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Development of Perceived Physical Literacy Scale for All

Herkes İçin Algılanan Fiziksel Okuryazarlık Ölçeğinin Geliştirilmesi[1]

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Keywords

1. Physical literacy
2. Public Recreation
3. Physical Activity
4. Recreation
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Anahtar Kelimeler

1. Fiziksel okuryazarlık
2. Yerel Yönetimler Rekreasyonu
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Abstract

Purpose: The aim of this study is to develop a scale for the perception of physical literacy on individuals participating in local government recreation activities.

Design/Methodology/Approach: In order to establish the construct validity of the scale, a model was first created through Exploratory Factor Analysis (EFA) with the first sample group; Then, Confirmatory Factor Analysis (CFA) was conducted with the data collected from the second sample group.

Findings: In EFA, sample adequacy was found to be .924 (>.60) and Bartlett's test of sphericity was significant at the p <0.01 significance level. It is also seen that there are 3 factors with eigenvalues greater than 1, and the total variance they explain is 69.690%. A structure with a total of 19 items was obtained with a factor load value >.45. As a result of CFA, it is seen that the model is at a good level in all fit indices.

Highlights: The obtained scale has been shown to be a reliable and valid scale in determining the physical literacy people perceive in themselves.

Öz

Çalışmanın amacı: Yerel yönetimler rekreasyonu aktivitelerine katılanlar bireyler üzerinde fiziksel okuryazarlık algısına yönelik ölçek geliştirmek bu çalışmanın amacını oluşturmaktadır.

Materyal ve Yöntem: Ölçeğin yapı geçerliğinde öncelikle birinci örneklem grubuyla Açımlayıcı Faktör Analizi (AFA) yoluyla bir model oluşturulup; daha sonra ikinci örneklem grubundan toplanan verilerle Doğrulayıcı Faktör Analizi (DFA) yapılmıştır

Bulgular: AFA'da örneklem yeterliliği için .924 (>.60) ve Barlett küresellik testi p <0.01 önem düzeyinde anlamlı çıkmıştır. Ayrıca öz değeri 1'den büyük olan 3 faktörün olduğu görülmekte ve açıkladıkları toplam varyans %69.690'dir. faktör yük değeri >.45 olan toplam 19 maddelik bir yapı elde edilmiştir. DFA sonucunda uyum indislerinin tamamında modelin iyi düzeyde olduğu görülmektedir.

Önemli Vurgular: Elde edilen ölçek kişilerin kendilerinde algıladıkları fiziksel okuryazarlığı belirlemede güvenilir ve geçerli bir ölçek olduğu ortaya koyulmuştur.

[1] This study comprises part of the first author's doctoral thesis.

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INTRODUCTION

Given the high prevalence of physical inactivity worldwide, introducing individuals to healthy, physically active lifestyles should be considered an important task of our modern societies (Carl et al., 2022). The increasing prevalence of sedentary living among children and adolescents has become an international concern, being responsible for the increased risk of childhood overweight and obesity, high blood pressure, and death (Li et al., 2021).

Understanding the importance of participating in physical activity, maintaining it throughout life, and knowing its positive effects on health is the key to physical literacy. When physical education is properly conducted by a trained teacher who follows the curriculum while providing physical activity with opportunities to learn, practice and participate, physical literacy development is inevitable (Hills et al., 2014). The concept of “physical literacy” is the individual's capacity to have an active lifestyle. Until recently, physical literacy studies were limited due to the lack of a common definition. The most relevant study of the concept of physical literacy belongs to Margaret Whitehead, who defined physical literacy as motivation, self-confidence, physical competence, knowledge and understanding to continue lifelong physical activity (Longmuir and Tremblay, 2016).

Physical literacy is a multifaceted term that encompasses areas such as movement competence, fun and enjoyment, self-confidence and social participation (Cairney et al., 2018). Physical literacy can be expressed as "the motivation, self-confidence, physical competence, knowledge and understanding required for an individual to continue lifelong physical activity at a certain level" (Whitehead, 2007).

