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Perceived Social Development Scale for Physical Education Lessons (PSDSPEL) - Parent Version

Beden Eğitimi ve Spor Dersine İlişkin Alglıanan Sosyal Gelişim Ölçeği (BESDASG-Ö)-Veli Versiyonu

Yasin KARACA * **Bijen FİLİZ** **

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ABSTRACT: In this study, a valid and reliable scale was developed to measure parents' perceptions of their children's social development in physical education classes. In the first part of the research, the relevant literature reviewed and student-parent interviews were held. As a result of the data obtained from the interviews, a 30-item draft scale was created. The draft scale was applied to 30 parents of students, and as a result of the feedback received, 5 items were removed from the pool. The remaining draft scale items were submitted to expert opinion and the number of items was reduced to 22. The 22-item scale was applied to 240 volunteer parents for Exploratory Factor Analysis (EFA) and to 216 different volunteer parents for Confirmatory Factor Analysis (CFA). As a result of the analyses, the final scale consisting of 15 items and four sub-dimensions was obtained. The Cronbach's Alpha values of the sub-dimensions were found to be between .74-.79. In the final part, the 15-item scale was applied to 540 volunteer parents. Accordingly, while it was observed that parents' PSDSPEL scores were higher in the sub-dimension of showing positive behavior, it was determined that male parents' perception levels were higher than female parents. As a result of the study, it was found that the validity, reliability and internal consistency coefficients of the scale were at acceptable levels

Keywords: Physical education and sports, showing responsibility, cooperating, showing positive behavior, scale development.

ÖZ: Bu çalışmada, ebeveynlerin beden eğitimi derslerinde çocuklarının sosyal gelişimine ilişkin algılarını ölçebilecek geçerli ve güvenilir bir ölçek geliştirilmiştir. Araştırma doğrultusunda ilk aşamada ilgili literatür taranmış, öğrenci-veli görüşmeleri yapılmıştır. Görüşmelerden elde edilen veriler sonucunda 30 maddelik taslak ölçek oluşturulmuştur. Oluşturulan taslak ölçek 30 öğrenci velisine uygulanmış ve alınan geri bildirimler sonucunda beş madde havuzdan çıkarılmıştır. Kalan taslak ölçek maddeleri uzman görüşüne sunulmuş ve madde sayısı 22'ye düşürülmüştür. 22 maddelik ölçek, Açımlayıcı Faktör Analizi (AFA) için 240 gönüllü ebeveyne, Doğrulayıcı Faktör Analizi (DFA) için 216 farklı gönüllü ebeveyne uygulanmıştır. Yapılan analizler sonucunda 15 maddeden ve dört alt boyuttan oluşan nihai ölçek elde edilmiştir. Alt boyutların Cronbach's Alpha değerlerinin .74- .79 arasında olduğu tespit edilmiştir. Son aşamada, 15 maddelik ölçek 540 gönüllü ebeveyne uygulanmıştır. Buna göre, olumlu davranış gösterme alt boyutunda ebeveynlerin BESDASG-Ö puanlarının yüksek olduğu görülürken, erkek ebeveynlerin algı düzeylerinin kadınlardan daha yüksek olduğu belirlenmiştir. Araştırma sonucunda, ölçeğin geçerlilik, güvenirlik ve iç tutarlılık katsayılarının kabul edilebilir seviyelerde olduğu görülmüştür.

Anahtar kelimeler: Beden eğitimi ve spor, sorumluluk gösterme, iş birliği yapma, olumlu davranış gösterme, ölçek geliştirme.

* *Corresponding Author*: Assoc. Prof. Dr., Osmaniye Korkut Ata University, Osmaniye, Türkiye, yasinkaraca99@gmail.com, https://orcid.org/0000-0001-6024-7679
** Assoc. Prof. Dr., Afyon Kocatepe University, Afyonkarahisar, Türkiye, bijenfiliz@gmail.com, https://orcid.org/0000-0001-5863-3861

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People's being able to fulfil the roles that society expects from them as social beings and take their rightful places in the community is possible only through both satisfying their psychological needs and completing their social developments in a healthy way. Social development is a process that starts from the birth of a person and continues until his/her death. Also, social development is one of the essential processes of childhood, as in other area of development. In order for children to adapt to and socialize with the society and environment they live in, they need to gain social skills such as interacting with peers as well as other people in a healthy way, expressing emotions, controlling social reactions, empathizing, establishing close relationships with others, displaying a positive image, cooperating and sharing (Arslan & Uyanık, 2018). Social development plays an essential role in a child's acquisition of these values.

