PHYSICAL EDUCATION OF STUDENTS

The Turkish adaptation of leisure facilitator scale: a validity and reliability study

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Abstract

Purpose: The aim of this study to test the reliability and validity of "Leisure Facilitator Scale" (LFS) for Turkish university students.

Material: The sample included 111 female and 132 male, and totally 243 faculty of sport sciences' students for this study. The LFS which was consists of 3 subscales and 27 items was used to collect data. Besides descriptive statistics, confirmatory factor analysis was applied to test the factor structure of LFS. Pearson's product-moment coefficients were used to examine correlations between the factors. For determining the reliability of the scale Cronbach Alpha coefficient was calculated.

Results: Analysis indicated that the Turkish version of the LFS constituted of 3 subscales and 16 items. Totally 11 items were excluded from the Turkish version because of lower factor loadings. Factor loading values of the items ranged between 0.49 and 0.76. Cronbach Alpha values were calculated as 0.79, 0.66, 0.78 and 0.86 for the subscales and total scale respectively.

Conclusions: In conclusion, results indicated that "Leisure Facilitator Scale" Turkish adapted form can be used as a valid and reliable measurement tool to examine the factors that facilitate leisurely participation of students.

Keywords: leisure, facilitators, adaptation, university students.

Introduction

Many researchers studying leisure argue that each individual should physically and mentally experience leisure free from the stress of everyday life and each individual has the right to freely choose a leisure activity [1, 2, 3]. Kraus [4], likewise, defines leisure as the time period in which individuals satisfy their feelings of emotion, pleasure and entertainment by freely choosing their activities, and thereof fulfill their self-realization by unveiling their potential. Several others also conducted studies suggesting that participation into leisure activities provides the individual multiple benefits such as physical and mental well-being, happiness, socialization and relaxation [5, 6]. Not every individual, however, share the same benefits from the leisure tactivities equally. Crawford and Godbey [7] define this situation with the categorical constraints by labelling them "personal, interpersonal and structural" constraints in leisure participation.

The factors that constraint or limit participation into leisure activities have significant role in understanding an individual's activity behavior and in establishing a causality link between the individual and the activity. In this respect, it is first essential to comprehend the leisure constraints approach in order to understand the causes of participation/non-participation in leisure activities and the relations between these causes and aforementioned factors [8, 9]. According to this approach, the non-participation factors involve the personal factors such as the needs, past experiences, beliefs and attitudes; interpersonal factors such as the family, social environment and friends; and structural factors such as the finances, facilities, socio-economic status, ethnic composition and gender roles [7, 10, 11]. For other researchers [12, 13], however, the leisure constraints approach can sometimes be a limited approach in understanding leisure behavior. People usually participate into these activities not because they are stripped off all the constraints and become free but the leisure time space is a free zone. On this issue, Kim et al. [14] suggested that the factors that facilitate participation into leisure activities should be investigated as well as the constraints in order to explain the nature of participation into leisure activities and to ensure a wider participation. Likewise, the strategy model developed by Hubbard and Mannel [15] posited that having some constraints for activity participation does not necessarily mean that the individual will not participate in leisure activities. Individuals can develop some strategies for coping with the constraints and participation can be realized. Actually, the underlying phenomena behind the strategic choices are the facilitating factors for leisure activity participation [16]. It is observed by some researchers that determining the facilitating factors of leisure participation has significant role in explaining the participation/non-participation behavior since the strategy models that aim to explain the participation behavior of the individuals in leisure activities in terms of leisure constraints and the ways to cope with these constraints are interrelated with the facilitating factors in essence [14, 17]. In regard to this point, investigating the facilitating factors for leisure

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participation carry important weight.

The survey of the literature on the leisure facilitators reveal the fact that most of the studies date fifteen years back [13, 18, 19] while the number of studies on the same topic in Turkey is very limited [20, 21, 22]. In the Turkish case, it is probably due to the lack of an adapted scale to measure the facilitating factors for leisure activity participation. Therefore, the purpose of this study is to adapt the Leisure Facilitator Scale developed by Kim et al., [14] into Turkish and examine the psychometric properties of the scale. The results of this study can help opening a new dimension for future studies that target increasing the participation of individuals into the leisure tactivities.

Leisure Facilitators

Opposite of the concept of "leisure constraints", the leisure facilitators can be defined as those factors that facilitate participation in and increase the number of repetition of leisure activities while strengthening the urge for participation and providing the chance to benefit from the advantages of the activities [23]. Korotkov et al. [24], likewise, defined leisure facilitators as the facilities that help access the activities for participation and leisure satisfaction. That is to say, if an individual participates into an activity he/she definitely possesses some facilitating factors and if he/she cannot participate into an activity he/she must be facing some personal, interpersonal or structural constraints [13, 25]. If we are to formulate the leisure facilitators and constraints, the formula can be stated as 3C1P. "P" denotes participation or non-participation and "3C" denotes the personal, interpersonal and structural causes. All three causes determine the participation or non-participation behavior [26].