Studies on physical literacy are aimed at comments and recommendations, and there is a lack of experimental studies. Due to the lack of studies and lack of evidence on physical literacy, it is not correct to directly associate it with lifelong physical activity (Longmuir and Tremblay, 2016). Since more experimental research is needed, a measurement tool to evaluate physical literacy is needed. In this study, a scale for the perception of physical literacy was developed for participants in local government recreation activities to fill the gap in the evaluation tool in the literature. This study aims to identify people's perceived physical literacy level inhibitors and to suggest solutions and intervene in their physical literacy journeys. Another aim of this study is to make positive contributions to individual and then public health through physical literacy awareness. For this reason, it gains importance as it will fill the gap in action-oriented research in the literature.

METHOD/MATERIALS

Study Group

The research was conducted in 2023-2024 with individuals benefiting from the sports centers within Istanbul Metropolitan Municipality Sports Istanbul facilities. In order to determine the construct validity of the scale, a model was first created through Exploratory Factor Analysis (EFA) with the first sample group; Then, Confirmatory Factor Analysis (CFA) was conducted with the data collected from the second sample group. For this purpose, the first study group in the research consisted of 242 people doing sports in Sports Istanbul facilities. 62% of the participants in this group were male (150), 38% were female (92); 38.8% had a bachelor's degree (94), 23.6% had a high school degree (57), 21.5% had an associate's degree (52), 8.3% had a master's degree (20), 4.1% had a secondary school (10), 2.0% had a doctorate (7), It was determined that 0.8% had primary school (2) education level. The lowest among the participants is 18 years old and the highest is 61 years old. The first place is 22 years old (31 people) with 12.8%, the second place is 28 years old (23 people) with 9.5%, and the third place is 18 years old (16 people) with 6.6%. There are 373 participants in the second study group. 61.9% of the participants in this group were male (231), 38.1% were female (142); It was determined that the largest percentage, 39.7%, was undergraduate (148), followed by 22.8%, high school (85), and 22.3%, associate degree (83). The age range of the participants varied between 18 and 61, and it was determined that 12.3% were 22 years old (46), 10.2 were 28 years old (38) and 7.2 were 18 years old (27).

Data Collection Process

Ethics committee permission for the research was received from Marmara University Health Sciences Institute Ethics Committee with date 20.06.2022 and protocol number 82. The "Google forms" survey tool of the www.google.com website was used in the research. The research data was filled in by the researcher to those who volunteered to participate and approved the consent form. Only demographic information was asked from the participants, but no identification information was requested.

Data Collection Tools

Development of the Measurement Tool

It was planned to develop the Perceived Physical Literacy Scale for All developed within the scope of the research in 5 stages, taking into account the scale development stages in the literature (creating the item pool, obtaining expert opinions, conducting a trial application, factor analysis, reliability analysis) (Metin et al., 2012).

Development of Item Pool

In developing the scale, the 18-item item pool of the Perceived Physical Literacy Scale developed by Sum et al. (2016) was used in the study, and 17 items were added by the researchers in line with the literature. According to DeVellis (2017), it is difficult to

determine the number of items that should be added to the item pool at the beginning of scale development studies. In order to increase internal consistency, a large item pool must be created when reaching the final scale. A large number of items helps the researcher to select items suitable for the purpose of the research. Widely used Likert-type scales measure thoughts, beliefs, and attitudes. (DeVellis, 2017). The reason why the prepared scale was designed as a Likert-type scale is to reflect the differences between ideas in the most accurate way. In this context, the draft scale was rated as a five-point Likert type consisting of the options "strongly disagree (1), disagree (2), Neutral (3), agree (4), strongly agree (5)".

Obtaining Expert Opinion

Obtaining expert opinion may be an indicator of whether the items in the scale adequately express what is intended to be measured. (Büyüköztürk et al., 2004). After ensuring content validity in the study, face validity was also ensured. Face validity refers to what a scale appears to measure rather than what it measures. (Oncu, 1994). The developed scale was presented to the opinion of a total of 4 expert academicians, including 2 sports scientists, 1 education scientist and 1 linguist, to ensure content and face validity. In order to make the scale suitable for the final version, spelling errors were examined in terms of meaning and suitability for purpose.

