IJETS@R

(ISSN: 2587-0238)

Saçlı Uzunöz, F. (2022). Pre-Service Teachers' Experiences On Sport Education Model: An Application To Tennis, *International Journal of Education Technology and Scientific Researches, 7(20), 2126-2142.*

DOI: http://dx.doi.org/10.35826/ijetsar.541

Article Type (Makale Türü): Research Article

PRE-SERVICE TEACHERS' EXPERIENCES ON SPORT EDUCATION MODEL: AN APPLICATION TO TENNIS[1]

Fatma SAÇLI UZUNÖZ

Associate Professor, Nevşehir Hacı Bektaş Veli Üniversitesi, Nevşehir, Turkey, fatmasacli@gmail.com

ORCID:0000-0002-2246-4952

Received: 11.06.2022 *Accepted: 12.11.2022* *Published: 01.12.2022*

ABSTRACT

For an effective education, the knowledge, skills and attitudes of the teacher are the most important factors. The more qualified the teacher is about teaching techniques and models, the more efficient teaching can be executed in education process. Therefore, Physical Education Teacher Education (PETE) programmes foster their students to learn and use different teaching models in order to gradute qualified teachers. Researching the implications of this opportunity for Pre-service Teachers (PSTs) will provide us with feedback on the efficiency of PETE programs. In this direction understanding of their opinions about their PETE experiences is essential. From this point of view, the purpose of this study was to explore experiences of PSTs on Sport Education Model (SEM) within the tennis course. Drawing on a qualitative phenomenological research methodology, the study was conducted during 2015- 2017 academic years at a public university in Cappadocia region of Turkey. A total of 33 PSTs (9 seniors, 24 sophomores) enrolled in study. Data was collected through weekly observations, field notes, semi-structured interviews and focus groups. All recordings were transcribed, triangulated and analysed using thematic coding of standard qualitative techniques. Four main themes emerged from the data analysis: (1) Learning outcomes of SEM, (2) The challenges of SEM, (3) The conveniences of SEM (4) Future directions of SEM. It can be said that PSTs' experiences on SEM within the tennis course were similar with each other as being teacher and as being student. PSTs have acquired some personality traits as well as the content knowledge and pedagogical knowledge that a physical education teacher should have. Although they expressed some challenging aspects of the model, they emphasized that they had experienced its facilitating aspects for an effective teaching. It can also be foreseen they would be likely to use this model in their future professional life.

Keywords: Sport education model, pre-service teachers, tennis

[1] Preliminary findings of the study were presented as an abstract in BRICESS 2017 - BRICESS Inagural Conference of Exercise and Sport Science, 29 Nov - 2 Dec 2017, Santos, Brazil.

INTRODUCTION

Achievement of the students in physical education lessons is closely related to the teaching methods, techniques and models used. Selection of the model preferred in teaching is affected by teacher's tendency and capacity to model, time and physical facilities, cost, size of the student group, nature of the subject, and realization of learning outcomes. Therefore, within the scope of PETE programs, preservice teachers not only learn teaching models, but also to use the most suitable models for the course they will teach.

PETE program is determined by Turkish Council of Higher Education (2022) in Turkey and it is shaped to include courses appealing %18 general culture knowledge, %33 pedagogical content knowledge, %49 domain-specific knowledge. In the context of pedagogical content and domain-specific knowledge courses PSTs have being encouraged to learn and use different instructional methods and models. While PSTs learning the skill-based courses in practically and theoretically, at the same time they learn pedagogically how to teach the skills they have learned during their PETE experiences.

When we look at the research results directly related with this area (McMahon & MacPhail, 2007; Stran & Curtner-Smith, 2010; Deenihan, McPhail & Young, 2011; Deenihan & McPhail, 2013; Mooney, Moncrieff & Hickey, 2018), it is seen that the other PETE programmes outside of Turkey also foster their PSTs to use different approaches during teaching experiences. Gurvitch and Tjeerdsma Blankenship (2008), emphasizes the importance of model-based teaching as a teaching approach in teacher effectiveness. As described in detail by Metzler (2011) model-based instruction is a comprehensive and contemporary approach to teaching and learning which is based on theoretical foundations as a result of field-tested researches in schools or other settings to ensure efficiently and effectively achieving. In this context, instructional model can be defined as a broad plan or pattern in order to shape curriculum, design instructional materials, guide instruction in the classroom or other environments. Instructional model is designed to be used for an entire unit of instruction and includes all of the planning, design, implementation, and assessment for that unit (Metzler, 2011; 2017).

In Kirk (2013)'s interpretation, model-based instruction is acknowledged as a multi-activity form of teaching based on a sport technique in physical education programs all over the world. The main purpose of the models developed within the scope of model-based instruction including all children in the education process through student-centered physical activities in order to ensure holistic development (Metzler, 2017). Some instructional models such as cooperative learning and direct instruction have been initially developed for use in other subject areas and then adapted for physical education. On the other hand, some such as sport education, tactical games, teaching of personal and social responsibility have been developed exclusively for teaching physical education and related areas (Metzler, 2011).

