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Development of the Leisure Activity Participation Scale (LAPS)

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The purpose of the study was to identify key structures associated with leisure activity participation and develop a valid and reliable scale to measure leisure activity participation. The dimensions related to leisure activity participation were determined as a result of a literature review and focus group. Research data from two different samples were interpreted by exploratory factor analysis ($n = 243$) and confirmatory factor analysis ($n = 336$). Analysis results revealed eight dimensions related to leisure activity participation: relaxing, developmental, socializing, activity with an attractive environment, productive, esthetic, entertaining, and exciting activity. The validity of the scale was evaluated by content, convergent, and discriminant validity tests. Internal consistency and stability were tested through Cronbach's alpha and Pearson correlation coefficients. It was concluded that a valid and reliable measuring instrument had been developed.

Keywords: activity; leisure; participation; scale development

L'objectif de l'étude était d'identifier les structures clés associées à la participation aux activités de loisirs et de développer une échelle valide et fiable pour mesurer la participation aux activités de loisirs. Les dimensions liées à la participation aux activités de loisirs ont été déterminées à la suite de l'analyse documentaire et du groupe de discussion. Les données de recherche de deux échantillons différents ont été interprétées par une analyse factorielle exploratoire ($n = 243$) et l'analyse factorielle de confirmation ($n = 336$). Les résultats de l'analyse ont révélé huit dimensions liées à la participation aux activités de loisirs : détente, formation, socialisation, environnement impressionnant, activité productive, esthétique, amusante et passionnante. La validité de l'échelle a été évaluée par des tests de validité de contenu, convergents et discriminants. La cohérence et la stabilité internes ont été testées à l'aide des coefficients de corrélation alpha et de Pearson de Cronbach. Il a été conclu qu'un instrument de mesure valide et fiable avait été mis au point.

Mots clés : activité; loisir; participation; développement à l'échelle

Introduction

The leisure industry has become an important component of the economy in most of the developed countries and one of the largest industries in the world. It is growing rapidly, and concordantly, there is a growing demand for the activities of this industry. Every year millions of people benefit from leisure services as a part of leisure activities (Tribe, 2011). Therefore, it is important for leisure businesses to identify the profiles of participants, how satisfied they are, and how they spend their leisure time. Leisure

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businesses should seek answers to these questions to maximize their profits, satisfy their customers, and maintain their growth.

The determining factor of the participation in services provided by leisure businesses might be the features of the activities. The literature review on participation in leisure activities shows that most of the studies focused on the individual (Kim, Heo, Dvorak, Ryu, & Han, 2018) and social benefits of leisure (Kim, Irwin, Kim, Chin, & Kim, 2015). Participating in a leisure activity might bring various benefits to individuals and society. However, explaining the importance of participating in a leisure activity in this way might be limited. Because, besides the individual and social benefits, participation in a leisure activity is essential for both the market and industry. Explaining the main motives that ensure participation in activities, increasing the participation and sustaining the growth for the production and consumption of leisure activities that will fulfill the needs of the industry or an individual with scientific studies of the psychosocial field might not be possible for leisure activities that aim for profit. In the end, activity is the only factor that ensures participation and consumption. In other words, regardless of the leisure activity type, what matters most is that the activity has the main leisure features that will ensure the participation of an individual. The literature shows that there are number of developed and adapted scales that determine the reasons for participation in a leisure activity (Albayrak & Caber, 2018; Beard & Ragheb, 1983; Chun, Roh, Spralls, & Kim, 2018; Manfredo, Driver, & Tarrant, 1996; Morris & Rogers, 2004; Ragheb & Beard, 1982; Ryan & Glendon, 1998). The main deficiency of these scales in terms of the leisure industry and businesses is the lack of integrative perspective to assess leisure activities and the lack of focus on leisure consumption. This situation can be explained as follows. In all leisure activities, sports, art, and culture are used as a medium. The use of these phenomena as mediums in leisure activities limits the scales with these mediums. For instance, a scale that is developed according to data of a leisure activity that uses sports as a medium is limited to participation in sports (Buning & Walker, 2016; Masters, Ogles, & Jolton, 1993). In this context, the important point is not the medium or phenomena used in a leisure activity, but the requirement for a measurement tool which can assess the leisure activity in an integrative manner or which is structured with relevant questions, in other words, which can determine whether the activity has the features of a leisure activity or not. Regardless of the main medium of leisure activity (sports, art, and culture), there is an absence of a measurement tool that can be employed in leisure activities in terms of cost and functionality both for the literature and the industry. The consumption aspect of the issue shows that the decrease in working time as a result of advancing technology brings about an increase in leisure time. In this way, the consumption of leisure activities that employ sports, art, and culture as a medium continuously increases. Therefore, besides the need for leisure participation scales developed according to the psychosocial background of participation and literature knowledge, there arises the necessity of transforming these scales into structures that may be used in leisure consumption required by the industry.