Pilot Study

The Perceived Physical Literacy Scale for All was administered to 15 participants who use the Spor İstanbul facilities. Feedback was obtained from the participants following the administration. Based on this feedback, no issues were identified regarding the comprehensibility of the items. Participants also indicated that there were no redundant items with the same meaning and that the scale was appropriate for the group to which it was administered. It was determined that the scale can be completed within 5–8 minutes.

Factor Analysis

The prepared draft scale was applied in accordance with the Marmara University Ethics Committee Decision taken within the scope of the research. It was examined whether the results obtained from the participants' answers exhibited normal distribution. For this purpose, the suitability of the data obtained from 242 participants for factor analysis and sample adequacy were examined in the first stage of the research. In order to determine the suitability of the data obtained from the perceived physical literacy scale measurement tool for factor analysis, anti-image, determinant coefficients, skewness and kurtosis coefficients were examined. In addition, the Kaiser Meyer Olkin (KMO) for sample adequacy and the Barttlett sphericity test for multiple normality were examined (Pallant, 2020). Then, Principal Component Analysis was used to extract factors in EFA; and the varimax technique, one of the orthogonal rotation techniques, was used to determine the rotation method of the factors (Can, 2017). In determining the removal status of the items in the scale, factor loading values of .45 or above were accepted as criteria (Büyüköztürk, 2009). In addition, the suitability of the factor structure resulting from the EFA was tested using Structural Equation Models. In this direction, the suitability of the factor loadings determined by the Exploratory Factor Analysis was determined by the Confirmatory Factor Analysis. In the Confirmatory Factor Analysis, RMSEA, CFI, GFI, AGFI, NNFI, SRMR and X2 (chi-square) criteria were evaluated as criteria to determine the suitability of the model. While the Exploratory Factor Analysis for the scale was tested with the SPSS 29.0.1 program, the AMOS program was used to apply the Confirmatory Factor Analysis.

Validity and Reliability Analysis

Validity is the level at which tests accurately measure the desired characteristics. There are three types: scope, construct and criterion validity. Scope validity is the adequacy of the items in the scale in terms of content and characteristics in order to measure the target behavior. Obtaining expert opinion is one of the methods used to ensure scope validity. A 70-80% agreement in the opinions expressed by experts and corrections made as a result of criticisms are sufficient to ensure scope validity. Construct validity is an indicator of how accurately an abstract concept is measured. Factor analyses, t-test scores, and test averages can be used for construct validity. Criterion validity is related to determining the relationship between test scores and the desired characteristic. Correlation coefficients and statistical significance results can be used to test criterion validity (Seçer, 2015). The consistency of all stages of the research from beginning to end is called reliability (Yıldırım and Şimşek, 2016). For this reason, the Cronbach alpha value is closely related to the number of items in the scale (Büyüköztürk, 2005). The Cronbach α internal consistency coefficient and the reliability coefficients of the sub-factors of the Perceived Physical Literacy Scale for All, which took its final form by performing factor analysis, were calculated. These values are included in the reliability analysis findings section. It is desired for this value to be over 0.70.

FINDINGS

In the study, exploratory and confirmatory factor analysis was conducted within the scope of the construct validity of the “Perceived Physical Literacy Scale for all.

Findings Regarding Exploratory Factor Analysis (EFA)

In the study, firstly, the suitability of the data obtained from 242 participants in the first application for factor analysis and sample adequacy were examined. In order to determine whether the data obtained from the perceived physical literacy scale for all measurement tool was suitable for factor analysis, anti-image, determinant coefficients, skewness and kurtosis coefficients were examined. In addition, the Kaiser Meyer Olkin (KMO) for sample adequacy and the Barttlett sphericity test for multiple normality were examined and the test results are summarized in Table 1.

Table 1. Perceived physical literacy scale for all KMO and Barlet Test Result

Statistics	Value	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.924
Bartlett's Test of Sphericity	Approx. Chi-Square	3517.754
	df	171
	Sig.	.000

In Table 1, .924 (>.60) and Bartlett's sphericity test were found to be significant at p <0.01 significance level. The findings show that the sample size is suitable for performing factor analysis. This also shows that the data come from a multivariate normal distribution (Kan and Akbaş, 2005). Later, in exploratory factor analysis, Principal Component Analysis was used to perform factor extraction, and the varimax technique, one of the orthogonal rotation techniques, was used to determine the rotation method of the factors (Can, 2017). In order to clarify whether the items in the scale should be removed or not, the factor loading values were accepted as .45 or above (Büyüköztürk, 2009). In addition, it was also examined whether the items had a loading value below a single factor. As a result of the factor analysis of the 19-item scale, it was determined that it explained 69.690% of the total variance and created a structure consisting of 3 factors. The findings regarding the analysis are presented in Table 2.