As one of directly physical education field-related models, SEM draws from constructivist theory. Student actively construct the knowledge by making a bridge between their prior knowledge and experience during the learning process. When the active participation of the students aligned with the role of the teacher and the

teaching approaches, it becomes easier for the students to construct their knowledge (Mooney, Moncrieff & Hickey, 2018). The major objective of the SEM is to help students become literate, competent, and enthusiastic sports persons (Siedentop, 1994). Unlike traditional sporting units, SEM is a team-based pedagogical model sustained over the long seasons thus, sport education seasons are always longer than typical physical education units. This model can be used in small, mixed-ability learning groups in which the students belong to a team by holding different roles (such as coach, referee, or scorekeeper) and responsibilities within their team during a season. Seasons of the model should be organized around a formal competition and ends with a culminating event. Furthermore, score keeping and festivity are encouraged to make the experience more meaningful and enjoyable for the participants throughout the season (Siedentop, Hastie & Van Der Mars, 2011). As Wallhead and O'Sullivan (2005) mentioned the main characteristics of the model are "seasons", "affiliation", "formal competition", "record keeping", "festivity" and "culminating events". Specifically, fair play and good sportsmanship concepts are foregrounded within this model and students have more to learn than just techniques and tactics to be successful (Hastie & Buchanan, 2000).

The number of studies on SEM is quite large. To give an example of some from international studies, Bennett and Hastie (1997) described how a collegiate softball activity class was taught using the SEM. Hastie and Buchanan (2000) provided a databased analysis by teaching responsibility through SEM in action and developed a theory from practice. Graves and Townsend (2000) applied the SEM to dance by using primary components-seasons, affiliation, record keeping, formal competition, culminating event, and festivity- of the model. Spittle and Byrne (2009) investigated the influence of the model on student motivation in secondary physical education. Mooney, Moncrieff and Hickey (2018) explored pre-service teachers' experiences of a sport education unit strategically designed to support their transition into an initial teacher education degree.

There are also some researches in Turkey on how to apply the SEM to different contents such as Doydu, Çelen and Çoknaz (2013)'s study examined 16-week extracurricular football education carried out in line with the SEM on students' attitudes towards physical education and sports. Doydu and Çoknaz (2013) found out the influence of SEM on cognitive, psychomotor and game performance levels of students during 16-week extrarurricular football education. Sural and Savaş (2017) investigated the effects of basketball classes taught through SEM on psychomotor achievement skills of PSTs in PETE program.

Specifically related with the present study, McMahon and MacPhail (2007) examined one pre-service teacher's implementation of the SEM in a post-primary school in Ireland. Ayvazo (2009) provided a guide for physical education teachers who are interested in teaching tennis or tennis-related content on the basis SEM. Stran and Curtner-Smith (2010) discovered the relative importance of different knowledge types in PSTs' ability to learn and deliver the SEM. Deenihan, McPhail and Young (2011) incorporated SEM into a 12-week net games module focused on tennis, badminton and volleyball. Deenihan and McPhail (2013) explored PST's experiences delivering SEM during a school teaching placement after undertaking a practical SE module in his PETE program.

The framework of this study was situated on Occupational Socialization Theory (OST) by reviewing the related studies mentioned above conducted with preservice physical education teachers, physical education teachers and teacher educators. The pioneer of this theory in the field of physical education area is Hall A. Lawson. Lawson (1986) advocates that any form of socialization that effects people to get in physical education area and subsequently make responsible for their perceptions as teacher educators and teachers within the context of this theory. On the basis of this theory, socialization takes place in five different ways: Societal, sport, professional, organizational and bureaucratic. Especially PETE programs are considered as one of the most effective tools to serve the professional socialization and preservice teachers are expected to gain profession related knowledge, values, sensitivities, and the skills by including in their education process. In accordance with this purpose, occupational socialization has been used in many studies (McMahon & MacPhail, 2007; Stran & Curtner-Smith, 2010; Deenihan, McPhail & Young, 2011; Deenihan & McPhail, 2013; Mooney, Moncrieff & Hickey, 2018) in order to reveal how pre- and in-service teachers learn, interpret and use the SEM during and after the PETE experiences.

By and large, the literature confirms the efficacy of SEM in supporting student learning in different groups at all levels (Wallhead & O'Sullivan 2005) and also suitability to apply at university level as for giving sufficient time during a semester for implementing a complete program (Bennett & Hastie, 1997). As stated by Collier (1998), PETE programs provide a great opportunity for preservice teachers to learn, apply this model, and then transfer it to their professional lives when they become teachers. Therefore, it is important to reveal deeply PSTs' thoughts about how they learned, experienced and used this model in their teaching experiences before they graduate from the PETE.

In this context, the purpose of this study was to explore the experiences of PSTs on Sport Education Model (SEM) within the tennis course in PETE program and seek answers to these questions:

1- What are the experiences of sophomore preservice physical education teachers as student who learned the tennis course taught with SEM in PETE program?
2- What are the experiences of senior preservice physical education teachers as teacher who taught the tennis course with SEM in PETE program?

METHOD

This section includes information about the research model, study group, data collection tools, validity and reliability, data analysis, the role of researcher, and the ethic of the research.

Research Model

Drawing on a qualitative research methodology, a phenomenological design (Creswell & Poth, 2018) was used to provide a deep and detailed understanding about the phenomenon in this study. Qualitative research is a realistic and holistic approach in which perspectives, perceptions and events are evolved in the natural

environment by collecting different qualitative data sources such as observations, interviews, field notes (Yıldırım & Şimsek, 2018). As mentioned by Creswell and Poth (2018) phenomenological design is more preferable by researchers due to the easy applicability in social sciences. As an educational qualitative research design, phenomenology is used to describe people's understanding of a particular phenomenon or concept expressing their feelings, perspectives and perceptions about their experience. This design also emphasizes the common experiences of a group of individual. Since the experiences of PSTs about using SEM in tennis teaching were discussed in this study, phenomenological design allowed deeper analysis of their thoughts.