Social development is defined as learning actions that can be accepted by the society in which a person lives (Fazlıoğlu, 2009). The first indicators of a child's socialization process are beginning to perceive the social values in the family, internalizing these values and transforming them into actions. Social experiences and values gained during childhood form the basis for social development in the future. People who have completed their social developments can establish positive and constructive relationships with other people around them, solve their problems by social norms, establish a balance between their own needs and society's expectations, help their relatives and environment, and express their feelings appropriately (Baran, 2011). On the other hand, lack of social development can lead to many problems for children. For example, as a result of incomplete social development, children might be rejected by their peers or their academic success might decline. Children who do not complete their social developments adequately might experience more social problems in later stages of life than their peers (Baran, 2011). For these reasons, it is essential to focus on the factors that affect a child's social development.

Although many factors play a role in a child's social development, the most influential and determining factors are family, school and environment. Öztürk (1998) states that a child with his/her birth establish the first communication and social interaction with his/her family. Öztürk (1998) also states that children learn every act they see in the family through imitation. They shape their interest in speech, painting, music, and sports as well as eating habits, sleeping patterns, reading habits according to the actions they observe in their family. On the other hand Özçelik (2007) states that the family in childhood and the school and the environment in adolescence are determinants of social development. Başaran (1984) states that individuals need to train themselves in terms of knowledge, skills, manners and mentality to adapt themselves to their social environments and survive in these environments. He also states that individuals could acquire these abilities through education, which are possible thanks to schools.

Education is an essential tool that reveals individuals' hidden strengths and abilities and helps them improve those in the best way possible. In education, individuals should be approached as a whole: physically, mentally, emotionally, and socially because success in education can be achieved by combining mental education with physical education (Öncü & Güven, 2011). For this reason, physical education and sports are among the courses that are considered essential and prioritized in educational curriculums worldwide. In addition to this, educators emphasize the social aspects of physical education and sports. They also accept a higher participation of the population

in regular sports as an indicator of a higher civilization (Öncü & Güven 2011; Varış, 1990). From this point of view, it can be stated that physical education and sports are essential tools in raising individuals who can develop themselves physically and mentally. They can have healthy and strong personalities. They can be constructive, creative, productive, gentlemanly, and discreet (Ersoy et al., 2006). Thanks to physical education and sports which play important roles in the realization of sports activities at schools, it is ensured that children and young people gain values that contribute to social development such as solidarity, cooperation, responsibility, sharing, justice, tolerance, and helpfulness (Kayışlıoğlu et al., 2015). While children socialize through sports, they also gain the habit of learning better and respecting authority by interacting more with their teachers and coaches (Firek et al., 2020). This situation coincides with moral principles and Kohlberg's theory of social development, because children develop the ability to understand social cues and comply with laws and authority through sports (Ma, 2013). Physical education teachers are important role models for children, and children often imitate the behavior of these important figures. The concept of imitating behavior is supported by social learning theory, which suggests that new behaviors are acquired by observing and imitating others (Li & Shao, 2022). The theory of positive youth development, which proposes that the child is prone to healthy environmental development during a period when he/she becomes more interested in his/her own ecology, has been examined in the context of sports. The results obtained revealed that sports positively affected children in terms of their sense of confidence, family relationships, academic success, social competence and honesty (Linver et al., 2009). When look at the issue from the perspective of social development, there is no doubt that the basic element of social development is family. The important point here is the perspective of families and evaluation of sports activities because it teaches a child custom, traditions, and behavioural patterns effectively (Erkal et al., 1998).

Every sociological theory about sports provides a framework to help understand the importance of sports. For example, according to Critical theory, sport affects social relationships in various ways. Coakley (2003) through Critical theory, stated that the family is effective in the child's participation in sports activities. According to this theory, the family's ideals influence their children's participation in sports. Families can direct, limit or support their children's participation in sports, taking into account their general social and cultural situation. Strandbu et al. (2019) puts forward a hypothesis on the role of the family in sports participation, suggesting that there is a strong relationship between the family's sports culture and children's participation in sports. Accordingly, the basic role of the family in the socialization of the individual is; It is to convey the idea that sports are a natural part of life to children by emphasizing habits and lifestyles. Strandbu et al. (2019) was inspired by Bourdieu's (1984, 1996) theoretical framework on the impact of the concept of 'family' on socialization and the views of other sports researchers when creating this hypothesis. (Coakley, 2006; Dagkas & Burrows, 2016).

