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Research Article

Hataw Kompre: A Holistic Approach in Improving Motivation and Academic Performance Among Learners of Health Optimizing Physical Education 1 and 3

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Abstract

Purpose: This research aimed to assess the effectiveness of HATAW KOMPRE, a dance culminating activity, as a holistic approach in improving motivation and academic performance among learners of Health Optimizing Physical Education (HOPE) 1 and 3.

Design/methodology/approach: A quasi-experimental design was employed, involving 150 senior high school students from Tanza National Comprehensive High School. The study utilized pretests and posttests in HOPE 1 and 3, a survey questionnaire measuring task-oriented motivational climate and autonomous motivation and statistical analyses such as mean, standard deviation, and t-test.

Findings: Prior to HATAW KOMPRE, learners exhibited low academic performance (mean pretest scores: HOPE 1=23.55, HOPE 3=22.03). After the intervention, significant improvement was observed (mean posttest scores: HOPE 1=35.44, HOPE 3=36.07). The learners reported a high level of task-oriented motivational climate (mean=3.26) and autonomous motivation (mean=3.38) during the activity.

Research limitations/implications: Limitations include a single-group design, and the study focused on one culminating activity. Implications suggest the need for further investigation into varied interventions in health optimizing physical education.

Originality/value: This study innovatively applied HATAW KOMPRE as a holistic approach in HOPE, revealing its positive impact on motivation for cognition and academic performance, thus contributing to the scant literature on such interventions.

Keywords: Health optimizing physical education, HATAW KOMPRE, Motivation, Cognition, Dance activity

INTRODUCTION

Academic success is recognized to be strongly influenced by achievement motivation, which energizes and guides behavior toward achievement (Claver F, et al., 2020). Goals, task values, motivational beliefs, and achievement motives are only a few of the many diverse structures that make up achievement motivation, which is not a single construct in and of itself (Ferriz R, et al., 2016).

To establish a suitable classroom environment that permits the completion of scheduled activities, effective teaching tactics are needed (Gil-Arias A, et al., 2020). In actuality, educators that encourage a learning environment where students actively participate in its creation will succeed in meeting the learning objectives (Vlachopoulos SP, et al., 2011). On the other hand, teachers who do not support an environment in the classroom where students are engaged, independent, and interactive will find it harder to accomplish the intended learning objectives (Granero-Gallegos A, et al., 2020). In terms of the teacher's role in promoting disciplined behavior, effective teaching techniques and attitudes lessen disciplinary issues. Teaching techniques for physical education improve group management and offer teachers more time to reprimand pupils and give feedback, which boosts student engagement, autonomy, and effectiveness in the classroom and as a

result, academic accomplishment (Jian Z, 2022). Previous studies have highlighted the relevance of a task-oriented motivational climate, as well as the impact of basic psychological needs and autonomous motivation in generating beneficial student outcomes in physical education (Castuera RJ, et al., 2015). However, there is still more empirical validation yet to be proven and studied, hence the conduct of this research (Kong Y, 2021).

This study explored HATAW KOMPRE as a dance culminating activity that will serve as a holistic approach to improve the learners' motivation to actively participate in the achievement of the learning outcomes in health optimizing physical education 1 and 3 (Noltemeyer A, et al., 2019).

Instead of basing the approaches used inside the classroom on intuitions and postulations, this study developed successful interventions by weighing the advantages and disadvantages of HATAW KOMPRE while also investigating its current implementations and comprehending its theoretical justification (Nunez JL, et al., 2019).

MATERIALS AND METHODS

Action research questions

Generally, this study answered the question: How effective is HATAW KOMPRE as a holistic approach in improving motivation for cognition among learners of health optimizing physical education 1 and 3?

Specifically, the study also answered the following:

- What is the test result of the learners before the implementation of HATAW KOMPRE?
- What is the test result of the learners after the implementation of HATAW KOMPRE?
- What is the level of task-oriented motivational climate among learners of Health Optimizing Physical Education 1 and 3 during the implementation of HATAW KOMPRE?
- What is the level of autonomous motivation of learners in health optimizing physical education 1 and 3 during the implementation of HATAW KOMPRE?
- Is there a significant difference between the pretest and posttest scores of the learners after the implementation of HATAW KOMPRE?

Hypothesis

- There is no significant difference in the pretest and posttest scores in health optimizing physical education 1 after the implementation of HATAW KOMPRE (Papaioannou A, 1994).
- There is no significant difference in the pretest and posttest scores in health optimizing physical education 3 after the implementation of HATAW KOMPRE (Steinmayr R, et al., 2019).

Proposed innovation, intervention and strategy

The researchers implemented HATAW KOMPRE as a culminating activity of health optimizing physical education 1 and 3 among senior high school learners of Tanza National Comprehensive High School (Wade L, et al., 2020). This culminating activity was in the form of a dance competition among different sections of each grades 11 and 12.