Study Group

The participants of the study were purposively selected PSTs across from the PETE program as two different groups on the basis of pre-determined criteria (Denzin & Lincoln 2005) between 2015-2017 acedemic years at a public university in Cappadocia region of Turkey. The first criterion used in forming the research group was that all PSTs have learned SEM theoretically. The second criterion was that PSTs who will act as teachers in this study have learned tennis skill and the application of SEM to tennis course. The third criterion was that PSTs who had previously learned SEM theoretically choosed the tennis course. The fourth criterion was that PSTs who had learned application of SEM to tennis course taught tennis using SEM. The first group was 9 (4 females and 5 males) senior-PSTs (Mage=22.67, SD=3.01) and the second group was 24 (14 females and 10 males) sophomore-PSTs (Mage=19.71, SD=2.15). The principle of voluntariness was taken into account in participating in the research.

By following the Collier (1998)'s guidance regarding with sport education in preservice education, the researcher as teacher educator introduced SEM to all PSTs (seniors had participated in the course in their second years in 2015, and the sophomores participated in fall semester of 2016) theoretically at first step in the context of "physical education and sport learning and teaching approaches" course during one semester as part of PETE program. At second step, in order to allow the senior PSTs to experience the model as a participant, the researcher then used SEM practically in her teaching in the context of tennis course in their third years during 2015-2016 years. As third and last step, it was ensured that the senior PSTs used the SEM in their teaching tennis experience to sophomore PSTs in PETE program. Therefore, sophomores actively participated in a 4-hour elective tennis course as a student, and the seniors participated in the same course as a teacher during 14 weeks during spring semester in 2016-2017 years. Seniors worked all together with the researcher as a teaching team to organize, facilitate, and implement of the model in teaching tennis. They had received their 1st level tennis coaching certificate from the tennis federation before their teaching experience. At the same time they were the tennis team players of the same university. The researcher was associate proffessor in the same university and has been working on the sports education model for more than 10 years, has a book chapter on this subject and has taught the model in the PETE program. Therefore, she was familiar and experienced with the SEM and had a high motivation on including SEM researches into the PETE practices.

Data Collection Tools

Following the approaches of Creswell and Poth (2018) regarding the qualitative phenomenological design the data were collected through weekly observations, field notes (senior PSTs), semi-structured interviews and focus groups (sophomores and seniors) instead of through questionnaires or tests data. Interviews lasted from 45 minutes to 90 minutes. Field notes and interviews explored participant's experiences as students (sophomores) about involvement in tennis course conducted with SEM and also experiences and reflections as teacher (seniors) about conducting a tennis course using SEM. The researcher conducted independent observations of the PSTs who used the model for each class during 14 weeks and 2 weeks were allocated for evaluation as mid-term and final exams as the mandatory program requirements of PETE during the semesters.

Following Ayvazo (2009)'s guidelines for implementing a tennis education the unit consisted of a) setting up the unit, b) facilitating daily practice, and c) organizing a team competition – the "Dave-Fed" Cup. As seen in table 1, team roles and responsibilities in tennis education unit given by Ayvazo (2009) were used in this study. All lesson plans were prepared before the study by working together with the senior PSTs, researcher and an independent expert in tennis teaching.

Table 1. Team Roles and Responsibilities in Tennis Education Unit

Roles		Responsibilities
Coach	○	Conveying the practice of tennis skills and tactics
	○	Encouraging, assisting and leading players
	○	Providing feedback to the team players
	○	Representing the team during the Davis Cup
	○	Ranking the players of the team for each Davis Cup tie
Fitness Trainer	○	Conducting warm-up and stretching exercises in accordance with the lesson plan in each lesson
Equipment Manager	○	Responsible for distributing the materials/ equipments needed by the team for each practice and then collecting them back in full
Referee	○	Ensuring that players play in accordance with the rules of tennis
	○	Referee the game scrimmage
	○	Referee the Davis Cup event
	○	Answering questions about the rules if needed
Player	○	Trying to do all the activities in line with the coach's instructions
	○	Play strong but fair
	○	Being respectful to teacher, opponents and all teammates
Record Keeper	○	Keeping Davis Cup daily report by obtaining the reports from the teacher, recording scores, handing it back to the teacher at the end of tie

Data Analysis

Lesson observations conducted by researcher and field notes collected by senior PSTs were typed weekly and compared with the lesson plans of each lesson. Similarities and differences were revealed after reviewing with all together. After calculating compliance with lesson plans for each course, the average compliance for 14 weeks was found 92%. All interviews and focus groups were audiorecorded with the permission of PSTs of the study. All recordings were transcribed verbatim, coded and analyzed for themes, commonalities, and

distinctions using Yıldırım and Şimsek (2018)'s analysis process. Therewithal, evidences arised from each lesson analysis were used in order to support other data merged from the interviews.