Güven and Öncü (2006) state that children's participation in sports activities and families' attitude towards physical education and sports are determinants for their children's participation in physical education and sports. Moreover, families who are conscious of the contributions that physical education and sports make to social development have a positive attitude and they induce their children to such activities. In

contrast, some parents have stated that they disapprove of sports activities because their children's academic success might decrease. Öztürk (1998) states that families' sympathy and involvement in sports play an essential role in their children's participation in sports. Uslu (2005) states that families should motivate their children to various social activities, and that sports activities are among the main activities which ensure children's multi-directional developments. Karakuş (2005) states that families have an active role in their children's participation in physical education and extracurricular sports activities, as well as guiding them to the areas where their children are talented. Seghers et al. (2003) emphasize the importance of school and family collaboration in guiding children and young people to physical education. They state that the school and families should make an effort to increase the participation of children in physical education and sports activities and encourage them in this regard. It is seen that sports research in the literature deals with the family as a whole. It is rare for sport-related research to focus solely on father or solely mother-child interactions and their impact on sport and health relationships (Coakley, 2011; Knoester & Fields 2019; Knoester & Randolph, 2019; Messner & Musto, 2014). This is surprising, considering that, for example, sports activities play an important role in the father's relationship with his children (Coakley, 2006). On the other hand, Knoester and Field (2019) they state that most mothers participate in sports activities with their children once a week or more often. Knoester and Field (2019) also noted that mother-child interactions in sports and outdoor activities were positively associated with mothers' reports of health and relationship closeness. These studies reveal that it is essential to learn parents' social development perceptions regarding physical education lessons.

When the literature on the subject matter is examined, considering the scales globally, it is noticed that the individual and social responsibility scale (Conrad & Hedin, 1982) and the personal and social responsibility scale (Li et al., 2008) are used for determining the individual and social behavioural development of children and young people In the national platform, the social responsibility scale (Önal, 2005), responsibility and behaviour scale (Özen, 2013), personal and social responsibility scale (Filiz & Demirhan, 2015) and personal and social responsibility behaviours scale (Filiz & Demirhan, 2018) are noticed. Again, it is observed that in the international platforms where parental attitudes towards physical education and sports activities are evaluated, physical education activities attitude scale (Mowatt, DePauw & Hulac, 1988), attitudes of parents and children towards physical education lesson scale (Tannehill, Romar, & O'Sullivan, 1994) and scale for evaluating parental attitudes regarding the participation of school-age children in sports and physical activities are applied to evaluate the attitudes of parents towards physical education and sports activities (Latorre, 2006). However, at the perceived social development for physical education lessons in Turkey regarding family attitudes, only the scale of the parent's opinions on physical education classes' effects to socialize which is intended for elementary school students' parents is used (Öncü & Güven, 2011; Selçuk, 2010).

It is useful to include parents in the process to understand the contributions of students' physical education lessons to their social development. Therefore, it is thought that there is a need for more measurement tools in this regard. It is considered important for parents to know and internalize the benefits that physical education lessons can provide their children's social development with so that they can guide their children to

physical activity. Hence, it is thought that it would be useful to develop a measurement tool to evaluate parents' social development perceptions regarding physical education lessons. In this context, this study aims at developing a valid and reliable measurement tool that can reveal parents' perceptions of social development about physical education lessons and examine parents' perceptions of social development and social development perceptions in terms of gender.

Method

Study Group

The research group was selected according to the purposeful sampling method (Büyüköztürk, 2019) amongst the parents of the students living in the province of Malatya, Turkey and whose children were attending grades 5, 6, 7, and 8. In the first part of the study, 240 student parents were included for exploratory factor analysis and 216 different student parents were included for confirmatory factor analysis. A total number of 250 parents participating in the study were females (54.8%), 206 of them (45.1%) were males. In the second part in the study, there were 540 parents. In this group, 224 of the parents were females (49.8%), and 226 of them (50.2%) were males.

