1050881ar.pdf

Coman et al., (2020) Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' PerspectiveDowrick, (1999); Embregts, (2002); et al. A review of self modeling and related interventions. https://d1wqtxts1xzle7.cloudfront.net/56695929/s0962-1849_2899_2980009-220180530-4017-2fbmm9-with-cover-page-v2.pdf

DepEd (2021). Guidelines on the Use of the Most Essential Learning Competencies. https://commons.deped.gov.ph/MELCS-Guidelines.pdf.

E. Ivala & D. Gachago (2012): Social media for enhancing student engagement:The use of Facebook and blogs at a University of Technology. https://journals.co.za/doi/pdf/10.10520/EJC123970 Retrieved from:

https://www.mdpi.com/2071-1050/12/24/1036

Ewens, K. (2016). Exploring the Effects of Video Self-Modeling as an Intervention for Social Interactions in Young Children with Disabilities. St. Cloud State University

Février (2011) Acceptance and acceptability criteria: a literature review. https://www.researchgate.net/publication/322681919_Acceptance_and_acceptability_criteria_a_literature_review

Galatsopoulou, F., Kenterelidou, C., Kotsakis, R., & Matsiola, M. (2022). Examining Students' Perceptions towards Video-Based and Video-Assisted Active Learning Scenarios in Journalism and Communication Courses. Education Science.

Ghadirian, Ayub, and Salehi (2017) Students' perceptions on the implementation of elearning: Helpful or unhelpful?. http://etheses.iainkediri.ac.id/2185/3/932207916%20bab2.pdf