The personal facilitators relating to the personal characteristics, interests, beliefs and attitudes were defined by Raymore [13] deriving from the model developed by Crawford et al. [23]. The personal facilitators are the determining factors in the selection of the activities and they include the personal expectations and choices of the individual. The interpersonal facilitators are those factors helping an individual's participation in an activity as a person or in a group by the effect of the factors such as family support, social environment or peer group, in interaction with one's environment. These facilitators rely on the fact that individuals are interdependent and in interaction in their social environment [27]. Lastly, the structural facilitators are considered as the factors that encourage the individual in activity participation such as the social and physical conditions and the social belief systems. The ethnic background, gender, facilities, socio-economic status and health status can be counted under this category. The climate condition, media, transportation and easy access to the facilities can also be grouped as structural factors. In order to understand the structural factors as a whole, the structure and viewpoint of a society need to be understood [13]. The factors such as the demographic characteristics, the education system and institutions that encourage the individuals into activity participation also constitute a significant role [28]. The survey of the research conducted in different demographic settings and different cultures demonstrates that the facilitators can be influenced by the demographic factors and their effects on the individuals can vary [18, 19, 20, 21].

Materıal and methods

Participants.

The research sample consisted of 243 university students (111 female students and 132 male students) who were enrolled in three different faculty of sport sciences. The ages of the participants ranged between 17 and 27, and the age average of the sample was 20.57 ± 2.16.

Research Design.

The survey method, which is widely used in descriptive research models, was applied in this study. This method is generally executed on large groups and it targets to reveal the opinions and attitudes of individuals in a group on a case or a phenomenon [29, 30]. The data collection technique in the study was applying questionnaires, a technique which is also often utilized in studies using the survey method [31].

The data collection tool was the Leisure Facilitator Scale (LFS) developed by Kim et al., [14]. For the usage rights of the scale, the permission of the author was obtained via electronic mail. The original form of the LFS was constituted in three sub-dimensions (personal facilitators, interpersonal facilitators and structural facilitators) and involved 27 items in total. The scale items were scored as (1) 'Unimportant', (2) 'Rather Unimportant, (3) 'Rather Important', (4) 'Important' and (5) 'Very Important'. In adapting the LFS into Turkish the intercultural scale adaptation steps were followed [32]. In this respect, first we checked out whether the target concepts were existent in the present culture or not. Then, we tried to decide whether our evaluations on the results would prove meaningful or not. Upon positive opinion, the next step was to generate the Turkish form of the scale items. While generating the form, translation and back translation methods were used. The generated form was sent to the academic experts in scale development discipline and it was applied on a pilot sample of 35 students to check the clarity and comprehensibility of the scale statements.

The LFS was made fit for the reliability and validity analysis after the abovementioned steps. The application of the data collection tool over the participants required the permission of the students' professors and department and faculty chairs. After the permissions were obtained the questionnaires were filled before the class hours.

Statistical Analysis.

The statistical analyses were executed through SPSS 20 ve AMOS 19 package programs. In order to provide proofs for the factor structure confirmatory factor analysis was made [33]. The correlations between the factors were examined using Pearson Correlation Analysis to provide proof for the validity of the scale. For examining the reliability of the total scale and the sub-dimensions of the tested model internal coherence coefficients were

calculated. For determining whether there was significant difference between the scores obtained from the scale according to some variables MANOVA was used for the groups independent from the parametric tests. Finally, skewness and curtosis values and Levene test scores were examined in order to determine whether the data met the preconditions of the parametric tests [34].

Results

In this study, a confirmatory factor analysis was performed in order to validate the three-factor structure that was consisted of 27 items. When the items with low factor loaded value and high error variance (items 6, 7, 8, 10, 11, 15, 16, 17, 18, 19, 26) were omitted from the scale and the CFA was reapplied, improvements were spotted in the fit indices (Table 1). The item factor load values varied between 0.49 and 0.76.

Table 2 presents the Cronbach Alpha internal coherence coefficients for the sub-dimensions and the total scale, and the correlation between the factors. The correlations measured between the scale scores varied between 0.40 and 0.84. The Cronbach Alpha coefficients for the total scale and the sub-dimensions were calculated as 0.86, 0.66 and 0.79, respectively.