Scale Development Process

At this stage, the primary purpose was to create items to determine the effects of physical education lessons on students' social development. First of all, 30 voluntary parents of the students attending 5th, 6th, 7th, and 8th grades were interviewed and the parents' opinions were recorded about the contribution of physical education lessons to the social development of their children. Then social responsibility programs such as the personal and social responsibility model used in physical education and sports education, the sports education model, the collaborative learning model, the peer teaching model, and the social-emotional learning model were examined (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2013; Cohen 1994; Hellison, 2014; Metzler, 2011; Siedentop, 1994). With the information achieved as a result of the literature review and parent interviews, 45 items were formed, including the effects of physical education lessons on students' social development. For testing the comprehensibility of the items' language; the items were applied to the 30 parents interviewed. According to the parents' feedback, five items were removed from the pool, and a 25-item scale form was created. In the following process, 25 items were examined by three faculty members who were experts in the field of sports pedagogy. The experts stated that three items did not measure the desired behaviors and suggested that these items be removed from the scale, and a final 22-item form was created. As a result, for determining the effects of physical education lessons on the social development of students, a five-point Likert-type scale was prepared as "Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), and Strongly Agree (5)".

Data Analysis

SPSS 20.0 package program and LISREL 8.80 were used in the analysis of the data. In the first part of the study, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed to construct the scale's construct validity (Büyüköztürk, 2019). In order to provide evidence for item validity, the correlations of

the items in the sub-dimensions of the scale with each other were examined. Cronbach Alpha coefficiency was calculated for the internal consistency reliability of the scale. Pearson correlation analysis was performed to test the linear relationship between four sub-dimensions. In the second part, mean and standard deviation analysis were used to determine the social development perception levels of the parents regarding physical education lessons, and the MANOVA analysis was used to determine whether there was a difference in the scores of the parents from the PSDSPEL according to the gender variable. This analysis was preferred since the dependent variables are moderately correlated with each other.

Ethical Procedures

Ethics committee approval was obtained for the research from Afyon Kocatepe University, Social and Human Sciences Scientific Research and Publication Ethics Committee (26.05.2021-23677).

Results

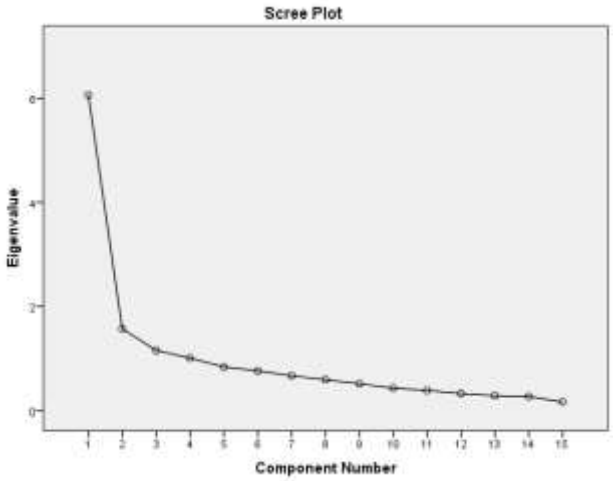
Development of the Scale

Exploratory Factor Analysis (EFA)

For EFA, data were collected from 240 parents of the students. Reliability analysis was conducted for 22 items before EFA. As a result of the analysis, three items with corrected item correlation values below .40 were removed from the scale (16, 19, 22), and the procedures were proceeded with 19 items. Bartlett test was found to be meaningful as a result of principal components analysis before rotation ($\chi 2 = 2016.364$; sd = 171; $p < .01$). The Kaiser Mayer Olkin (KMO) value, which was used for determining the suitability of the sample size for factoring, was determined as 79. Before transforming for factor analysis, five sub-dimensions with an eigenvalue greater than 1.00 achieved. These sub-dimensions explained 63.496% of the variance. For factor analysis, principal component analysis and Varimax vertical rotation technique were used. In the analysis, the cut-off point was accepted as .40 (Büyüköztürk, 2019), and four items were removed from the scale (17, 18, 20, 21), and 15 significant items were obtained. When the analysis was repeated, four sub-dimensions with eigenvalues greater than 1.00 were determined. These four sub-dimensions explained 65.277% of the total variance. The KMO value was found to be .83, and the significance level of the Bartlett test was found to be 0.000 ($\chi 2 = 1632.885$; sd = 105; $p < .01$). The number of factors in the scale is shown in Figure 1.

Figure 1

Exploratory Factor Analysis Scatter Plot



While the scatter plot is examined, it is seen that the items subsequent to the fourth item have values very close to each other. In this respect, the scale is considered as four sub-dimensioned. Table 1 includes factor load values of items and item test correlation values.