Table 2. Eigenvalues and Explained Variance of the Sub-dimensions of the Perceived Physical Literacy Scale for All

Component	Initials Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.568	50.359	50.359	6.014	31.650	31.650
2	2.008	10.570	60.928	3.985	20.971	52.621
3	1.665	8.762	69.690	3.243	17.069	69.690

When the exploratory factor analysis results are examined, it is seen that there are 3 factors with eigenvalues greater than 1 and the total variance they explain is 69.690%. The contribution of Factor 1 to the total variance is 31.650%, Factor 2 is 20.971% and Factor 3 is 17.069%. In social sciences, it is considered sufficient for the explained variance to be between 40% and 60% (Scherer et al., 1988). This result reflects that the total variance is quite sufficient.

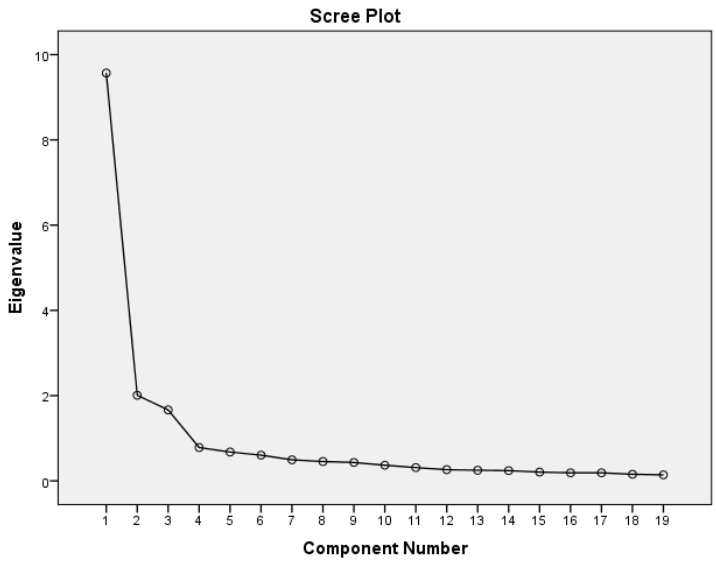


Figure 1. Scree Plot Test Result of Perceived Physical Literacy Scale for All

To verify the factor structure, a scree plot analysis was conducted. As shown in Figure 1, the elbow occurs after the third factor, indicating a three-factor solution. In addition, all items exhibit satisfactory structural integrity, characterized by substantial primary loadings on their target factors and an absence of substantively meaningful cross-loadings.

Table 3. EFA results for the Perceived Physical Literacy Scale for All

Item No	Self-Confidence and Sense of Self (Factor1)	Physical activity Skills and Sports Knowledge (Factor2)	Physical activity Attitudes (Factor3))	Item Quality (Çokluk et al. 2010)
1	.834			**Excellent**
2	.817			**Excellent**
3	.801			**Excellent**
4	.792			**Excellent**
5	.755			**Excellent**
6	.741			**Excellent**
7	.734			**Excellent**
8	.662			**Great**
9	.614			**Good**
10		.875		**Excellent**
11		.741		**Excellent**
12		.692		**Great**
13		.665		**Great**
14		.614		**Good**
15		.592		**Good**
16			.886	**Excellent**
17			.871	**Excellent**
18			.751	**Excellent**
19			.681	**Great**
Explained Variance (%)	31.650	20.971	17.069	%69.690

Table 3 shows the structure of the factor obtained after rotation and the factor loading values. While evaluating the findings in the table, attention was paid to the fact that the factor loading value was >.45 (Çokluk et al., 2016) and the difference between two factor loading values was at least >.10 (Büyüköztürk, 2009). As seen in the table, it was concluded that the factor loading values varied between .592 (Item 15) and .886 (Item 16). However, 16 items with a value below .45 and a loading value less than .10 among the items were removed from the scale and a structure consisting of a total of 19 items was obtained. These results show that the factor loadings obtained were high.

