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RESEARCH ARTICLE

Comparing the Self-Efficacy of Trainers and Primary School Teachers in Conducting Educational Games

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ABSTRACT

This study aims to compare the self-efficacy levels of trainers who train in various sports disciplines and of primary school teachers in terms of conducting educational games, within the scope of the "Sports Education Protocol in Primary Schools" implemented in Turkey. The research was conducted with primary school teachers and trainers working in Bilecik province. According to the findings, there is no significant difference between gender and education level variables and self-efficacy levels in conducting educational games for both groups. However, differences were found among teachers and trainers from different age groups. The study revealed that as the age range increased in both groups, the self-efficacy level in conducting educational games decreased inversely. Furthermore, tests comparing the self-efficacy levels of teachers and trainers in conducting educational games and the scale's subdimensions revealed significant differences. In the implementation subdimension, trainers scored higher. However, in the planning, evaluation, and overall self-efficacy scores for conducting educational games, significant differences were found in favour of teachers. The results indicate that primary school teachers face various challenges in implementing educational games, while trainers are insufficient in planning and evaluating educational games. Additionally, having trainers teach sports in primary schools is considered to raise certain pedagogical concerns. However, these concerns can be minimized with appropriate training and management strategies, and if a correct approach is adopted, it can even contribute significantly to children's physical, social, and emotional development.

INTRODUCTION

It is well-established that educational models that are planned in alignment with students' developmental characteristics and implemented purposefully are crucial for the healthy development of the students. Education is not solely focused on cognitive development but is a significant process encompassing both mental and physical skills in an integrated manner (Güneş, 2004). In this context, some educators consider the game-based learning model to be a powerful educational approach. Game-based learning involves various game applications that support and enhance learning objectives. This method provides students with an interactive and enjoyable experience during the learning process, increasing their motivation and enabling more effective achievement of learning outcomes (Sulistyaningtyas and Fauziah, 2019).

It is inconceivable for children to complete their developmental process without playing games; thus, the relationship between games and children is of utmost importance. Experts conducting research on game have a clear consensus that the role of game is critical in the developmental stages of children. Game not only helps children develop cognitive, physical, and social skills but also fosters imagination and creativity (Frey and Kaiser, 2011; Arslan et al., 2024; Karadeniz et al., 2024). Games provide children with an informal environment where they can explore and take the advantage of

learning opportunities. Such an environment allows children to experiment freely, learn from their mistakes, and acquire new skills. Through games, children engage in social interactions with their surroundings while simultaneously improving their problem-solving abilities. As a result, their learning processes become richer and more effective (Hsieh et al., 2015; Uzun et al., 2021; Satılmış et al., 2023).

In educational settings, game activities that are systematically and carefully conducted to achieve specific objectives are called educational games. These games encompass structured activities that support the teaching process, encourage students' physical, cognitive, and emotional development, and make learning fun. Educational games act as an effective tool that facilitates the achievement of learning goals while ensuring active participation of children (Yılmaz et al., 2019). They also serve as a fun teaching method that helps children reinforce concepts they have learned and provides opportunities for practice. These games enable children to actively engage in the learning process and apply the knowledge they acquire in a practical manner (Hamari et al., 2014). Educational games are activities integrated into the educational process to promote learning. They aim to teach specific skills, knowledge, or concepts in an entertaining way. These games can be played individually or in groups and are adaptable for students of various age groups (Shu and Liu, 2019).

Within the scope of the "Sports Education Protocol in Primary Schools," which was signed and implemented in 2022 between the Ministry of National Education and the Ministry of Youth and Sports, it was decided that the trainers working under the Ministry of Youth and Sports would provide training in various sports disciplines as part of the "Physical Education and Game" classes in primary schools (Özsarı, 2023). A review of literature indicated that considering the age range of students, game activities that are designed for primary school students should focus on the games that do not prioritize performance where winning and losing are secondary. Onay defines games for children as “a set of physical or mental actions which are based on simple rules, where winning or losing are not of great importance and participants engage in order to spend fun time or be the part of an activity” (Onay, 2007) Similarly, Kara defines educational games for children as “activities that positively contribute to children’s physical, mental, and psychological development, foster skills such as gaining confidence, cooperating, belonging to a group, and teach and develop sensitivity to the environment, learning to listen, respecting to others, and being tolerant by prioritizing collective wellbeing over individual interests” (Kara, 2010).