HATAW KOMPRE was conducted to meet the most essential learning competencies in Health Optimizing Physical Education such as: Participating in an organized event that addresses health/fitness issues and concerns; and organizing a fitness event for a target health issue or concern.

Moreover, this culminating activity also achieved the following:

- Recognize the best-performing sections in creating routines in aerobics, cheer dance, ballroom, K-pop, and hip-hop;
- Recognize the best-performing sections in executing Galaw Pilipinas; and
- Promote sportsmanship and camaraderie among students of different academic strands.

Action research methods

Participants and/or other sources of data and information:

Select 150 senior high school students of Tanza national comprehensive high school in Daang Amaya II, Tanza, Cavite served as participants in this study.

Purposive convenience sampling was used to obtain the participants of this study. This sampling procedure is a combination of purposive sampling and convenience sampling.

Purposive sampling involves determining the target participants based on their knowledge of the desired information of the researchers. Convenience sampling, on the other hand, involves the collection of data from a sample that is conveniently available to provide it.

The researchers then determined that the sampling population of this study will be 75 participants from each grade level, with 25 participants each from the science, technology, engineering, and mathematics strand, the accounting, business, and management strand, and the Humanities and social sciences strand for a total of 150 participants.

All included participants in this study were learners who took health optimizing physical education 1 and 3 during the first semester of SY 2021-2022.

Data gathering methods

Various instruments: This study on HATAW KOMPRE as a holistic approach in improving motivation for cognition among learners of health optimizing physical education 1 and 3 utilized the following research instruments in order to obtain the necessary data.

Pretests on health optimizing physical education 1 and 3: The pretests used in this study shall consist of 40

questions that would assess the prior knowledge of the participants during the second quarter of health optimizing physical education 1 and 3.

Posttests on health optimizing physical education 1 and 3: The posttests used in this study shall consist of 40 questions that would assess whether the academic performance of the of the participants improved during the second quarter of health optimizing physical education 1 and 3 after the implementation of HATAW KOMPRE.

Survey questionnaire

The survey questionnaire used in this study shall consist of two parts.

The first part was used to determine the level of task-

$$\bar{X} = \frac{\sum fx}{n}$$

oriented motivational climate among learners of health optimizing physical education 1 and 3 during the implementation of HATAW KOMPRE. It consists of 13 items lifted from the learning and performance orientation in PE classes questionnaire as in previous

$$SD = \frac{n\sum x^2 - (\sum x)^2}{n(n-1)}$$

research.

The second part was used to determine level of autonomous motivation of learners in health optimizing physical education 1 and 3 during the implementation of HATAW KOMPRE. This part consists of eight items from the revised perceived locus of causality in physical education scale as in previous research. Autonomous motivation will be calculated through intrinsic regulation and identified regulation.

Procedures for data collection: In gathering the primary data, pretests were first administered to the select 150 senior high school learners who served as participants in this study. The pretests were administered prior the implementation of HATAW KOMPRE.

Afterwards, the HATAW KOMPRE culminating activity took place where each section in grade 11 and 12 shall perform in a dance competition.

A posttest was administered to the participants to know if there is a significant effect in their scores after the implementation of HATAW KOMPRE.

$$t = \frac{m - \mu}{s/\sqrt{n}}$$

The survey questionnaires were also administered to the participants in this study.

The collected data was then be evaluated to determine the effectiveness of HATAW KOMPRE as a holistic approach in improving motivation for cognition among learners of health optimizing physical education 1 and 3.

Data analysis plan

The researchers used different statistical treatments in this study to analyze the data that was gathered.

Frequency and percentage was used to determine the profile of the respondents in terms of age, sex, and academic strand. The formula is as follows:

Percentage

$\%=\frac{f}{N} \times 100$

Where:

%=percentage f=frequency

To measure the average of the pretest and posttest scores of the participants, spread of the posttest scores, as well as their level of task-oriented motivational climate, and level of autonomous motivation during the implementation of HATAW KOMPRE, mean and standard deviation were used. The formulas are as follows:

Mean

Where:

f=frequency of observation

$\bar{X}$=weight

n=total observation

Standard deviation

Where:

SD=standard deviation

n=sample size

x=variable

Interval of the mean level of the level of task-oriented motivational climate, and level of autonomous motivation during the implementation of HATAW KOMPRE, were interpreted as follows:

3.50-4.00	Strongly agree
2.50-3.49	Agree
1.50-2.49	Disagree
1.00-1.49	Strongly disagree

Moreover, T-test was used to identify the difference between the pretest and posttest scores of the participants. The formula is as follows:

T-test

Where:

t=Student's t-test

m=mean

μ=theoretical value

s=standard deviation

n=variable set size

This study also made use of the quasi-experimental research design, particularly the one- group pretest-posttest research design. In this study, both pretest and posttest were given to the group of students selected by the researchers before and after the implementation of HATAW KOMPRE as their culminating activity in health optimizing physical education 1 and 3. The pretest and posttest scores were then being compared to determine the impact of said culminating activity in the improvement of the learners' motivation for cognition in the said subject.