Validity and Reliability

Data from interviews and focus groups were transcribed verbatim by the researcher and senior PSTs and also another independent researcher from sport sciences to eliminate errors and ensure reliability. In order to enhance trustworthiness of the study, member checking was conducted (Denzin & Lincoln 2005) with researcher and each PSTs who used the model in their teaching experiences for reading a copy of the transcripts and verified their content. Data from different sources were triangulated and used to support each theme revealed from the analysis. The principle of voluntariness was taken into account in participating in the research, direct quotes were given from the interviews, and randomly selected letters were used for each name of the participants and to ensure their privacy as part of the trustworthiness. At the same time, Mr abbreviation for males and Ms abbreviation for females were used to distinguish the gender of the paricipants (Denzin & Lincoln 2005; Yıldırım & Şimşek, 2018). As stated in Yalman and Uzunöz (2021), determining and explaining in detail how was the research group selection and the characteristic features of the participantswhy was the phenomenological design was prefered, how the data collection was conducted, and which pattern was used to analysis of the data provided the external validity of the research.

The Role of Researcher

The researcher personally applied observation, semi-structured interviews and focus groups. The researcher worked at the university where the study was conducted. The participants were their own students and the researcher knowed the students. It was thought that this situation contributed positively to the study. Namely, since the participants and the researcher knew each other, it could be thought that they were frank and sincere while expressing their thoughts. Since the research area is the institution where the researcher works, all kinds of planning and organization were made easily and necessary precautions could be taken. The researcher placed herself in brackets throughout the study and kept her feelings and thoughts completely out of the research.

Ethic of the Research

According to the years of the research, it was not possible to obtain an Ethics Committee Permission. The identities of the participants were kept confidential, considering that they might encounter any negative situation. Participants were informed about each stage before, during and after the research. Participants voluntarily participated in the research and they were informed that they could withdraw from the study at any stage of the study.

FINDINGS

Based on the purpose of exploring the experiences of PSTs with SEM in the context of tennis course in PETE program the research questions were answered and the experiences of PSTs were presented from two

different perspectives. The first was how sophomores as student experienced SEM while learning tennis, and the second was how seniors as teacher experienced SEM while teaching tennis.

Four main themes: (1) Learning outcomes of SEM, (2) The challenges of SEM, (3) The conveniences of SEM (4) Future directions of SEM were identified from analysis of all the data sources of the study. Those themes and the accompanying sub-themes were presented with supporting by quotations from the discourses of the participants.

Learning outcomes of SEM

The PSTs both as a learner (sophomores) and as a teacher (seniors), revealed that they obtained different learning outcomes from the tennis course taught with the SEM. The most prominent outcomes were content and pedagogical content knowledge, time management and giving feedback, observation and evaluation skills, empathy and responsibility, being sensitive, respectful to others and fair play.

Content and pedagogical content knowledge

While learning and teaching tennis knowledge and skills, all PSTs were aware that they learned the structure, features, functioning of the model, how the roles gained functionality took place in pedagogical practices (Researcher's observation notes, Week 1-Week 14).

Senior PSTs, as teacher, expressed their developments on pedagogical and content knowledge while using SEM in their teaching experience.

"Contrary to my initial uneasiness, I learned most of the things for using SEM in my teaching, such as planning and executing a lesson, using spaces effectively, using my voice efficiently, giving the students different roles, teaching game strategies and organising a festive after working regularly together with my friends and our teacher." (Ms. D, Senior, Semi-structured Interviews)

Time management and giving feedback

Senior PSTs were expressed the importance of time management and giving feedback to the students.

"In traditional models, since the teacher has all the control, she decides what she will spend the time on. But in this model all students are involved as participants and they all have different roles and responsibilities. Therefore, any problem that may arise in any of them affects the entire course duration. At this point, time management of the teacher seems to depend on the performance of the students." (Mr. S, Senior, Focus Group)

Observation and evaluation skills

Sophomore PSTs, as student, stated that there were improvements in their observation and evaluation skills using a given criteria.

"I had to be very careful while doing the refereeing duty, I needed to know the rules and I had to make the right observation and make the right decision during the game." (Ms. R, Sophomore, Focus Group)

Empathy and responsibility

Sophomore PSTs, as student emphasized that empathy skills and responsibility have developed in line with the different roles they have taken during the lessons.

" I think it increased my empathy because of adapting different roles. For example, I put myself in the shoes of students who did not want to participate in the lesson while carrying out the role of coaching, I thought about how I could motivate them more, how I could attract their attention. I generally, felt what that person was thinking when we took on all the roles." (Mr. A, Sophomore, Focus Group)

Being sensitive, respectful to others and fair play

Both sophomore and senior PSTs stated that they understood the importance of the concepts of, sensitivity, respect, and fair play during their learning and teaching experiences.

"In the lessons at the beginning of the semester, the students had difficulties in obeying the rules exactly and being kind and fair to both their teammates and the player in the opposing team, but in the following weeks, with the attention of the seniors and the researcher to this point, the participants made progress in this regard and learned the improtance of fair play in this model." (Researcher's observation notes, Week 1-Week 14).

"In fact, we knew the importance of fair play concept in tennis, but we still fell short of practice sometimes. However, we have seen and experienced how fair play, which is within the structure of SEM, and tennis branch overlap. I have also learned to teach fair play to second graders." (Ms. A, Senior, Semi-structured Interviews)

The challenges of SEM

The PSTs both as a learner (sophomores) and as a teacher (seniors), revealed that they had some difficulties with SEM during tennis learning and teaching experiences. These difficulities were more time requirement, disagreements on timetable of the culminating event, and using one sport branch.

More time requirement

Researcher also noted that all preparations to teach the using SEM in tennis took more time as compared the teach by herself in PETE in her field notes during the semester.