There are notable differences between the curricula of trainer education and teacher education in terms of educational games courses. Even though both programs acknowledge the significant role of educational games in teaching and learning environments, their focus and method of implementation differ. While coaching education emphasizes sport skills and competitive approach, teacher education adopts a broader pedagogical framework focusing on the overall development of children. For trainers, the purpose of educational games is to improve performance in training and to focus on results, where competition is at the forefront and winning is prioritized. Trainers plan and implement educational games to achieve specific goals, aiming to develop athletes' technical and tactical skills, teamwork and strategic thinking, and to allow athletes to experience the emotional experiences of both victory and defeat during the game (Mardiansyah et al., 2024). It is believed that this emotional resilience and self-discipline will contribute to the development of athletes (Mardiansyah et al., 2024). For teachers, educational games are structured activities which aim at teaching knowledge and skills in a fun and interactive environment and thus softer in nature. These games are integrated into the teaching process to boost students’ motivation, reinforce learning, and develop social skills (Decorby et al., 2005).

Within the scope of the “Sports Education Protocol in Primary Schools” signed between the Ministry of National Education and the Ministry of Youth and Sports in 2022, the phenomenon that the trainers working within the Ministry of Youth and Sports provide training in various sports branches in Physical Education and Games lessons in primary schools is an unprecedented practice. For this reason, when the literature reviewed, there is no comparison of the aims, methods, planning, implementation, evaluation processes and competencies of Trainers and Classroom Teachers in conducting educational games.

As it can be understood from the literature, the previous studies compared the skills of Physical Education Teachers and Classroom Teachers to play educational games or their competencies in conducting physical education and game lessons. Other than that, the skills of these two branch teachers have been discussed separately. In no study carried out so far, the competencies of trainers to facilitate educational games have been taken into consideration and compared, which creates the necessity of conducting this distinctive study to evaluate and discuss the relevant protocol in terms of the physical and mental development of our children, who are our future. The publishment of the results of this study will hopefully contribute the literature.

In light of all this information, it is essential to address the differences in the planning, implementation, and evaluation processes of educational games conducted by trainers and classroom teachers, who represent two distinct professional groups and serve as stakeholders in this unprecedented project. Additionally, identifying educational game activities suitable for the developmental characteristics of the students in the target age group and establishing the application principles of these games remain necessary.

Based on the above information, the aim of this study is to compare the self-efficacy levels of trainers who provide training in various sports branches and classroom teachers within the scope of the "Sports Education Protocol in Primary Schools" implemented in Turkey.

METHOD

Population-sample

The population of the study consists of classroom teachers working in public schools in the city centre affiliated to Bilecik Provincial Directorate of National Education and trainers working in the city centre affiliated to Bilecik Provincial Directorate of Youth and Sports. Based on calculations made to determine the representability of the sample group, a total of 153 people were found to be sufficiently representative with a 5% margin of error and 95% confidence interval. This consists of 103 classroom teachers and 50 trainers. In the light of these calculations, the sample group of the current research consisting of 159 people, 107 teachers and 52 trainers, who were randomly selected from the population sufficiently meets the study's requirements.

Data collection tool

Measurement tools used in the study are: "Demographic Information Form" created by the researcher to collect the personal information of the participants and the "Educational Game Playing Self-Efficacy Scale" developed by Altınkök and Yılmaz in 2018 to determine the self-efficacy levels of the participant teachers and trainers in educational game playing, in 5-point Likert form, consisting of 11 questions and 3 sub-dimensions (Planning, Implementation, Evaluation). The scores obtained from the sub-dimensions of the scale give the self-efficacy level score for educational game playing. The score margin of the scale is in the range of 11-55. The Cronbach's Alpha value calculated for the original scale developed was 0.88 (Altınkök and Yılmaz, 2018). The Cronbach's Alpha value for this study was determined to be 0.77, and according to experts, Cronbach's Alpha value should be at least 0.70 and above for the reliability of a test applied (Esin, 2014; Özdamar, 2011; Büyüköztürk, 2010; Tezbaşaran, 1997).

Process

In this study, which was carried out in compliance with the decision of Bilecik Şeyh Edebali University Scientific Research and Publication Ethics Committee, dated 02.05.2024 and numbered 14. The study was conducted after obtaining the required ethics committee approvals. Before administrating the scales, general information about the study was provided to the participants, and participation was on a voluntary basis.