Table 1

Factor Load Values and Item Total Correlation (R) Values of the PSDSPEL

				Varimax components factor load values				
Sub-dimensions	**Item number**	**New item number**	**Factor load value**	**1**	**2**	**3**	**4**	**R**
Showing responsibility	7	1	.73	.81				.61
	8	2	.70	.80				.57
	6	3	.68	.75				.68
Cooperating	10	4	.68		.81			.47
	12	5	.53		.68			.43
	9	6	.61		.55			.61
	11	7	.46		.49			.59
Showing positive behavior	15	8	.83			.86		.89
	13	9	.62			.70		.54
	14	10	.76			.62		.88
Communicating	2	11	.71				.76	.55
	3	12	.63				.60	.60
	5	13	.68				.59	.42
	4	14	.66				.58	.62
	1	15	.60				.53	.64
Eigenvalue				6.062	1.571	1.153	1.006	
Total variance				40.414	10.474	7.684	6.705	

In addition the factor names (sub-dimensions), each item must be clearly written on the table.

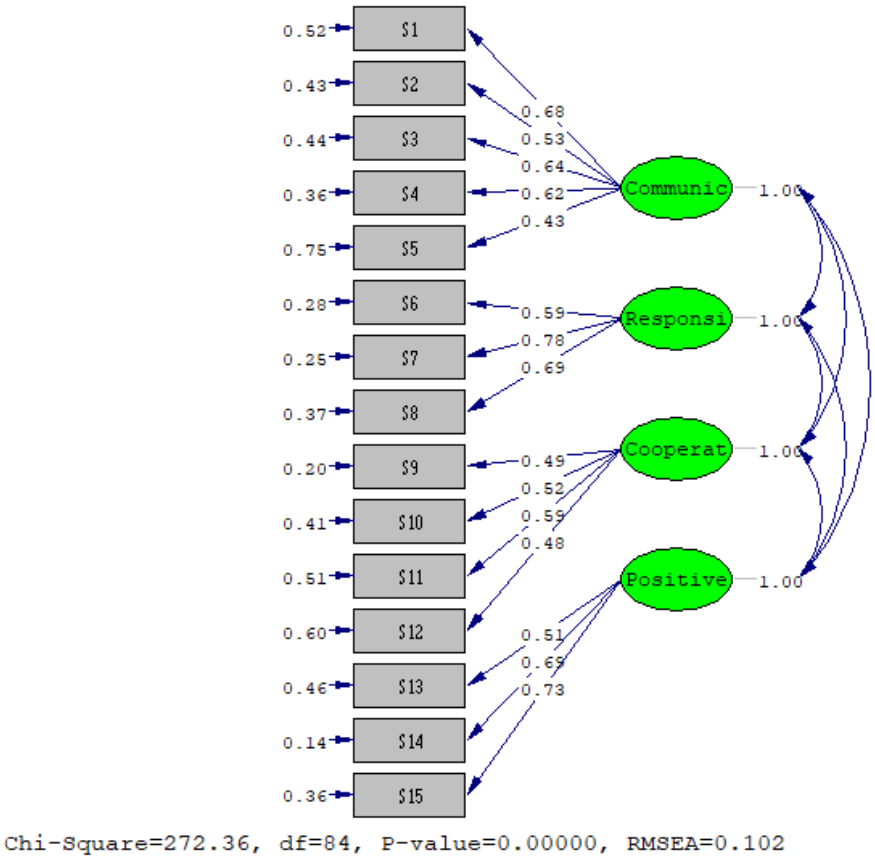
In Table 1, it is seen that the factor loading values of the first sub-dimensions are between .75 and .81, the second sub-dimensions are between .49 and .81, the third sub-dimensions are between .62 and .86, and the fourth sub-dimensions are between .53 and .76. It is observed that the total correlation values of the items are between .42 and .89. Item total correlation is expressed as the item's distinction parameter. It is stated that the distinction quality of the item is sufficient for values of .30 and above (Büyüköztürk, 2019), Therefore, it shows that the items have a sufficient level of discrimination. According to the properties of the items collected in the sub-dimensions, the first sub-dimension is named as showing responsibility, the second sub-dimension as cooperating, the third sub-dimension as showing positive behaviour, and the fourth sub-dimension as communicating.

Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis was performed with different data sets obtained from 216 parents in order to reach the goodness of fit values of the four sub-dimensional models. The diagram of the model is given in Figure 2.

Figure 2

Path Diagram of the Model



In Figure 2, for CFA, it is seen that the factor load values are between .44 and .88, the error variance values are between .23 and .80, and all of them reach a significant level. The Chi-square value for the four sub-dimensional model is

determined as $\chi 2$ (84, N = 216) = 272.36, p <.001. As a result of the calculation, it is seen that it has a good value with the value of $\chi 2$ / df = 3.24. This value`s being less than 5 indicates that the model is at an acceptable level (Hu & Bentler, 1999). RMSEA = .10, SRMR = .07, CFI = .93, NFI = .91, NNFI = .91, and GFI = .86 fit values are found to be good and perfect (Hu & Bentler, 1999; Brown, 2006). RMSEA and SRMR values` being 10 or less indicate that the model is at an acceptable level (Anderson & Gerbing, 1984; Cole, 1987). The findings obtained from the confirmatory factor analysis shows that the factor structure of the scale is in acceptable agreement with the collected data.

Internal Consistency Coefficient

In order to determine the internal consistency coefficient of the Turkish form of PSDSPEL, Cronbach's Alpha and correlation coefficient was calculated. Cronbach's Alpha and correlation coefficient values of the sub-dimensions are presented in Table 2.

Table 2

Mean, Standard Deviation (Sd), Correlation Coefficients, and Cronbach's Alpha Values of the Sub-Dimensions

Sub dimension	**Co**	**SR**	**C**	**SPB**
Communicating (Co)	-			
Showing responsibility (SR)	.59**	-		
Cooperating (C)	.57**	.49**	-	
Showing positive behavior (SPB)	.55**	.44**	.56**	-
Mean	19.96	12.51	16.27	11.96
Sd	3.37	2.27	2.48	2.21
Cronbach's Alpha	.74	.79	.78	.79

As a result of the analysis, the reliability coefficient for the four sub-dimensions of the scale was found to be α = .81. As it can be seen, the reliability coefficient values were around .74 for the first sub-dimension, .79 for the second sub-dimension, .78 for the third sub-dimension, and .79 for the fourth sub-dimension. It is stated that the correlation coefficiency is perfect around .90, very good around .80, sufficient around .70, and the dimensions are dependent and all measure a single conceptual structure together when it is above .60, and it is insufficient below .50 (Kline, 2011). Also, in the sub-dimensions correlation coefficient values, positive and statistically significant relationships between .44 and .59 were achieved (Table 2).

Test-Retest Reliability

The test-retest method was used to statistically test the stability of the PSDSPEL. In order to determine the test-retest reliability coefficient of the scale, the scale was administered to 40 volunteer parents of students at two-week intervals. In order to calculate the correlation coefficient, the normality distribution of the scale was examined, and it was determined that the scores of the parents from the PSDSPEL were between -2 and +2 standard deviations and it was observed that the data were normally

distributed (Tabachnick & Fidell, 2013). Pearson Product Moment Correlation Coefficient was used to test the stability between the scores of the parents from both applications. Accordingly, it was observed that there was a high, positive and significant correlation between the two applications of the PSDSPEL [r(40)=.82, p<.05].

Parents' Perceptions of Social Development Regarding Physical Education Lessons

In this section, results regarding the parents' social development perceptions related to physical education lessons in general in terms of gender are presented.

Table 3

Social Development Perception Levels of Parents Regarding Physical Education Lessons

	N	$\overline{X}$	Sd	Minimum	Maximum
Communicating	540	3.99	.66	2.40	5.00
Showing responsibility	540	4.17	.75	2.00	5.00
Cooperating	540	4.07	.61	2.25	5.00
Showing positive behavior	540	4.00	.73	2.00	5.00
Total	540	4.05	55	2.33	5.00

In Table 3, it is seen that the social development perceptions of the parents regarding physical education lessons are at high levels in the sub-dimensions of "communicating" (3.99 ± .66), "showing responsibility" (4.17 ± .75), "cooperating" (4.07 ± 61), and "showing positive behaviour" (4.00 ± .73). Considering the total scores, it is seen that their perceptions are at a high level. According to the analysis (4.05 ± .55), it can be stated that the parents think that physical education lessons contribute to the social development of the students.