Table 4. Item Analysis of the Perceived Physical Literacy Scale for All

Item	Group	N	$\bar{X}$	SS	t	p	Item Total Correlation
1	Upper 27%	65	4.6462	.48188	14.943	.00	.788
	Lower 27%	65	2.9077	.80473			
2	Upper 27%	65	4.5538	.58712	15.844	.00	.731
	Lower 27%	65	2.7385	.71320			
3	Upper 27%	65	4.5538	.53124	12.320	.00	.636
	Lower 27%	65	2.8769	.96027			
4	Upper 27%	65	4.4615	.50240	13.087	.00	.767
	Lower 27%	65	2.9692	.76993			
5	Upper 27%	65	4.6923	.46513	12.669	.00	.713

Item	Group	N	$\bar{X}$	SS	t	p	Item Total Correlation
6	Lower 27%	65	3.3077	.74840	19.912	.00	.770
	Upper 27%	65	4.7538	.43412			
7	Lower 27%	65	2.7385	.69094	15.926	.00	.787
	Upper 27%	65	4.7385	.44289			
8	Lower 27%	65	2.8308	.85822	11.880	.00	.678
	Upper 27%	65	4.5538	.58712			
9	Lower 27%	65	3.2308	.67937	12.149	.00	.749
	Upper 27%	65	4.7231	.51562			
10	Lower 27%	65	3.1385	.91646	12.182	.00	.543
	Upper 27%	65	4.0923	.70096			
11	Lower 27%	65	2.4308	.84722	13.846	.00	.686
	Upper 27%	65	4.6615	.53843			
12	Lower 27%	65	2.8615	.89925	10.636	.00	.624
	Upper 27%	65	4.5538	.70779			
13	Lower 27%	65	3.0154	.92690	11.280	.00	.676
	Upper 27%	65	4.5692	.49904			
14	Lower 27%	65	3.3692	.69752	11.432	.00	.633
	Upper 27%	65	4.2923	.65486			
15	Lower 27%	65	2.9846	.64933	7.776	.00	.563
	Upper 27%	65	4.6462	.51329			
16	Lower 27%	65	3.8000	.71151	9.379	.00	.516
	Upper 27%	65	4.6923	.52806			
17	Lower 27%	65	3.4923	.88606	8.758	.00	.480
	Upper 27%	65	4.3538	.75892			
18	Lower 27%	65	3.0923	.87897	9.381	.00	.590
	Upper 27%	65	4.5538	.63813			
19	Lower 27%	65	3.2769	.89281	12.505	.00	.681
	Upper 27%	65	4.7231	.54508			
	Lower 27%	65	3.2923	.74421			
Reliability (α)= 0.94							

According to Table 4, it is seen that the corrected item total correlations of the items of the Perceived Physical Literacy scale for All vary between .788 - .480. This finding shows that the values are at the desired level (Büyüköztürk, 2004). On the other hand, the differences between the Lower and Upper 27% groups were found to be significant in the mean scores ($p<.01$). As a result of the findings, it can be said that the internal consistency is high in distinguishing people and items.

Findings Regarding Confirmatory Factor Analysis (CFA)