Participants were given an adequate amount of time to read and sign the informed consent form. Any questions asked by the participants were answered and the contact information of the researcher was shared so that communication could take place when needed. It took approximately 20 minutes for each participant to apply the scale. The research was conducted in accordance with the principles outlined in the Declaration of Helsinki.

Data analysis

The research method of this study is "Causal Comparison Research" and it aims to identify the current conditions and determine the causes and consequences of the differences between these conditions without any intervention on the conditions and participants. In this research, SPSS 22.0 package program was used to analyse the data. Initially, the data distribution was analysed. Utilizing descriptive statistical techniques, frequency and percentage distributions were employed. In order to determine the differences between the variables, Skewness and Kurtosis values were analysed to determine the normality of the data. Since the data obtained were between +1.5 and -1.5, the data was accepted to show normal distribution (Tabachnick and Fidell, 2013). Independent Samples T-Test was used for the comparison of two different independent groups and One Way Anova Test was applied for the comparison of more than two independent groups. In case of defining a difference between the groups, Post-Hoc multiple comparison tests were applied to determine which groups causes the difference. The results were evaluated at a 95% confidence interval and the significance level was set at $p<0.05$.

FINDINGS

The findings of the current study are presented below.

Table 1: Frequency and percentage (%) values of demographic characteristics of volunteer teachers and trainers

		Teachers		Trainers	
Variables	**Groups**	***n***	***%***	***n***	***%***
Gender	Female	74	69.2	18	34.6
	Male	33	30.8	34	65.4
	Total	107	100.0	52	100.0
Age	21-30 years old	8	7.5	8	15.4
	31-40 years old	32	29.9	24	46.2
	41-50 years old	42	39.3	15	28.8
	51-60 years old	25	23.4	5	9.6
	Total	107	100.0	52	100.0
Education Level	High School	-	-	4	7.7
	University	74	69.2	41	78.8
	Master's Degree	33	30.8	7	13.5
	Total	107	100.0	52	100.0
At what level have you participated or are you participating in sports?	As a Leisure Activity	78	72.9	-	-
	Amateur	29	27.1	49	94.2
	Professional	-	-	3	5.8
	Total	107	100.0	52	100.0
Have you received pedagogical formation training?	Yes	107	100.0	7	13.5
	No	-	-	45	86.5
	Total	107	100.0	52	100.0
Are educational games important for children's development?	Yes	107	100.0	107	100.0
	No	-	-	-	-
	Total	107	100.0	52	100.0
Is winning important in educational games?	Yes	14	13.1	49	94.2
	No	93	86.9	3	5.8
	Total	107	100.0	52	100.0

Should rewards be given to winners and penalties to losers in educational games?	Yes	8	7.5	50	96.2
	No	99	92.5	2	3.8
	Total	107	100.0	52	100.0

When Table 1 is analysed, it is observed that 69.2% of the participant classroom teachers were female and 30.8% were male, while 34.6% of the participant trainers were female and 65.4% were male. When the age ranges of the participant classroom teachers were analysed, 7.5% were between 21-30 years old, 29.9% were between 31-40 years old, 39.3% were between 41-50 years old and 23. 4% were between the ages of 51-60, while the participant trainers were relatively younger and 15.4% were between the ages of 21-30, 46.2% between the ages of 31-40, 28.8% between the ages of 41-50 and 9.6% between the ages of 51-60.

When the education level of the participant classroom teachers is examined, it is concluded that 69.2% of them have university and 30.8% have master's degrees, while 7.7% of the participant trainers have high school, 78.8% have university and 13.5% have master's degrees. This indicates that the education level of trainers is relatively lower than that of the classroom teachers. Regarding the participant classroom teachers and trainers' engagement in sports activities, 72.9% of the teachers reported that they do sports as a leisure time activity, while 94.2% of the trainers have an amateur sportsmanship background and 5.8% of them have a higher level of professional sportsmanship background. When the pedagogical formation education status of the participant classroom teachers and trainers was analysed, all of the teachers and 13.5% of the trainers were reported to have pedagogical formation education.

Beside these, findings show that all off the participating classroom teachers and trainers agreed that educational games are important for children's development, which shows a complete consensus on this matter. However, the points where classroom teachers and trainers disagree regarding educational games are notable. A significant majority of the classroom teachers (86.9%) argue that winning is not important in educational games, while the majority of the trainers (94.2%) state that winning is important. Additionally, 96.2% of trainer's answered in the affirmative to the question of whether or not educational games should penalize losers and award winners, whereas 92.5% of classroom instructors gave a negative response. This indicates that the two groups have almost completely opposing viewpoints on these two issues.