Descriptive research is a study that defines the 'what is' description of the phenomena. This involves recording, analysis, and interpretation of the situation under study. It focuses on present conditions or the behavior of the subject in the present.

Moreover, it focuses on the conditions of the existing relationships, prevailing practices, beliefs and processes, developing trends as well as effects. Studies, changes, and progress of conditions at different periods of time may be necessary and may be noted for it might be valuable to existing studies.

The descriptive method was applicable in this research since it will focus on the effectiveness of HATAW KOMPRE as a holistic approach in improving motivation for cognition among learners of health optimizing physical education 1 and 3. The survey questionnaire measured the level of task-oriented motivational climate, level of basic psychological needs, and level of autonomous motivation of learners in health optimizing physical education 1 and 3 during the implementation of HATAW KOMPRE.

RESULTS AND DISCUSSION

This section presents the study's findings as well as the analysis and interpretation of data from the data gathering **(Table 1)**.

Test result of the learners before the implementation of HATAW KOMPRE.

Table 1. Mean and standard deviation of the students' test scores in the pretest.

Variable	Mean	Standard deviation	N
Pretest in HOPE 1	23.55	3.48	75
Pretest in HOPE 3	22.03	4.31	75

As shown in Table 1, the mean scores of 23.55 for HOPE 1 and 22.03 for HOPE 3 indicate the low academic performance of learners. The standard deviation of 3.48 for HOPE 1 and 4.31 for HOPE 3 points toward the homogeneity of their scores. This implies that before the implementation of the study, it was noted that the academic performance in health optimizing physical education 1 and 3 among senior high school learners need improvement.

Table 2. Mean and standard deviation of the students' test scores in the posttest.

Variable	Mean	Standard deviation	N
Posttest in HOPE 1	35.44	2.49	75
Posttest in HOPE 3	36.07	1.72	75

As shown in **Table 2**, the mean scores of 35.44 for HOPE 1 and 36.07 for HOPE 3 indicate the high academic performance of learners. The standard deviation of 2.49 for HOPE 1 and 1.72 for HOPE 3 still point toward the homogeneity of their scores. This implies that after the implementation of HATAW KOMPRE, it was noted that the academic performance in health optimizing physical education 1 and 3 among senior high school learners has improved significantly.

Table 3. Level of task-oriented motivational climate.

Indicators	Weighted mean	Interpretation
1. I try to outperform my other classmates/schoolmates	3.32	Agree
2. I try to gain rewards by outperforming others	3.12	Agree
3. I feel most satisfied when I manage to outperform others	3.28	Agree
4. I feel it is most important to demonstrate that I am better in this subject than others	3.17	Agree
5. I think that successful students are those who perform skills better than my classmates	2.78	Agree
6. I worry about failure in performing skills because it would lead to the disapproval of others	3.23	Agree

7. I worry about failure in performing skills because it would not look good in the eyes of my PE teacher	2.59	Agree
8. I worry about performing skills I am not particularly good at	2.89	Agree
9. I feel very bad when they make mistakes while performing skills	3.43	Agree
10. I feel bad when I cannot perform a skill as well as others	3.3	Agree
11. I feel satisfied when I learn something new	3.68	Strongly agree
12. I enjoy trying my best to learn a skill	3.73	Strongly agree
13. I learn something enjoyable	3.82	Strongly agree
Total	3.26	Agree
Note: 1.00-1.49 strongly disagree, 1.50-2.49 disagree, 2.50-3.49 agree, 3.50-4.00 strongly agree		

Table 3 shows level of task-oriented motivational climate among learners during the implementation of HATAW KOMPRE. The overall weighted mean of 3.26 with an interpretation of "agree" indicates a high level of task-oriented motivational climate among learners during the implementation of HATAW KOMPRE.

Table 4. Level of autonomous motivation.

Indicators	Weighted mean	Interpretation
1. I take part in PE because it is important to me to do well in PE	3.39	Agree
2. I take part in PE because it is important to me to improve in the drills we do in PE	2.61	Agree
3. I take part in PE because it is important to me to be good in the sports we practice in PE.	2.7	Agree
4. I take part in PE because it is important to me to try in PE	3.48	Agree
5. I take part in PE because PE is enjoyable	3.69	Strongly Agree
6. I take part in PE because PE is exciting	3.55	Strongly Agree
7. I take part in PE because I enjoy learning new skills	3.78	Strongly Agree
8. I take part in PE because PE is fun	3.86	Strongly Agree
Total	3.38	Agree
Note: 1.00-1.49 strongly disagree, 1.50- 2.49 disagree, 2.50- 3.49 agree, 3.50- 4.00 strongly agree		

Table 4 shows level of autonomous motivation among learners during the implementation of HATAW KOMPRE. The overall weighted mean of 3.38 with an interpretation of "agree" indicates a high level of autonomous motivation climate among learners during the implementation of HATAW KOMPRE. The results demonstrate some initial evidence that employment of HATAW KOMPRE can encourage students to assume responsibilities and make independent decisions, which leads to them reporting greater enjoyment and perceived competence when compared to physical education lessons delivered *via* a traditional direct instruction model. The findings are similar with the study of Gil-Arias, et al.

