

The Advantage of Using Sport Education Instead of Traditional Approach in Physical Education

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Abstract: *The literature on sport education suggests that most of the studies examining its effectiveness are within high schools and there are fewer studies on the perceptions or representations of the model by students in primary settings. This study presents findings the influence of a Sport Education intervention program on students' motivational responses in a high school physical education setting. More specifically, two intact groups were assigned curricular interventions: the Sport Education group, which received ten 60-min lessons, and the comparison group, which received a traditional teaching approach to sportbased activity. Pre- and postintervention measures of student enjoyment, perceived effort, perceived competence, and perceived autonomy were obtained for both groups. The results showed significant increases in student enjoyment and perceived effort in the Sport Education group only. And the Sport Education curriculum may increase perceptions of perceived autonomy, and in so doing, enhance the motivation of high school students toward physical education. The participants in this study encountered meaningful learning experiences during the implementation of the sport education model.*

Keywords: *Sports Education; Physical Education; Curriculum Programs ; High School Students*

I. Introduction

Sport education is a curriculum and instructional model designed to offer authentic, educationally rich sport experiences for girls and boys in the context of school physical education. During the last two decades researchers have underlined the importance of rethinking and reorganizing the way of delivering instruction in physical education [1, 2]. In recent years, scholars in sport pedagogy have begun to study programmes and models that may influence student learning and make these experiences more positive [3]. Scholars have pointed out that instructional models are considered as more inclusive and suitable approaches that can be used by physical education teachers in providing effective instruction to all students [4]. One pedagogical model that has drawn considerable attention from teachers and researchers is the sport education model. The innovation of the model stems from the fact that the experiences which are offered, are well-rounded and authentic rather than the typical events in physical education; since students not only learn to play games, but also learn to coordinate and manage their sport experiences [5]. The sport education model combines some key instructional features that differentiate it from the traditional physical education model [6, 7]. Students work in the same group throughout the length of the season and are given responsibilities and different sport related roles such as player, referee, captain, statistician, coach, etc.

The primary aim of sport education is to help students to become competent, literate, and enthusiastic sports players. Motivation has been viewed as a key factor influencing student learning outcomes [8]. In the educational domain, research on motivation is mainly concerned with how personal and environmental factors involved in the teaching/learning process energize and direct student learning and achievement. From a cognitive perspective, motivation is the process in which a goal-directed activity is instigated and sustained. Whether students are motivated to persist in the learning behavior or not is highly dependent on their specific goals and cognitions, and on whether they perceive their experience as positive or not [9]. A type of individual motivation that has been shown to be important in determining positively motivated behavior in physical education and sport is the students' level of intrinsic motivation. When students are intrinsically motivated, they show interest in an activity; they experience enjoyment and feelings of competence and control.

Research in sport and physical education has shown that intrinsic motivation is positively related to students feeling less bored, reporting greater self-effort, and being more intent on future participation in physical activity. As such, fostering tasks in physical education that increase student perceptions of optimal challenge, personal control, and self-competence will enhance intrinsic motivation and develop a number of positive adaptive student motivational responses.

The model of sport education has become well-known all over the world and contributes to the renewal and improvement of knowledge in teaching physical education in a more meaningful way. Today there are several examples of how the model has been implemented in English-speaking countries such as New Zealand, Australia, United States, United Kingdom, and Ireland. More recently the model has been implemented in

nonwestern contexts including Korea and Russia. Findings from these international studies have reported positive results of the practical validity of the model. Findings suggested that during sport education seasons students enjoyed taking administrative roles, showed a distinct preference for remaining in the same team for the entire season and they enjoyed their experiences in the sport education unit more than their regular physical education lessons. Results indicate that the sport education model has given pupils a more authentic and less abstracted learning experience; enabled students to have more time to play and practice for skill learning, and that the sport education model has the potential to produce an educationally and morally desirable conception of sport. More recently, the sport education model has also been implemented in Asian. The sport education model has been successfully applied in a Korean middle school.

The purpose of this study was to determine the effect of two contrasting approaches, the Sport Education model and a traditional teacher-led approach, to teaching a unit of games-based activity in physical education. The dependent variables were student enjoyment, perceived effort, perceived competence, goal orientations, and perceived autonomy.