Table 2: Descriptive statistics of classroom teachers' and trainers' educational game self-efficacy levels and scale sub-dimensions

Scale Sub-Dimensions	***Role***	***n***	***min $\bar{x}$***	***max $\bar{x}$***	***$\bar{x}$***	***SD***
Planning	Teacher	107	2.58	5.00	4.65	.446
	Trainer	52	2.75	5.00	3.92	.501
Implementation	Teacher	107	1.25	5.00	3.99	.677
	Trainer	52	4.00	5.00	4.70	.373
Evaluation	Teacher	107	2.44	5.00	4.50	.602
	Trainer	52	1.00	5.00	3.21	1.011
Educational Game Self-Efficacy Level	Teacher	107	2.99	4.82	4.37	.366
	Trainer	52	3.36	5.00	4.01	.390

When the self-efficacy levels and sub-dimensions of the scale of participating teachers and trainers are examined in Table 2, the participant classroom teachers were found to have a very high mean score in the Planning sub-dimension ($\bar{x}$= 4.65), a high mean score in the Implementation sub-dimension ($\bar{x}$= 3.99), a very high mean score in the Evaluation sub-dimension ($\bar{x}$= 4.50) and a very high mean score in the Educational Game Playing Self-Efficacy level ($\bar{x}$= 4.37). When the participant trainers are examined, they were found to have a high mean score in the Planning sub-dimension ($\bar{x}$=

3.92), a very high mean score in the Implementation sub-dimension ($\bar{x}$= 4.70), a medium mean score in the Evaluation sub-dimension ($\bar{x}$= 3.21) and a high mean score in the Self-Efficacy for Educational Game ($\bar{x}$= 4.01). Regarding these results, it was concluded that classroom teachers had higher mean scores in Planning, Evaluation and Educational Game Self-Efficacy than trainers, and trainers had higher mean scores in the Implementation sub-dimension than classroom teachers.

Table 3: Comparison of classroom teachers' educational game self-efficacy levels based on demographic characteristics

Variable	**Gender**	***n***	***x̄***	***SD***	***t***	***p***
Educational Game Self-Efficacy Level	Female	74	4.35	.392	-.708	.481
	Male	33	4.41	.301		
	Age	***n***	***x̄***	***SD***	***F***	***p***
	21-30 years old	8	4.60	.208	2.848	.041*
	31-40 years old	32	4.45	.295		
	41-50 years old	42	4.33	.380		
	51-60 years old	25	4.25	.416		
	Educational Level	***n***	***x̄***	***SD***	***t***	***p***
	University	74	4.37	.415	-.107	.915
	Master's Degree	33	4.37	.223		

*p<0.05

As it is shown in Table 3, the results of the t-test conducted to compare the educational game self-efficacy levels of male and female classroom teachers indicate that there is no statistically significant difference between the groups (t = -0.708; p > 0.05). However, it is observed that male teachers ($\bar{x}$= 4.41) have a relatively higher level of self-efficacy for educational game than female teachers ($\bar{x}$= 4.35).

ANOVA, which was conducted to test whether the self-efficacy level of teachers providing educational games according to their age groups differ, has indicated that the groups show a statistically meaningful difference (F = 2.848; p < 0.05). As a result of the Tukey HSD multiple comparison test conducted to determine from which age groups this difference originated, it was determined that the difference comes from the age groups of 21-30 ($\bar{x}$= 4.60) and 51-60 ($\bar{x}$= 4.25). This finding reveals that as the age range increases, there is an inversely proportional decrease in the level of educational game playing self-efficacy.

The results of the t-test carried out to determine the differences in self-efficacy levels for conducting educational games among classroom teachers with different educational levels indicate that there is no statistically significant difference between the groups (t = -0.107; p > 0.05).