Indicators show that the leisure business incurs customer loss at the rate of 10 to 30% per year (Kalder, 2000). However, some of these organizations do not have any information about the reasons for the loss of customers, which customers they lost, and how much revenue and retail they lost as a result (Butler, Oswald, & Turner, 1996). One of the most important components that can determine whether the production and consumption of commercial leisure activities are successful or not might be participation, which considers the features of the activity. The acceptance of the fact that the leisure activities featured are among the

main motives that can increase and sustain the interest in an activity, and periodic determination of the participation status, has a great importance in terms of the profits of leisure businesses. Through this means, leisure businesses can identify the target group to whom they provide service, and the efficiency of the provided activity, they can restructure the activity according to the target group, individualize the activity, and take necessary precautions to prevent customer loss. Analyzing the motives of individuals to participate in a leisure activity according to activity features can play a key role in terms of realization of goals by for-profit leisure businesses. Therefore, features on activity and the relationship with participation are important for researchers, leisure centers, leisure retailers, and leisure business managers.

Literature review

The World Health Organization (WHO) defines “participation” as “involvement in a life situation” in the International Classification of Functioning, Disability and Health (ICF) (WHO, 2001). The concept of ‘life situation’ describes the interaction and participation of an individual within the spheres of daily life and its broader dimensions. ICF classified the domains of participation as: learning and applying knowledge, general tasks and demands, communication, mobility, self-care, domestic life, interpersonal interactions and relationships, major life areas, community, and social and civic life (WHO, 2001). Participation is a fundamental part of an individual’s life experience and it is necessary for reaching life satisfaction, sense of competency, and psychological, emotional, and skills development (Law, 2002). Participation in activities is a context where individuals establish friendships, improve their skills and competencies, express their creativity, recover their mental and physical health, and find the meaning and purpose of their life (Brown, Brown, & Bayer, 1994; Kinney & Coyle, 1992; Lyons, 1993).

The participation of individuals in life situations can be classified as participation in house, work, school, and leisure activities. In this context, the leisure component, which is a way of individual participation, includes artistic, creative, cultural, active, physical, sports-related, social, stimulating, and skill-based activities (Kalscheur, 1992; King *et al.*, 2003; Zuckerman & Kuhlman, 2000). Research studies revealed that participation in meaningful events such as work or entertainment has a significant and positive impact on health and wellness (Larson & Verma, 1999; Law, Steinwender, & Leclair, 1998). Individuals participate in leisure activities based on their purposes, preferences, and fields of interests independently of their ethnicities, socio-economic situation, educational status, culture, race, and other characteristics (Kim, 2012). In this sense, leisure activities bring about tangible benefits such as “fitness level, social interaction, skills development etc.,” as well as intangible benefits such as “self-efficacy, continuity etc.” (Lammel, 2003, p. 31).