II. Participants And Setting

This study focused on describing high school students' perceptions and experiences of a basketball season that followed a sport education format. The sample consisted of students from low to middle income households. Physical education was taught in two groups (one for boys and one for girls) for 1 hour per week and was compulsory for all students up to the age of 16 years and the other two groups for implemented in the games-based activity of basketball (the other condition were same). A qualitative research design was chosen in order to understand and provide details of phenomena that are difficult to convey with quantitative research designs. Participants in this study were groups of 30 boys, 30 girls and their teacher from a public high school in China. None of the students in this class had any experience with the sport education model and none had been taught basketball in the current academic year. Informed consent was obtained from all the students' parents or guardians before the participants took part in the study. In addition, pseudonyms were used to protect the identity of the students throughout the study. The student teacher participated in the study voluntarily. He had 10 years of teaching experience as well as previous experience with the Sport Education curriculum model in basketball physical education lessons. The season was designed and taught by the student teacher and its duration was thirteen 40 minute lessons. The physical education facilities and equipment were adequate in the specific school.

Motivational Responses (Including Enjoyment, Effort, and Perceived Competence). To assess student motivational responses to the curricular programs, we had the students respond to a version of the Intrinsic Motivation Inventory as reworded for use in sport settings. The IMI requires participants to respond to 18 items which assess four underlying dimensions of intrinsic motivation: Enjoyment/Interest, Effort/Importance, Perceived Competence, and Pressure/Tension. Each item was answered on a 7-point scale ranging from 1 means "very strongly disagree" to 7 means "very strongly agree." The scores for enjoyment, perceived effort, and perceived competence were calculated as the mean of the responses to each item of the respective subscales.

Achievement Goal Orientations. The participants' dispositional achievement goal orientations were assessed using the Ego Orientation in Sport Questionnaire. This questionnaire requires participants to think of when they feel most successful in physical education and then respond to 13 items reflecting an ego goal orientation. Each item was answered on 5-point scale ranging from 1 means "strongly disagree" to 5 means "strongly agree."

Perceived Autonomy. Student perceived autonomy was assessed using a 20-item questionnaire adapted to physical education. The items were taken from the Academic Self-Regulation Questionnaire and the Academic Motivation Scale. The questionnaire consists of five subscales representing different degrees of autonomy. All five subscales in the instrument had acceptable reliability and validity when used with adolescent physical education students.

Teacher Behavior. Differences in student motivation between the two curricular approaches could be the result of differing amounts or types of support offered by the teacher to the students during lessons. The observations were videotaped during the lesson prior to the issue of the postintervention questionnaires. Teacher verbal behavior was coded using an adapted form of the Coach Behavior Assessment System

The adapted form examined 12 categories of teacher behavior organized into two major dimensions: (a) general teacher-initiated behavior, and (b) teacher behavior in response to students' performance. The first dimension of teacher-initiated behavior involves technical instruction, organization, general communication, and general encouragement. The second dimension of reactive teacher behaviors involves reinforcement and non-reinforcement responses to desirable performance, and reactions to mistakes including encouragement, technical instruction, punishment, and lack of response.

III. Lesson Design

Sport Education Intervention Group (15 boys and 15 girls). In the experimental condition the teacher implemented the Sport Education model. The intervention model followed next ten lessons. Lesson 1: content was diagnostic assessment, teacher responsibility was assist students with the stations, student responsibility was complete all the exercises in the stations and fill the sheet according to their performance. Lesson 2: content was creating teams, teacher responsibility was present teams according to the data that was collected and explain the roles, student responsibility was built their teams'information. Lesson 3: Pass-Shoot-Lay-up, teacher responsibility was provide a range of activities for warm-up, student responsibility was learn the skills and tactics. Lesson 4: content was all star game Revision lessons 3, teacher responsibility was advises the officials, the organizers and the trainers, student responsibility was learn the skills and tactics. Lesson 5: content was defense 4th Formal Competition, teacher responsibility was present the new defensive tactic, student responsibility was learn the skills and tactics. Lesson 6: content was defense 5th Formal Competition, teacher responsibility was present the new defensive tactic, student responsibility was learn the skills and tactics. Lesson 7: content was defense 6th Formal Competition, teacher responsibility was advises the officials, the organizers and the trainers, student responsibility was decide how they will defense. Lesson 8: content was defense 6th Formal Competition, teacher responsibility was play-offs, student responsibility was perform playing, team and duty roles. Lesson 9: content was awards ceremony, teacher responsibility was design and make the awards, conduct the awards ceremony, student responsibility was participants. Lesson 10: content was formative assessment, teacher responsibility was assist students with the stations, student responsibility was complete all the exercises in the stations and fill the sheet according to their performance.