Table 4: Comparison of trainers' educational game self-efficacy levels based on demographic characteristics

Variable	**Gender**	***n***	***x̄***	***SD***	***t***	***p***
Educational Game Self-Efficacy Level	Female	18	4.08	.422	.956	.344
	Male	34	3.97	.372		
	Age	***n***	***x̄***	***SD***	***F***	***p***
	21-30 years old	8	4.32	.353	4.843	.005*
	31-40 years old	24	4.06	.357		
	41-50 years old	15	3.87	.358		
	51-60 years old	5	3.65	.297		
	Educational Level	***n***	***x̄***	***SD***	***F***	***p***
	High School	4	3.75	.300	1.496	.234
	University	41	4.00	.364		
	Master's Degree	7	4.16	.538		

*p<0.05

When Table 4 examined, the independent sample t-test conducted to compare the educational game playing self-efficacy levels of male and female trainers did not reveal a statistically significant difference between the groups (t =. 956; p > 0.05). However, it can be stated that the educational game playing self-efficacy levels of female trainers (**$\bar{x}$ = 4.08**) are relatively higher than those of male trainers (**$\bar{x}$ = 3.97**).

The analysis of variance conducted to determine the difference between the educational game playing self-efficacy levels of trainers in different age groups revealed a statistically significant difference among the groups (F=4.843; p<0.05). As a result of the Tukey HSD multiple comparison test conducted to identify which age groups this difference originated from, the difference was found to arise between the age groups of 21-30 years ($\bar{x}$= 4.32), 41-50 years ($\bar{x}$= 3.38) and 51-60 years ($\bar{x}$= 3.65). In addition, as the age range increases, there is an inversely proportional decrease in the level of educational game playing self-efficacy.

As a result of the analysis of variance conducted to determine the difference between the self-efficacy levels of trainers with different educational levels, it was confirmed that the groups did not show statistically significant difference (F=1.496; p>0.05).

Table 5: T-test table comparing self-efficacy levels and scale sub-dimensions in educational game playing between classroom teachers and trainers

Scale Sub-Dimensions	Role	*n*	$\bar{x}$	*SD*	*t*	*p*
Planning	Teacher	107	4.65	.446	9.272	.000*
	Trainer	52	3.92	.501		
Implementation	Teacher	107	3.99	.677	-7.053	.000*
	Trainer	52	4.70	.373		
Evaluation	Teacher	107	4.50	.602	10.100	.000*
	Trainer	52	3.21	1.011		
Educational Game Self-Efficacy Level	Teacher	107	4.37	.366	5.723	.000*
	Trainer	52	4.01	.390		

*p<0.05

As presented in table 5, the t-test conducted to compare the self-efficacy levels of classroom teachers and trainers in educational game playing and the sub-dimensions of the scale gives statistically significant differences in favour of teachers in the Planning (t = 9.272; p < 0.05), Evaluation (t = 10.100; p < 0.05) sub-dimensions, and the total score of the Educational Game Playing Self-Efficacy Level (t = 5.723; p < 0.05). On the other hand, in the Implementation sub-dimension (t = -7.053; p < 0.05), trainers showed a higher self-efficacy level.

DISCUSSION AND CONCLUSION

The aim of this study was to compare the self-efficacy levels of trainers who provide training in various sports branches and classroom teachers within the scope of the "Sports Education Protocol in Primary Schools" implemented in Turkey. Considering the data gathered for the present study, when the demographic characteristics of the classroom teachers and trainers participating in the study are examined, 69.2% of the classroom teachers were female, and 30.8% were male, while 34.6% of the trainers were female and 65.4% were male. When the age ranges of the participant classroom teachers were examined, 7.5% were between 21-30 years old, 29.9% were between 31-40 years old, 39.3% were between 41-50 years old and 23.4% were between the ages of 51-60, while the participant trainers were relatively younger and 15.4% were between the ages of 21-30, 46.2% between the ages of 31-40, 28.8% between the ages of 41-50 and 9.6% between the ages of 51-60. Following the re-establishment of the Ministry of Youth and Sports in 2011, the provincial organization began to be rapidly restructured, and a young and dynamic public sector workforce of trainers was established through both the Public Personnel Selection Examination (KPSS) and recruitment through service procurement. This situation explains the age difference between teachers, who are personnel of the Ministry of National Education with a long-standing history, and trainers, who are personnel of the Ministry of Youth and Sports with a relatively newer structure.

When the educational levels of the classroom teachers were examined, 69.2% of the participant classroom teachers were found to have a university degree and 30.8% to have a master's degree while the 7.7% of the participating trainer were found to have a high school education, 78.8% to have a university degree, and 13.5% to have a master's degree, indicating that their educational levels were lower compared to the classroom teachers. The regulation of the teaching profession as a 3-step career profession as teacher, expert teacher and head teacher in accordance with the Teaching Profession Law has encouraged teachers to continue their academic education alongside their profession due to various gains, and this situation explains the reason for the difference in education level determined in favour of teachers as a result of our research.