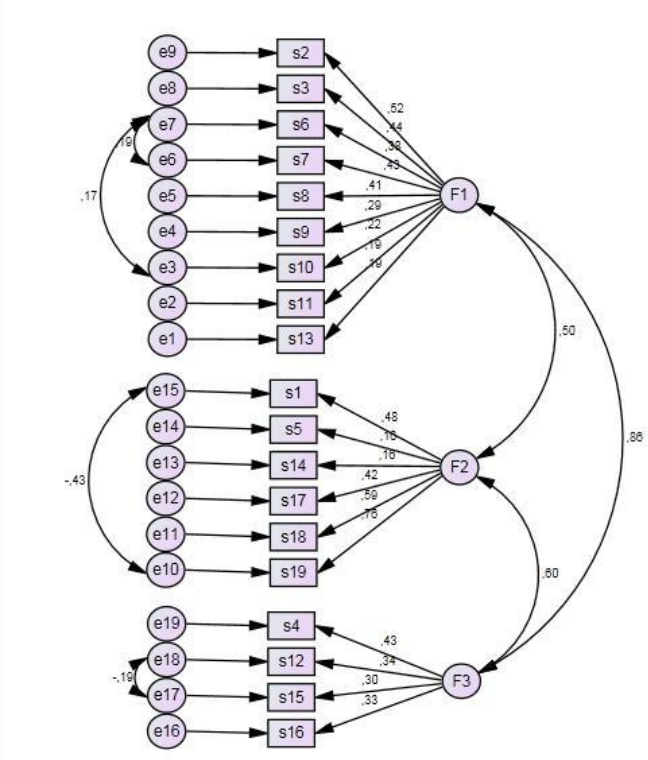
The aim is to determine the degree to which a structure previously determined by exploratory factor analysis is confirmed by the data collected later (Büyüköztürk et al., 2004). In the CFA (Confirmatory Factor Analysis) processes, the three-factor structure obtained from the EFA (Exploratory Factor Analysis) results was analyzed. The suitability of the factor structure was examined according to the goodness of fit and modification results. The goodness of fit of the HİAFOÖ scale calculated with CFA and the indexes accepted in the literature are given in Table 5.

Table 5. Confirmatory Factor Analysis Fit Indices

CFA Fit Index		Research Findings	Good Model Criteria (Çokluk, et al., 2010)
Chi-Square/Degrees of Freedom	χ2/sd	2.65	<5
Goodness of Fit	GFI	.901	≥ .85
Adjusted Goodness of Fit	AGFI	.870	≥ .85
Comparative Fit Index	CFI	.96	≥ .90
(Non) Normed Fit Index	NNFI	.96	≥ .90
Standardized Root Mean Square Residual	SRMR	.714	≤ .08
Root Mean square Error of Approximation	RMSEA	.066	≤ .08

When the findings obtained in Table 5 as a result of CFA are compared with the values accepted in the relevant literature, it is seen that the model is at a good level in all fit indices. As a result of the findings, it was concluded that the model obtained is in compliance with the data.

Figure 2. Path Diagram of Perceived Physical Literacy Scale for All



Chi-Square= 382,3; df= 145, p-value=.0000, RMSEA=.066

When the CFA results were examined, the t values in the path diagram were checked for all items and it was determined that the lowest t value was 7.776 and had a significant t value at the .01 level. On the other hand, the images of the factor loading values were included in the path diagram shown in Figure 2. When the fit indices reported in Table 5 and the path diagram given in Figure 2 were examined, it was determined that the factor structure of this 3-factor scale was at a good level and the fit indices showed excellent and moderate model fit.

DISCUSSION

The Perceived Physical Literacy Scale for All developed within the scope of the research was planned to be developed in 5 stages, taking into account the scale development stages in the literature (creation of the item pool, obtaining expert opinions, conducting a trial application, factor analysis, reliability analysis) (Metin et al., 2012). In the development of the scale, the 18-item item pool of the Perceived Physical Literacy Scale developed by Sum et al. (2016) was used and 17 items were added by the researchers in line with the literature. The developed scale was presented to a total of 4 expert academicians, including 2 sports scientists, 1 educational scientist, and 1 linguist, in order to ensure content and face validity. The scale developed by Sum et al. (2016) consisted of 9 items and 3 sub-dimensions and was named under the titles of “Sense of Self-Confidence”, “Knowledge and Understanding”, and “Self-Expression and Communication”. The study of Margaret Whitehead, who defined physical literacy as the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout life, is referred to as the study most associated with the concept of physical literacy (Longmuir and Tremblay, 2016).

Physical literacy is a multifaceted term that also encompasses areas such as movement competence, fun and enjoyment, self-confidence and social participation (Cairney et al., 2018). Physical literacy can be expressed as “the motivation, self-confidence, physical competence, knowledge and understanding required to maintain physical activity at a certain level throughout life as an individual” (Whitehead, 2007).