Senior PSTs mentioned they spent too much time for lesson planning as for it was the first time experience for them and also stated that it was not suitable for large groups during singles tennis instruction.

"I was thinking that I could easily teach tennis with a traditional method as for everyone is familiar with it. I had seen the SEM before, when our teacher was working with us, but when I used it to teach myself, it was very different, I needed to work a lot for planning the lesson, preparing all materials, ect spent too much time. I felt as if I had just learned it." (Ms. D, Senior, Focus Groups)

Sophomore PSTs highlighted time requirement especially for having difficulities on conducting coaching role during the class.

"I had a little difficulty in the role of coaching, first of all I didn't know what to do with students because I had to do things that would be beneficial to them. In this model, it is necessary to attend the lesson with preparations which needs too much time. Frankly, I had a lot of difficulty in this role because I couldn't prepare enough, I did it a little more comfortably in other roles." (Mr. C, Sophomore, Semi-structured Interviews)

Disagreements on timetable of the culminating event

"As a group, we could not make a common decision on the final game in order to reveal overall winner and hence, it was hard for us to be patient for the final event of the season." Mr. Z. Sophomore, Semi-structured Interviews)

Using one sport branch

"Using a single branch during a semester brought to the fore the necessity of teaching the most details of that." (Mr. S, Senior, Semi-structured Interviews)

The conveniences of SEM

PSTs revealed many factors which made the SEM more useful and easy in learning and teaching tennis experiences. These factors were t*eamwork and cooperation, motivation for active participation, and enjoyment with responsibilities.*

Teamwork and cooperation

"Contrary to the monotonous course in other lectures, taking a different roles made us a real team in each lesson. This structure of the lesson both informed and excited us, and increased our cooperation with each other in order to be successful at the end" (Mr. K, Sophomore, Focus Group)

Motivation for active participation

"There are big differences between the Sports Education model and other models, you know that in traditional education, the dominance of the course is with the teacher, and the students' opinion is not asked. The Sports Education model is definitely much more useful for us in activating students by giving many roles and responsibilities, which also made us more willing, and more resourceful." (Mr. O, Sophomore, Semi-structured Interviews)

"I think that the stereotype teaching that has come all this time has changed with SEM. Because, the student is more active, gets rid of passivity, and always responsible to conduct some roles. I think it gives these students more practicality." (Ms. L, Senior, Focus Group)

Enjoyment with responsibilities

During the classes, taking responsibilities and conducting different roles were perceived by PSTs as an enjoyment in this model.

"A teacher needs to be both an athlete, a coach, a masseur and a conditioner, or a refree at the same time, and we practice all of these. It allows us to understand in a short time what a coach should do and what a conditioner should do. Exhibiting these roles increased our interest and desire for the course, prevented the lesson from being boring, and we had more fun. I believe that these things always will be useful to us in our professional life." (Ms. A, Senior, Focus Group)

Future directions of SEM

PSTs reflected their thoughts about fully understanding and effective observation of the SEM and made suggestions about including the model not only in PETE but also the school settings in the future.

Understanding and effective observation

"The reason why knowledge and skills are more permanent in SEM is that the participants learn and teach by doing and living after understanding the basic structure of the model. The biggest example of this, according to the roles given, is that if this task is coaching, it has led to improvements in effective communication, practice and teaching ability at the same time observation, evaluation and managemnet skills, and if it is a conditioner, new styles of warm-up training, different drills, and again effective communication have led to the development of skills. It is not possible for us to develop these abilities without understanding and applying the model when become a teacher or coach in the future." (Mr. İ, Senior, Focus Group)

Including SEM in PETE and school settings

"We now learned how the model is, what elements are important, and how to apply it at university level but I think we have to practice these skills in teaching to the kids or secondary school. If we work in any school as a teacher or coach in the future, the students in that school should also experience the same process we went through so that they can learn how the model works. I'm sure both the younger students and we will have difficulties at first, but if this model is included in physical education programs, everyone will have to use in their lessons, then both students and teachers become accustomed it." Ms. N, Senior, Focus Group)

CONCLUSION and DISCUSSION

Four common main themes were obtained from the analysis of all data sources gathered from all PSTs, both as students and as teachers, about the tennis course taught with SEM. Four main themes were (1) Learning outcomes of SEM, (2) The challenges of SEM, (3) The conveniences of SEM (4) Future directions of SEM.

As the first main theme, the PSTs revealed that they obtained different "learning outcomes" from the tennis course taught with the SEM. The common sub-themes for all PSTs were content and pedagogical content knowledge, being sensitive, respectful to others and fair play. Time management and giving feedback was the