When the classroom teachers' and trainers' sports participation status was analysed, 72.9% of the teachers were found to practice sports as a leisure time activity, while 94.2% of the trainers were found to be amateurs and 5.8% of the trainers were found to have a higher level of professional sports background. When examining the pedagogical formation training of the participating classroom teachers and trainers, it was confirmed that all the teachers had received pedagogical formation training as required by their profession, while only 13.5% of the trainers had received pedagogical formation training. When considering the minimum appointment requirements for the relevant professional groups, it is believed that these findings are consistent with the expected outcomes.

Furthermore, it is observed that all of the participating classroom teachers and trainers acknowledged the importance of educational games for children's development, and there is complete consensus on this matter. The points where classroom teachers and trainers disagree in terms of educational games are that the majority of the teachers (86.9%) believe that winning is not important in educational games, while the vast majority of trainers (94.2%) express that winning is important. Additionally, concerning the issue of awarding a prize to the winner and imposing a penalty on the loser in educational games, the majority of teachers (92.5%) gave a negative response, while 96.2% of the trainers had favourable views, indicating almost completely different views on these two points. The reason for this difference is attributed to the distinct differences in the curricula of training education and teaching education, particularly concerning the educational games course. Although the importance of educational games in teaching and learning environments is acknowledged by both programs, their focus and methods of application differ. While teaching education places more emphasis on the overall development of students within a broader pedagogical framework, training education places more emphasis on a competitive approach for the development of sports abilities in educational activities.

As a result of the t-test for the within-group comparison of the educational game facilitation self-efficacy levels of classroom teachers and trainers in terms of gender variable, it was determined that there was no statistically significant difference between the groups. Similarly, in a study conducted in 2023 with teachers from different disciplines in Alanya region, no significant difference was obtained in educational game conducting self-efficacy levels based on the gender variable (Ödemiş and Arslan, 2023). Another study carried out in 2016 with physical education teacher candidates also concluded that there was no statistically significance in the educational game self-efficacy levels with respect to gender (Çintesun, 2020). Yılmaz and colleagues compared the self-efficacy levels of physical education and sports teachers and classroom teachers in 2019 and found that there was no significant relationship between the gender variable and the self-efficacy of conducting education games (Yılmaz et al., 2019). In another study conducted by Marback et al. in 2005 on the gender differences of trainers, it was similarly stated that there was no significant difference in terms of the ability to facilitate games (Marback et al., 2005). On the contrary, in a study examining the self-efficacy levels of special education teachers regarding game teaching, it was concluded that there was a statistically significant difference between the self-efficacy levels of special education teachers regarding game teaching in terms of gender variable (Akmeşe & Kayhan, 2017). The findings of a different study on the abilities of trainers working at universities revealed that there were gender-related disparities among the trainers, with female trainers coming to fore in certain sub-dimensions and male trainers in others (Myers et al., 2005). Although the results of some studies differ, in general, there is a similarity between the results of our study and the general results in the literature.

As a result of the analysis of variance conducted to establish the difference between the self-efficacy levels of educational game facilitation among classroom teachers and trainers in different age groups, it was determined that the groups showed a statistically significant difference. In terms of teachers,

this difference was found to be between 21-30 and 51-60 age groups, while for trainers it was discovered to be between 21-30, 41-50 and 51-60 age groups. In addition, for both groups, as the age range increases, it was observed that there was a decrease in the level of educational game playing self-efficacy in inverse proportion. Similarly, in a study examining trainer competencies and game facilitation skills, it was concluded that there were statistically significant differences between age groups depending on physical competence, and as the age range of trainers increased, there was a decline in their competencies and game facilitation skills (Feltz et al., 2009). In a comparable fashion, Güllü and Donuk, in a study conducted on the competence level of football coaches in 2019, reported that there were statistically significant differences in all sub-dimensions of training competence based on age variable (Güllü and Donuk, 2019). Furthermore, two different studies conducted on pre-service teachers and pre-coach students studying in the coaching education programs revealed that there was no significant difference in terms of the level of competence to play and facilitate games involving physical activity (Tabancalı & Çelik, 2013; Öztürk, 2016). These results clarify that although trainers and teachers of comparable ages do not differ statistically, physical competence and, hence, self-efficacy levels in facilitating physically demanding sports decrease with increasing age.