The mean of the total scores and the standard deviation value for the participants subject to the LFS were 3.72 and 0.61, respectively. When the LFS scores were analyzed on factorial basis, it was observed that the highest average (3.94) was scored on the 'personal facilitators' sub-dimension and the lowest (3.42) on the 'interpersonal facilitators. The skewness and kurtosis coefficients, on the other hand, demonstrated that the data met the normalcy assumption for the preconditions of the parametric tests (Table 3).

The MANOVA scores demonstrated that the basic effect of the gender variable on the LFS sub-dimensions was significant [λ=0.964, F(2, 998)=3.239, p<0.03]. In our study, ANOVA was also applied in order to detect which dependent variables contributed significantly to the multi-variable structure. It was concluded that 'personal facilitators' scores [F(1, 241)=4.416, p<0.05] and 'interpersonal facilitators' sub-dimension scores [F(1, 241)=4.459, p<0.05] significantly varied in terms of gender main effect. In all sub-dimensions where significant variation was noted the average scores of the male participants were higher than those of the female participants (Table 4).

Table 1. Confirmatory Factor Analysis Scores

χ^2	df	χ^2/df	GFI	CFI	IFI	TLI	RMR	SRMR	RMSEA
192.02	100	1.92	0.91	0.92	0.92	0.90	0.08	0.06	0.06

Table 2. The Sub-dimensional Correlation and Internal Coherence Scores of the LFS

LFS (Subscales)	PF	IPF	SF	Total	Alpha
Personal Facilitators (PF)	1				0.79
Interpersonal Facilitators (IPF)	0.40**	1			0.66
Structural Facilitators (SF)	0.55**	0.54**	1		0.78
Total	0.78**	0.82**	0.84**	1	0.86

Table 3. The Distribution of the Scale Scores

Sub-dimensions	Mean	SD	Skewness	Curtosis	Min. – Max.
Personal Facilitators (PF)	3.94	0.69	-0.77	0.85	1.40-5.00
Interpersonal Facilitators (IPF)	3.42	0.85	-0.33	-0.52	1.00-5.00
Structural Facilitators (SF)	3.80	0.71	-0.53	0.41	1.00-5.00
Total	3.72	0.61	-0.38	-0.25	1.98-5.00

Table 4. The MANOVA Scores According to the Gender Variable

	Female (n=111)		**Male (n=132)**			
LFS (Subscales)	Mean	SD	Mean	SD	F	p
Personal Facilitators (PF)	3.84	0.73	4.03	0.64	4.42	0.04*
Interpersonal Facilitators (IPF)	3.30	0.86	3.53	0.82	4.46	0.04*
Structural Facilitators (SF)	3.78	0.70	3.81	0.72	0.18	0.67

Discussion

According to the results of the CFA for providing evidence for the factorial structure of the LFS, the three-factor and 27-item structure could not be verified. On the other hand, 16-item and three-factor structure proved statistically and theoretically suitable. Based on the fact that χ^2/sd ratio was under 3, it was observed that there was perfect fit between the data and the model [35]. The GFI value as 0.91 denoted perfect fit whereas the values of CFI as 0.92, IFI as 0.92, TLI as 0.90, RMR as 0.08, SRMR as 0.06 and RMSEA as 0.06 implied acceptable fit [36]. The result of the analyses made to determine the reliability level of the scale demonstrated that the reliability coefficients obtained from the sub-dimensions of the scale were generally adequate for the reliability of the test scores [37]. The value obtained for the "interpersonal facilitators" sub-dimension of the scale was 0.66 and this value within the acceptable limits was accordable with the value of 0.61 obtained in the original version of the LFS [14]. Another finding derived for the factor structure of the LFS was positive and medium/high level correlation between the sub-dimensions of the scale.

The second objective of the study was the analysis of the LFS scores of the participants according to the gender variable. In this respect, whereas there was no significant difference at the `structural facilitators` sub-dimension the scores of the other sub-dimensions differed significantly according to the gender variable. The average scores of the male participants were higher than the scores of the female participants. This result were similar to the studies in the literature. This situation might have arisen from the fact that the male participants of the study group might have benefited more actively from the personal and interpersonal facilitators in the leisure activities they preferred.

Conclusion

In conclusion, this study suggests that the Turkish adaptation of the Leisure Facilitator Scale can be a valid and reliable measurement tool in determining the leisure facilitating factors of the individuals for the age group (ages 17-27) concerned. The adapted scale can also be a guiding tool for future studies on this issue. On the other hand, since the study sample was composed of only students from faculty of sport sciences it can be considered as a limitation of the study. With its three sub-dimensions and 16 items, for the adapted LFS to be accepted valid and reliable for the entire Turkish culture, further complementary studies with samples from different age groups would be needed.

Conflict of interest

The authors declare no conflict of interest.

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