third sub-theme revealed by senior PSTs, while fourth and fifth sub-themes observation and evaluation skills, empathy and responsibility were revealed by sophomore PSTs. The theme of "learning outcomes" emerged as a result of the PSTs' experiences of teaching and learning tennis with SEM can be directly attributed to the constructivist approach as stated by Mooney, Moncrieff and Hickey, (2018). The student is always actively involved in the education process as he/she taking on different roles such as coach, trainer, referee, etc. both when teaching tennis as a teacher and when learning tennis as a student. In this process they construct easily their knowledge by making a link between their previous knowledge and experience. Both sophomore and senior PSTs expressed that there was a prominent integrity and progress on their own content and pedagogical content knowledge during this learning and teaching experiences. The fact that, by following the Collier (1998)'s guidance the researcher as teacher educator first taught SEM theoretically to all PSTs at different times in the previous year and then used SEM in her tennis teaching to current seniors may have helped them to acquire content and pedagogical knowledge more easily. As SEM attempts to give students experiences on authentic sporting (Siedentop, Hastie & Van Der Mars, 2011) it would seem favorable that those appliying SEM would have an experience of sport skills and also teaching skills. Compared to traditional physical education classes, in this study, SEM placed more responsibility on PSTs and required them to have more knowledge on the subject. Oslin, Collier and Mitchell (2001) identify such experience as 'living the curriculum', supporting the linkage between pedagogical knowledge and subject matter knowledge giving together in a PETE program. Before you get to that stage the teaching experience begins by observing the teacher for the first time in childhood and it continues during the all education process. PSTs in this study were acknowledged the differences between learning and teaching concepts and realized that teaching needs more than knowing such as understanding the students' learning way and their characteristics while teaching. The second common sub-themes for all PSTs were being sensitive, respectful to others and fair play under the learning outcomes theme. As Hastie and Buchanan (2000) stated, students have more to learn than just techniques and tactics to be successful they specifically learn fair play and good sportsmanship concepts within this model. Similarly, Sinelnikov and Hastie (2008) put forward the fair play concept for Russian students in teaching sport education. From the findings related with the learning outcomes, empathy and responsibility were can be the results of understanding the structure of the SEM, and the positive attitudes towards the tennis course and the model. Time management and giving feedback was the third sub-theme revealed by senior PSTs under the main theme of learning outcomes. More necessity of time management for observation and planning were included in observation notes of the researcher as well. She found out senior PSTs needed more time to organise all course requirements, because they had a hard time putting their theoretical knowledge into practice and therefore wasted a lot of time. But during the process, she realized that they gradually developed this skill both by observing and practicing the model. Collier (1998) also confirms the efficiency of the observations for PSTs in PETE during the sport education season in order to learn management responsibilities while shifting from the teacher to the students. The fourth and fifth sub-themes observation and evaluation skills, empathy and responsibility were revealed by sophomore PSTs under the learning outcomes theme. As Siedentop (1994) states, the SEM has three main objectives; competency, literacy, and enthusiasm. Based on all PSTs'

experiences, content and pedagogical content knowledge can be considered within literacy. Time management and giving feedback, observation and evaluation skills can be considered within competency. Empathy and responsibility, being sensitive, respectful to others and fair play can be considered within enthusiasm. When considered holistically, it can actually be said that the three main aims of the SEM overlap with the learning outcomes that emerged from the experiences of the PSTs in PETE program.

The second main theme revealed by all PSTs was "challenges with SEM" during tennis learning and teaching experiences. Under the main theme, *more time requirement* was the common sub-theme for all PSTs. Whereas the second sub-theme *disagreements on timetable of the culminating event* was revealed by only sophomore PSTs, and the third sub-theme *using one sport branch* was revealed by only senior PSTs. According to the researcher observation notes, it could be said that the most prominent problem for the PSTs was using time insufficiently. Because the more seniors needed more time the more spent time the researcher for working with them and giving feedback to them. Senior PSTs experienced more time requirement for planning, conducting and management of their whole teaching, while sophomores needed more time just for conducting the role of coach during their learning process. Braga and Liversedge (2017) examined the challenges and facilitators to the implementation of SEM from PSTs' perspectives and they reported that spending time and energy on planning, establishing fair teams, and assessing student learning were difficult parts of the SEM implementation for them. Similarly to the findings, Clarke and Quill (2003) also mentioned the time factor as one of the preventors in using SEM implementation in secondary school children in southern England. In order to understand facilitators and inhibitors of learning to teach the SEM from one PST's perspective McMahon and MacPhail (2007) in their study brought to the forefront the effects of professional socialisation occurring in PETE on the PST's experience of learning to teach the model. In their study, the difficult part for the PST was the task of teaching the roles and responsibilities in the model, even though she perceived it as easy in the beginning. In this sense, their results can be accepted as similar with our findings about the difficulty experienced by the sophomores in implementing the coaching role and the seniors need more time for implementing the course to teach the roles and responsibilities. For the senior PSTs, another factor that made it difficult to use SEM in their teaching was the use of a single sport branch such as tennis in this current study. In the research conducted by Deenihan, MacPhail and Young (2011), it is seen that a suggestion made by PSTs is similar. They likewise preferred the inclusion of different sports and a longer time in the same way within PETE program in the context of their teaching experiences.

The third main theme revealed by all PSTs was "the conveniences of SEM" for their learning and teaching tennis experiences. Three common sub-themes as facilitator of the model put forwarded by both groups of PSTs were *motivation for active participation, enjoyment with responsibilities, and* t*eamwork and cooperation.* As Siedentop (1994) defines the main characteristics of the model, students are part of a team in this model and they are encouraged to work together with using an effective communication skills. In a way supports our findings, Gurvitch and Tjeerdsma Blankenship (2008) also underlined the views of PSTs on the advantages of the model as compared with traditional approaches. PSTs stated that they were listening while teaching with

other methods but in SEM it was required preliminary preparation as a team in order to be active participation in the class. Deenihan and McPhail (2013)'s study also stated the importance of active participation in physical education during SE season in PETE from the experiences of preservice teachers. Sural and Savaş (2017) supports our results by stating the effects of peer teaching tasks and cooperative learning used in teaching basketball via SEM in PETE program. With active participation, student motivation increased and boredom decreased. In Gurvitch and Tjeerdsma Blankenship (2008)'s study, PSTs also expressed their appreciation and joy on using model in their teaching experience. Similarly, Wallhead and Ntoumanis (2004) in their study, stated significant increase on high school students' enjoyment and positive motivational responses in physical education class executed by SEM. Again, suralsuralfound the positive effects of SEM on student motivation in secondary physical education level specifically in maintaining high levels of intrinsic motivation, task orientation, and mastery climate than the traditional condition.