Table 5. T-test results on pretest and posttest scores for health optimizing physical education 1.

	Mean	Standard deviation	Level of significance	Value of t	p value
Pretest	23.55	3.48	0.05	-68.53	1.05×10^{-6}
Posttest	35.44	2.49			

Table 5 reveals the t-test results on pretest and posttest scores for Health Optimizing Physical Education 1 after the implementation of HATAW KOMPRE. The t value of -68.53 indicates that there is significant difference among the pretest and posttest scores. Likewise, the p value of 1.05×10^{-6} signifies rejection of the null hypothesis.

Table 6. T-test results on pretest and posttest scores for health optimizing physical education 3.

	Mean	Standard deviation	Level of significance	Value of t	p value
Pretest	22.03	4.31	0.05	-43.62	1.5×10^{-5}
Posttest	36.07	1.72			

Table 6 reveals the t-test results on pretest and posttest scores for health optimizing physical education 3 after the implementation of HATAW KOMPRE. The t value of -43.62 indicates that there is significant difference among the pretest and posttest scores. Likewise, the p value of 1.05×10^{-5} signifies rejection of the null hypothesis.

Based on the findings of the study, the following implications were drawn:

- The total mean of learners' pretest scores is 22.79 over 40, with a percentage of 56.98%. This means that the learners' percentage of scores did not meet the passing score percentage of at least 60%, resulting in a grade of 75%.
- The total mean of learners' scores in the posttest is 35.76 over 40, which has a percentage of 89.39%. This means that the percentage of the scores of the learners goes beyond the passing score percentage of at least 60%, which is transmuted grade of 75%.
- The findings provide preliminary indications that the utilization of HATAW KOMPRE is associated with an increased inclination of students to take on responsibilities and make independent decisions. Consequently, student's express higher levels of enjoyment and perceived competence in comparison to conventional physical education lessons delivered through a traditional direct instruction model.
- There is a significant difference between the pretest and posttest scores of the learners before and after the implementation of HATAW KOMPRE. Therefore, it concludes that the implementation of this activity conducted by the researcher is effective and significantly impacts the learning progress of learners in health optimizing physical education 1 and 3.

RECOMMENDATIONS

Based on the conclusion of the study, the following recommendations are made:

- Other schools or educators teaching health optimizing physical education in grade 12 can utilize the same culminating activity as HATAW KOMPRE to create a holistic approach in improving motivation for cognition among learners of HOPE 1 and 3.
- More research can be done to determine the effectiveness of the culminating activity.
- Teachers can be trained on how to create and use the similar culminating activities to meet the needs of their students and help them perform better in school.
- Future research can focus on creating specific programs, activities, and/or learning materials per lesson then analyze its effectiveness in improving the motivation for cognition of health optimizing physical education learners **(Tables 7 and 8)**.

Table 7. Action research work plan and timelines.

Activities	March	April	May	June	July	August
1. Preparation of research questionnaire						
2. Testing of validity and reliability of the questionnaire						
3. Collection of data						
4. Conduct of data analysis						
5. Draft final paper for submission						
6. Submit final paper						

Table 8. Plans for dissemination and utilization.

Dissemination activities	September	October	November	December	January	February
1. SLAC						
2. District LAC						
3. Research conference						

CONCLUSION

The implementation of HATAW KOMPRE as a dance culminating activity in health optimizing physical education (HOPE) 1 and 3 demonstrated a significant improvement in both academic performance and student motivation. Pretest results showed low initial academic performance, but posttest scores revealed a marked increase, indicating that HATAW KOMPRE positively influenced learners' cognition and engagement. Additionally, the activity fostered a task-oriented motivational climate and high levels of autonomous motivation, as reflected in the participants' enjoyment, satisfaction and effort in physical education tasks.

The results suggest that HATAW KOMPRE can serve as an effective holistic intervention to enhance not only students' academic achievements but also their motivation, responsibility, and decision-making. Despite the study's limitations, such as its single-group design and focus on one activity, it provides valuable insights into how dance-based interventions can be utilized to foster improved academic outcomes in physical education. Future research should explore similar interventions across various physical education activities to further validate these findings and broaden the scope of their applicability.

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