Table 4

MANOVA Results According to Gender Variable of PSDSPEL

Sub-dimensions	Gender	N	$\overline{X}$	Sd	F	p
Communicating	Male	226	4.04	.57	2.536	.112
	Female	224	3.94	.74		
Showing responsibility	Male	226	4.15	.72	.343	.558
	Female	224	4.19	.78		
Cooperating	Male	226	4.11	.58	2.597	.108
	Female	224	4.02	.64		
Showing positive behavior	Male	226	4.09	.68	7.696	.006*
	Female	224	3.90	.76		

According to the MANOVA results in table 4, the main effect of the gender variable on the PSDSPEL sub-dimensions was found to be significant. MANOVA was

conducted to understand which dependent variable contributes to multivariate significance. In terms of the main effect of gender, it was determined that the scores for "showing positive behaviour" differ significantly. In this sub-dimension in which a significant difference is detected, male parents' mean scores are higher than female parents' mean scores.

Discussion and Conclusion

In this study, "Perceived Social Development Scale for Physical Education Lesson-Parent Version" was developed for determining the social development perceptions of the students' parents regarding physical education lessons. And the perception levels of the parents towards social development and their perceptions of social development by gender were examined. First of all, validity and reliability studies of the scale were carried out.

The findings of the study's validity and reliability reveal that the scale can be used for determining the perceived social development levels of the students' parents regarding physical education lessons in accordance with the purpose of the scale. Also, it is determined that parents' perceptions of social development are high, and the perception levels of male parents are higher than that of female parents in the sub-dimension of displaying positive behaviour.

As a result of the Explanatory Factor Analysis (EFA) conducted within the scope of the validity of the scale, four sub-dimensions with eigenvalues greater than 1.00 were identified. These four sub-dimensions explain 65.277% of the total variance. The KMO value was found to be .83, and the significance level of the Bartlett test was found to be 0.000 ($\chi 2$=1632.885; df=105; p<.01). Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) being higher than 0.60 and Bartlett's test being significant indicates that the data is suitable for factor analysis (Büyüköztürk, 2019). Tavşancıl (2002) states that it is acceptable for the KMO value to be between 0.50 and 1. Scale's it was determined that the factor load values of the sub-dimensions and the item-total correlation values were above the explained values (Büyüköztürk, 2019), and the items were found to have a sufficient level of distinctiveness. These findings show similarity with some studies conducted for relevant subject (Güven & Öncü 2011; Kremer-Sadlik et al., 2010).

As a result of the Confirmatory Factor Analysis (CFA) conducted to evaluate the factor structure of the attitude scale; Values of $\chi 2$/df=3.24, RMSEA=.10, SRMR=.07, CFI=.93, NFI=.91, NNFI=.91, GFI=.86 were obtained. RMSEA and SRMR values` being 10 or less indicate that the model is at an acceptable level (Anderson & Gerbing, 1984; Cole, 1987). CFI 0.95 and NNFI value of 0.95 and above indicates good compatibility. (Hu & Bentler, 1999; Sümer, 2000). GFI be 0.85 or above is sufficient for model-data fit. (Marsh & Balla 1992; Frias & Dixon, 2005). NFI and GFI of be 0.90 or above it is an indicator of acceptable fit (Schermelleh-Engel et al., 2003). As a result of CFA, it was determined that the factor load and error variance values of the scale were at acceptable levels. The goodness of fit index findings obtained from CFA showed that the model was good and perfect, and the factor structure of the scale was in an acceptable fit (Hu & Bentler, 1999; Brown, 2006).

Cronbach Alpha reliability coefficients for the whole scale and its sub-dimensions were found to meet the criteria. It was found .74 for communicating, .79 for

showing responsibility, .78 for cooperating, .79 for displaying positive behaviour, and .81 for the whole scale. The values obtained showed that there was a positive and linear relationship between the whole scale and its sub-dimensions (Kline, 2011). Reliability coefficient of 0.70 or higher is sufficient for the reliability of test scores (Büyüköztürk, 2019). It is seen that similar results have been reached in the studies conducted on the subject (Kremer Şadlık et al., 2010; Öncü & Güven, 2011). As a result, it was determined that the internal consistency of PSDSPEL was at an appropriate level. As a result of the analysis performed to test the scale's stability, it was determined that there was a high level, positive, and significant relationship between both applications. The results showed that the measurement tool had a high degree of error-free, and the measurement obtained from the test was stable (Alpar, 1998).