The fourth main theme revealed by all PSTs was "*future directions of SEM*" during their learning and teaching tennis experiences. Under the main theme, the common sub-theme revealed by both PSTs group was *including SEM in PETE and school settings, understanding and effective observation* of future directions. In line with our research findings, Collier (1998) made provided suggestions for the inclusion of the SEM in PETE program in order for PSTs to experience SEM as participants/students within a practical course conducted with SEM. In their study, Curtner-Smith, Hastie and Kinchin (2008) pointed out that in order for the full version of SEM to be used by teachers, a collaborative working climate should be created for them and the structure of the model should be introduced in a quality way within PETE programs. In Deenihan, MacPhail and Young (2011)'s study, PSTs recommended that the SEM module should be taught earlier in the PETE program earlier instead of the third year. Actually, as stated in the method section of how the study group was selected in this study, SEM was introduced to all PSTs theoretically (Collier, 1998) at first step in the context of "physical education and sport learning and teaching approaches" course during one semester as the second years of PETE program. At second step, in order to allow the senior PSTs to experience the model as a participant, the researcher then used SEM practically in her teaching in the context of tennis course in their third years during one semester. As third and last step, it was ensured that the senior PSTs used the SEM in their teaching tennis experience to sophomore PSTs in PETE program. The critical point in this process is the second and third phase, which is not compulsory in the PETE program in Turkey. Confirming the similar researchers' (Collier, 1998; Stran & Curtner-Smith, 2010; Deenihan & McPhail, 2013) assertion, this may be an indication that it is not enough to teach the model only theoretically within the scope of the compulsory lessons of the second grade PETE program, it must also be used in teaching a skill practically to provide a more permanent learning for PSTs.

As a conclusion, it can be said that preservice physical education teachers' experiences on SEM within the tennis course were similar with each other as being teacher and as being student. As a result of the use of SEM in tennis teaching at PETE program, PSTs have acquired some personality traits as well as the content knowledge and pedagogical knowledge that a physical education teacher should have. Although they expressed some challenging aspects of the model, they emphasized that they had experienced its facilitating aspects for

an effective teaching. It can also be foreseen they would be likely to use this model in their future professional life as they pointed out that it should not only be used in PETE but also in school settings.

RECOMMENDATIONS

This study offered concrete insights into how such an experience can help PSTs learn SEM and apply it effectively on their teaching practics before their professional life being as physical education teachers. It has being drawn a path that can be followed for all PSTs, the qualified teachers and also teacher educators who think to combine tennis and SEM in their teaching process. Not only tennis but also the other practical courses should be thought by using SEM in PETE program by teacher educators. Some components of the SEM such festivity could not be included in this study becasue it was not possible for inviting parents, siblings ect. Future research is encouraged to examine including all components of the SEM in teaching process not only for PETE programs but also school settings. Future studies can be conducted with including experiences of all students, preservice teachers, teachers and the teacher educators in order to draw a whole picture.

ETHICAL TEXT

"In this article, journal writing rules, publishing principles, research and publishing ethics rules, journal ethics rules are followed. The author is responsible for any violations that may arise in the article."

This study was not subjected to the ethical committee approval since the data obtained during 2015-2017. In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The responsibility belongs to the author (s) for any violations that may arise regarding the article.

Author(s) Contribution Rate: Author (s) Contribution Rate: The author's contribution to this article is to 100%.

ACKNOWLEDGEMENT

Many thanks to Dr. Ledric Sherman for his support in the first phase of the study. Preliminary findings of the study were presented as an abstract in BRICESS 2017 - BRICESS Inagural Conference of Exercise and Sport Science, 29 Nov - 2 Dec 2017, Santos, Brazil.

REFERENCES

Ayvazo, S. (2009). Applying the sport education model to tennis, strategies. *A Journal for Physical and Sport Educators, 23*(1), 8-12, http://doi.org/10.1080/08924562.2009.10590852.

Bennett, G., & Hastie, P. (1997). A sport education curriculum model for a collegiate physical activity course. *Journal of Physical Education, Recreation & Dance*, 68(1), 39-44, http://doi.org/10.1080/07303084.1997.10604876.

Braga, L., & Liversedge, P. (2017). Challenges and facilitators to the implementation of a sport education season: The voices of teacher candidates. *Physical Educator*, 74(1), 19.

Clarke, G., & Quill, M. (2003). Researching sport education in action: A case study. *European Physical Education Review*, 9(3), 253–266, https://doi.org/10.1177/1356336X030093004.

Collier, C. (1998). Sport education and preservice education. *Journal of Physical Education Recreation & Dance*, *69* (5), 44-45.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th Ed.). Sage.

Curtner-Smith, M.D., Hastie, P.A., & Kinchin, G.D. (2008). Influence of occupational socialization on beginning teachers' interpretation and delivery of sport education. *Sport, Education and Society,* 13(1), 97–117, https://doi.org/10.1080/13573320701780779.