Traditional Approach Group (15 boys and 15 girls). For the group taught with a traditional style of teaching, the format of every lesson was similar. Each lesson consisted of a 10-min warm-up followed by a 20-min skill related practice and ending with a 20-min round-robin 5-v-5 tournament. The basketball drills and warm-up practices used in this approach were at the same level of skill development as in the Sport Education curriculum model.

IV. A Parallel Learning: Skill And Tactical Development

Based on the data it seems that the participants perceived that sport education provided them opportunities that can increase their participation level as well as their skill and tactical development. "Lower skilled students and girls seemed to have equal opportunities for improvement. None of them was marginalized. All members of the teams interacted positively with each other and seemed to enjoy their participation in the game situations'. Although these students wanted to win the title of the basketball championship, their valuable effort and their equal and active participation during the game- play according to fair-play was also important. Sport education offers the opportunity to the teacher to cultivate motor skills and tactical sophistication at the same time. Students seemed to enjoy and to understand the importance of the specific strategy.

Based on our data it seems that the participants were able to develop not only their skills but also their tactical knowledge and understanding of the game of basketball. It also seemed that sport education provided the participants with opportunities to develop their game-play competency. The participants managed to execute strategies appropriate to the complexity of each game. This advanced their self-improvement and as a result their team progress. During the course of the unit students were taught the advantages and disadvantages of each tactic. Data from this study suggested that the students were able to critically select specific tactics which seemed to be suitable for the specific situations.

V. Changing In Dependent Variables From Pre- To Postintervention

The second research question examined whether the students in the Sport Education curriculum group would report a greater increase in enjoyment, perceived effort, and perceived competence than those in the traditional curriculum group. Table 1 shows the result of ANOVA tests, among Bonferroni adjustment to the alpha level (new p = .01). We carried out independent sample t-tests, Sport Education vs. traditional, to examine mean differences in the dependent variables from pre- and postintervention. As a result of the multiple t-tests being performed during these analyses, we undertook a Bonferroni adjustment to the alpha level (new p = .006). Postintervention goal orientations, perception of the motivational climate, and perceived autonomy were entered as independent variables into the model.

Table 1 Cronbach's Alpha Coefficients (M ± SD) for Pre- and Postintervention Measured Dependent Variables for Both Programs

Dependent variable		Sport Education(n=30)		Traditional(n=30)		a
		M	SD	M	SD	
Enjoyment	Pre	4.47	1.18	5.21	0.91	0.70
	Post	5.65**	0.69	5.07	0.82	0.79
Effect	Pre	5.11	0.90	5.04	1.01	0.76

	Post	5.69**	1.05	4.77	1.28	0.69
Perceived competence	Pre	4.77	0.82	0.86	4.78	0.68
	Post	5.41	5.41	1.01	4.85	0.69
Ego goal orientation	Pre	2.82	0.72	2.54	1.05	0.88
	Post	2.49	0.81	2.35	0.81	0.86
Perceived autonomy	Pre	6.94	3.05	4.93	7.47	0.85
	Post	7.58	2.90	4.65	5.72	0.77

The purpose of the present study was to assess the effectiveness of a Sport Education intervention in enhancing students' enjoyment, perceived effort, and perceived competence in physical education. The results showed that students in the Sport Education curriculum group reported significantly higher postintervention enjoyment and perceived effort than those taught with the traditional approach. Students in the Sport Education group reported significant pre- to postintervention increases in enjoyment and perceived effort, but not in perceived competence; for the latter variable there was a nonsignificant increase in the mean scores from pre- to postintervention. In contrast, the traditionally taught curriculum group did not report significant changes in any of the three motivational indices. A teacher's implementation of the model which overemphasizes student affective outcomes, and the accountability systems that accompany these goals, may indirectly affect the model's potential for developing student skill and tactical performance. The Sport Education curriculum model effectively brought about positive changes in students' perceptions of a sport-based physical education program. This finding supports the notion that perceived autonomy can have a positive effect on student motivational outcomes. In practical terms this means that when students engage in the Sport Education curriculum, they do so because they personally grasp its value for game play and team building, and so are more likely to feel competent in the various sport activities.

On the basis of the findings presented in this study, we suggest that there is great value in providing meaningful learning experiences to our students. Accordingly, we agree with Siedentop's et al. [10] statement and we hope that those students who experience positive learning experiences in school physical education curricula programmes "would prefer to continue to participate actively, because they have come to value the experiences and enjoyment derived from participation."

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