The t-test performed to determine the differences in the self-efficacy levels of educational game facilitation among classroom teachers with different education levels and the analysis of variance performed to determine the differences among trainers with different education levels revealed no statistically significant differences between the groups. It is considered that this result is due to the fact that the education levels of the teachers and trainers participating in our research are close to each other within their groups. In a study conducted in 2010 with 177 tennis trainers, the fact that no statistically significant difference was found between the education levels of tennis trainers and their coaching self-efficacy levels supports the findings of our study (Toklu, 2010).

When the mean scores of the self-efficacy levels of educational game facilitation and the sub-dimensions of the scale among participating teachers and trainers were examined, the classroom teachers were found to score very high in the planning sub-dimension, while trainers scored high. In the implementation sub-dimension, teachers scored high, whereas trainers scored very high. In the evaluation sub-dimension, teachers scored very high, while trainers scored moderate. For the overall self-efficacy scores in educational game facilitation, teachers scored very high, and trainers scored high. Based on these findings, it was observed that classroom teachers had higher mean scores than trainers in terms of planning, evaluation, and overall self-efficacy scores for educational game facilitation, whereas trainers had higher mean scores than classroom teachers in terms of implementation sub-dimension. Furthermore, a statistically significant difference in favour of trainers was found in the implementation sub-dimension of the t-test performed to compare the self-efficacy levels of educational game facilitation and the sub-dimensions of the scale between teachers and trainers. In contrast, significant differences in favour of teachers were found in the planning and evaluation sub-dimensions, and overall self-efficacy scores. In a 2010 study which examines the planning and implementation of primary school physical education classes in alignment with their objectives, it was concluded that physical education lessons that are planned and executed properly improved students' overall academic success and positively influenced their attitudes toward school. Additionally, the significance of having qualified and competent teachers who can plan and implement physical education lessons appropriately considering the age and developmental levels of children, and who understand the value of physical education and game practices was highlighted (Ayan and Tamer, 2010). In a 2017 study investigating classroom teachers' perspectives on the games and physical activities course, it was found that classroom teachers were adequate in the planning phase of the physical education and games course. However, in the implementation phase, it was noted that the course objectives were not adequately achieved due to the fact that classroom teachers did not fully grasp the importance of the physical education and games course, it was often perceived as a time slot for compensating other lessons and the teachers had limited competence in physical activities (Kara et al., 2017). In an experimental study by DeCorby and colleagues in 2005 that investigated the challenges classroom teachers encountered in physical education lessons, it was found that classroom teachers struggled with the implementation phase of physical education classes. As a result, they were more meticulous during the planning phase, and when they did not adhere to their established plans, they were unable to provide effective physical education lessons (DeCorby et al., 2005). The teaching strategies of trainers were investigated in a different research study carried out in 2021 with 56 trainers from 14 different sports disciplines. It was unearthed that

trainers predominantly adopted coach-centred teaching methods during training sessions and while conducting educational games. It was also observed that they often did not sufficiently engage in planning and evaluation processes during their training sessions and that they often relied on their self-efficacy and previous experiences (Kılıç and İnce, 2021). In a study conducted in 2004 in South Korea to determine the perceptions of primary school teachers regarding physical education lessons, three major factors were identified as contributing to the failure to achieve the learning outcomes of physical education classes. These factors included improper planning of physical education lessons, teachers' lack of understanding of the importance of the subject, and shortcomings in implementation, as well as deficiencies in teachers' pedagogical knowledge (Kim and Taggart, 2004). It is commonly noted after reviewing the pertinent literature that these conclusions are consistent with our study's findings.

In conclusion, it is considered that classroom teachers, who are stakeholders of the project executed within the scope of physical education and game lessons in primary schools, experience various challenges in the implementation of educational games. Trainers, on the other hand, prove to be insufficient in planning and evaluating educational games, and their involvement in providing sports-specific instruction in primary schools may raise certain pedagogical concerns. Nevertheless, it is considered that if these concerns are minimized with appropriate training and management strategies, and a proper approach is adopted, this initiative has the potential to significantly contribute to children's physical, social, and emotional development. Therefore, the inclusion of trainers in the educational processes of primary schools should be revised as a long-term project that requires careful planning, the establishment of necessary infrastructure, the determination of implementation standards, and supervision at every stage. It is believed that this research and its findings will contribute to the more effective and efficient continuation of the project that has been initiated, and thus will fulfil its purpose and positively contribute to the physical and mental development of our children, who represent our future.

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