Deenihan, J.T., & MacPhail, A. (2013). A Preservice teacher's delivery of sport education: Influences, difficulties and continued use. *Journal of Teaching in Physical Education,* 32(2), 166-185.

Deenihan, J.T., MacPhail, A., & Young, A.M. (2011). 'Living the curriculum': Integrating sport education into a physical education teacher education programme. *European Physical Education Review,* 17(1), 51-68.

Denzin, N., & Lincoln, Y. (2005). *Handbook of qualitative research* (3rd Ed.). Sage.

Doydu, İ., Çelen, A., & Çoknaz, H. (2013). Spor eğitimi modelinin öğrencilerin beden eğitimi ve spora karşı tutumuna etkisi. *E-International Journal of Educational Research,* 4(2), 99-110.

Doydu, İ., & Çoknaz, H. (2013). The influence of sport education model on middle school students during extracurricular football studies on cognitive- psychomotor and game performance levels. *International Journal of Human Sciences*, *10*(1), 925-958.

Graves, M. A., & Townsend, J. S. (2000). Applying the sport education curriculum model to dance. *Journal of Physical Education, Recreation & Dance, 71*(8), 50-54, http://doi.org/10.1080/07303084.2000.10605192.

Gurvitch, R., & Tjeerdsma Blankenship, B. (2008). Implementation of model based instruction – the induction years. *Journal of Teaching in Physical Education*, *27*(4), 529–548. http://doi.org/10.1123/jtpe.27.4.529.

Hastie, P.A., & Buchanan, M.A. (2000). Teaching responsibility through sport education: Prospects of a coalition. *Research Quarterly for Exercise and Sport, 71*(1), 25-35, http://doi.org/10.1080/02701367.2000.10608877.

Kirk, D. (2013). Educational value and models-based practice in physical education. *Educational Philosophy and Theory*, 45(9), 973-986.

Lawson, H. A. (1986). Occupational socialization and the design of teacher education programs. *Journal of teaching in physical education*, *5*(2), 107-116, http://doi.org/10.1123/jtpe.5.2.107.

McMahon E., & MacPhail, A. (2007). Learning to teach sport education: The experiences of a pre-service teacher. *European Physical Education Review,* 13(2), 229–249.

Metzler, M. W. (2011). *Instructional models for physical education* (3rd Ed.). Holcomb Hathway.

Metzler, M. A. (2017). *Instructional models for physical education* (3rd Ed.).Taylor and Francis.

Mooney, A., Moncrieff, K., & Hickey, C. (2018). Exploring pre-service teachers' experience of sport education as an approach to transition pedagogy. *Physical Education and Sport Pedagogy*, 23(6), 545-558, http://doi.org/10.1080/17408989.2018.1485137.

Oslin, J., Collier, C., & Mitchell, S. (2001). Living the curriculum. *Journal of Physical Education, Recreation & Dance, 72*(5), 47–51.

Siedentop, D. (1994). *Sport Education: Quality Physical Education through Positive Sport Experiences.* Human Kinetics.

Siedentop, D., Hastie, P.A., & Van Der Mars, H. (2011). *Complete Guide to Sport Education* (2nd Ed.). Human Kinetics.

Sinelnikov, O.A., & Hastie, P.A. (2008). Teaching sport education to Russian students: An ecological analysis. *European Physical Education Review*, 14(2), 203–222.

Spittle, M., & Byrne, K. (2009). The influence of sport education on student motivation in physical education. *Physical Education and Sport Pedagogy, 14*(3), 253-266, http://doi.org/10.1080/17408980801995239.

Stran, M., & Curtner-Smith, M. (2010) Impact of different types of knowledge on two preservice teachers' ability to learn and deliver the sport education model. *Physical Education and Sport Pedagogy,* 15(3), 243-256, http://doi.org/10.1080/17408980903273147.

Sural, V., & Savaş, S. (2017). Farklı öğretim yöntemleriyle işlenen basketbol dersinin öğrencilerin psikomotor erişi düzeylerine etkisi. *Kastamonu Eğitim Dergisi*, 25 (1) , 345-360.

Türkiye Yükseköğretim Kurumu. (2018, 30 Mayıs). Beden eğitimi ve spor öğretmenliği lisans programı https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yeni-Ogretmen-Yetistirme-Lisans-Programlari/Beden_Egitimi_ve_Spor_Ogretmenligi_Lisans_Programi.pdf adresinden 1 Eylül 2022 tarihinde alınmıştır.

Wallhead, T.L., & Ntoumanis, N. (2004). Effects of a sport education intervention on students' motivational responses in physical education. *Journal of Teaching in Physical Education*, 23, 4-18.

Wallhead, T., & O'Sullivan, M. (2005). Sport education: Physical education for the new millennium?. *Physical Education and Sport Pedagogy,* 10(2), 181–210.

Yalman, E. ve Uzunöz, A. (2021). Nitel araştırmalarda geçerlik ve güvenirlik. A. Uzunöz (Ed.). Bilimsel Araştırma Becerileri ve Araştırmada Güncel Desenler içinde (s. 103-117). Pegem Akademi.

Yıldırım, A. ve Şimsek, H. (2018). Sosyal bilimlerde nitel araştırma yöntemleri (10. Baskı). Seçkin Yayıncılık.