As a result of the research, it was observed that the parents' social development perceptions towards physical education lessons were high. According to this result, it can be said that parents understand the importance of the role that physical education lessons play in their children's individual and social development. This result also indicates that parents are sensitive to their children's personal and social development. When the literature on the subject is examined, it is seen that similar results have been reached. Stucke and Heim (2006) and Edwarson and Gorely (2010) found in their research that the vast majority of parents find sports lessons important for children's development. In the study conducted by Pehlivan (2009), it was observed that parents had positive opinions about sports activities as they acquired habits such as being healthy, establishing friendships, cooperating, self-confidence, and avoiding harmful habits thanks to their children's sports activities. In the study conducted by Boyraz et al. (2017), it was stated that parents consider physical education lesson important for their children thanks to their positive contribution to health, quality of life, and behaviours. In the study conducted by Sunay and Kaya (2020), it was observed that the parents of the students had positive opinions about physical education lessons owing to their positive contributions in terms of physical and social development as well as academic success. Yaldız (2018) stated that the parents of the studentshave positive opinionsabout physical education lessons. The results show that families put importance on physical education lessons and consider sports positively. Chiarlitti and Kolen (2017) stated that parents'opinions are essential on many cases from the students' application of knowledge and skills they learn in physical education to their physical activities outside the school; from adapting healthy diets to their food and beverage preferences. Thus, it can be said that it may be useful for the authorities in the field of education to consider the parents' opinions in taking decision and application processes related to physical education lessons and extracurricular sports activities at schools.

In the study, a significant difference was observed in the favour of male parents in "showing positive behaviour" sub-dimension. According to the result, it can be stated that male parents think that students gain more positive behaviour in physical education classes than female parents. Physical education and sports, which have an impact on the child's development, are one of the most common ways for male parents to participate in fatherhood activities and interact with their children (Konester & Randolph, 2019). Reasons such as the fact that physical education supports the individual to be healthy and strong, the passion, talent and experiences related to sports contribute to the establishment of a common bond between father and child, and the concept of

masculinity encourages sports may have led men to this idea. Studies supporting this idea have been found in the literature (Coakley, 2006; Knoester & Randolph, 2019). Similar to the results of this study, Akdoğan (2017) found that male parents had a more positive attitude towards physical education than female parents. On the other hand at the studies conducted by Öncü (2007), Yaldız (2018), and Lago-Ballesteros et al., (2019) no significant difference was found in the parents' views on physical education lessons.

As a result, the findings achieved shows that PSDSPEL is a valid and reliable measurement tool for determining the effect of parents' physical education lessons on social development. PSDSPEL is easy to understand and answer by parents of students. For researchers, it is an easy-to-apply, short, accessible, and free scale. PSDSPEL will enable parents to be aware of the positive effects of physical education lessons on their children's social development and will help them guide their children to physical education activities deliberately. Therefore, it will be possible to raise awareness of parents, to teach the lesson more effectively and efficiently, to teach students better manners, to increase the participation of students in sports, to contribute to the planning, projects, and services, and to guide them to sports.

The PSDSPEL was developed on students' parents, but the scale's expressions are adjustable so that they can be adapted for students, teachers, and school administrators when necessary. Therefore, in the future studies, the scale can be adapted to students, teachers, and school administrators in order to make more comprehensive evaluations about the effects of physical education lessons on social development. Comparative studies can also be conducted on the subject. Also, providing individual student and parent meetings with the PSDSPEL can strengthen the research results.

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Statement of Responsibility

Conceptualization, methodology, software, validation, formal analysis, research, resources, data curation, writing-original draft, writing-review & editing, visualization and supervision were done by both authors.

Conflicts of Interest

Both authors declare that they have no financial, commercial, legal or professional relationships that could affect the research.

Author Bios:

Dr. Yasin Karaca is an Assoc. Prof. in the Department of Recreation Management at Osmaniye Korkut Ata University. His teaching and research interest lies in themes related to sports management, recreation, teaching in physical education, physical education and sports education, sports psychology, sociology of sports.

Dr. Bijen Filiz is an Assoc. Prof. in the Department of Coaching Education at Afyon Kocatepe University. Her educational and research interest lies in themes related to instructional, curriculum, and hidden programs in physicaleducation, physical education teacher education and sports education, measurement and evaluation in

physicaleducation, physical activity and academic achievement, and sports sociology. Dr. Filiz is a member of the FutureLeader Volunteer/ Global Community Health, the World Leisure Organization.

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