CONCLUSION AND RECOMMENDATIONS

In this study, which aimed to evaluate the factor structures of the Perceived Physical Literacy Scale for All, it was seen that the measurement tool consisted of 19 items and 3 sub-dimensions after the validity and reliability analyses were conducted and the factors; Items 1, 2, 3, 4, 5, 6, 7, 8 and 9 were named as "Self-Confidence and Self-Perception", items 10, 11, 12, 13, 14 and 15 were named as "Physical Activity Skills and Sports Knowledge" and items 16, 17, 18 and 19 were named as "Physical Activity Attitudes". Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) techniques were used in this study. The research was conducted with individuals benefiting from the sports centers within the Istanbul Metropolitan Municipality (IMM) Sports Istanbul in 2023-2024. In the construct validity of the scale, firstly, a model was created with the first sample group through Exploratory Factor Analysis (EFA); then, Confirmatory Factor Analysis (CFA) was conducted with the data collected from the second sample group. In this study, where the factor structure of the “Perceived Physical Literacy Scale for All” was evaluated, χ 2/sd, RMSEA, SRMR, RMR, NNFI, CFI, GFI and AGFI fit indices were taken into account and it was found that all of them were at acceptable rates. Finally, as a result of the validity and reliability analyzes, Cronbach's alpha coefficient (α) = 0.94 was determined. Since the research findings were obtained only from the data collected from individuals who came to the sports centers belonging to local governments, it can be considered as a limitation of the research. As a result, it was revealed that the obtained scale is a reliable and valid scale in determining the physical literacy that people perceive in themselves.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Statements of publication ethics

We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

Examples of author contribution statements

H.S and S.Y conceived of the presented idea. H.S developed the theory and performed the computations. H.S and S.Y verified the analytical methods. S.Y encouraged H.S to investigate and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

Researchers’ contribution rate

The study was conducted and reported with equal collaboration of the researchers.

Ethics Committee Approval Information

Ethics committee permission for the research was received from Marmara University Health Sciences Institute Ethics Committee with date 20.06.2022 and protocol number 82.

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Appendix.1

Perceived Physical Literacy scale for All **(Herkes İçin Algılanan Fiziksel Okuryazarlık Ölçeği)**	**Kesinlikle Katılmıyorum**	**Katılmıyorum**	**Kararsızım**	**Katılıyorum**	**Kesinlikle Katılıyorum**
1. Yaşıma göre fiziksel olarak iyi görünüme sahibim.	1	2	3	4	5
2. Spora karşı pozitif tutum ve ilgiye sahibim.	1	2	3	4	5
3. Sağlıklı ve zinde kalmak için kendimi yönetme becerilerine sahibim.	1	2	3	4	5
4. Güçlü iletişim becerilerine sahibim.	1	2	3	4	5
5.Zorlu doğa koşullarında fiziksel aktiviteyi sürdürebilirim	1	2	3	4	5
6. Spor yapmayı bir alışkanlık haline getirebilirim.	1	2	3	4	5
7. Spor sayesinde arkadaşlıklar kurarım.	1	2	3	4	5
8. Güncel spor trendlerini öğrenmeye hevesliyim.	1	2	3	4	5
9. Kendimi spor yapmak için motive etmenin yolunu bulurum.	1	2	3	4	5
10. Yeterli temel hareket (Çömelme, sıçrama, koşma, atlama vb.) becerilerine sahibim.	1	2	3	4	5
11. Beden eğitimi bilgilerimi yaşam boyu uygulayabilirim.	1	2	3	4	5
12. Performansımı ve hareket yeteneğimi nasıl geliştireceğimi bilirim.	1	2	3	4	5
13. Çeşitli fiziksel aktivitelerde iyi performans gösterebilirim.	1	2	3	4	5
14. Çeşitli spor branşları hakkında başkalarıyla tartışacak düzeyde bilgi sahibiyim.	1	2	3	4	5
15. Çeşitli spor branşları hakkında başkalarıyla tartışacak düzeyde bilgi sahibiyim.	1	2	3	4	5
16. Kendimin ve diğer insanların spor yapmasından memnuniyet duyarım.	1	2	3	4	5
17. Fiziksel aktiviteye katılmaya hevesliyim.	1	2	3	4	5
18. Fiziksel aktivite sağlık gelişimim için önemli değere sahiptir.	1	2	3	4	5
19. Fiziksel aktivite sosyal etkileşim kurmamda önemli yer tutar.	1	2	3	4	5