The issue of identifying which features determine participation in leisure activities has importance. In this context, Csikszentmihalyi’s concept of flow can be explanatory. Our occupations need an individual balance of satisfaction in their daily status (Christiansen, Backman, Little, & Nguyen, 1999; Jonsson, Moller, & Grimby, 1999). In order to derive significance from an activity, a balance between the difficulty of an activity and skills of an individual is necessary (Moneta & Csikszentmihalyi, 1996). Csikszentmihalyi examined the “flow” in individuals’ participation in activities and identified that a “flow” occurs more in structural activities that include more control such as games, work, sports, artistic activities, and ritual events (Csikszentmihalyi, 2000; Csikszentmihalyi & LeFevre, 1989). In order to make participation significant, there is a need for a sense of choice or control, and in order

to make it easier to pay attention to the activity, there is a need for a supportive environment, focusing on the task, a sense of mastership, and a sense of challenge. Individuals display a balanced personality by gaining optimum experience through perceived emotional intensity of challenges related to the task they have and their skills related to their capacities. Research studies demonstrate that the balance of challenge and skills is not sufficient to predict the emergence of emotional intensity. For emotional intensity to emerge (flow theory), challenge and skill should exceed a certain threshold value. Despite the fact that both challenge and skill are equal at a low level, the result for emotional intensity is emotionlessness. The concept of emotional intensity is the full commitment of an individual to the performed activity, the desire to succeed during the activity, and the mental expression of the process of the emotion emerging as a result of an individual's energy toward the activity (Csikszentmihalyi, 1988). As a result, flow leads to the repetition, in other words, maintenance, of activities, which are participated in due to their utterly positive and rewarding features (Csikszentmihalyi & Massimini, 1985).

The most important component among the leisure activity types is the entertainment component. It can be argued that one of the most important determinants that integrate leisure activities with commerce is entertainment, because no one would like to spend leisure time with a non-entertaining activity. When the research studies reported that one of the most important sources of motivation for leisure activities to be attractive is entertainment (Cairney *et al.*, 2012; Stebbins, 2001; Wininger & Pargman, 2003), detecting the factors for participating in the activities provided by leisure businesses is becoming crucial.

Lee and Hwang (2011) indicated that some researchers focus on leisure consumption. The activity categories created for studies that focus on the consumption of leisure activities are described as follows: (1) sports, open-area recreation, and various physical activities; (2) cultural or history-related activities; (3) theme parks, gambling, shopping, dinner, etc., i.e., entertainment activities; (4) political (organizational) activities (Becchetti, Trovato, & Londono Bedoya, 2011; Davis & Sternquist, 1987); (5) family, relatives, and other social gathering activities (Davis & Sternquist, 1987); (6) volunteer activities; and (7) religious activities (Becchetti *et al.*, 2011). The literature review on participation in leisure activities revealed that there are a number of structures on ensuring and sustaining participation. Therefore, leisure activities can be categorized in different ways. However, as stated before, the important point to be considered is the main features that prove that the activity is a leisure activity. In the scope of this study, the relevant structures to the main features of a leisure activity that give rise to the participation of an individual are explained below.

Relaxing activity

Participating in an active or passive leisure activity reduces depression and anxiety, and leads to the emergence of positive feelings, enhances self-confidence and sense of self, increases overall psychological wellness, and contributes to cognitive functions (Henderson & Ainsworth, 2002; Iso-Ahola & Mannell, 2004).

Developmental activity

A series of studies conducted on leisure activities highlighted the potential of leisure activities in terms of facilitating personal development following stressful life events

(Chun & Lee, 2010; Kleiber, Hutchinson, & Williams, 2002). Kleiber *et al.* (2002), for example, discovered the concept of positive transformation following negative life situations. The researchers indicated that leisure activities have the potential to be a medium for personal transformations that will support individuals in experiencing enhanced relationships and discovering new opportunities. The WHO (2010) reported that participation in activities has a positive impact on both the physical and mental health of all individuals. In a similar way, Hsieh (2009) interpreted the benefits of leisure as an assessment of individuals concerning the satisfaction of subjectively developing their physical and mental status during and after participation in activities.

Socializing activity

According to Hull (1990), a positive emotion arises as a result of the presence of other individuals. In order to ensure that individuals enjoy an activity, the participation should be done with a group of people who are reliable, similar, and of a similar social status. Individuals spend most of their time in common leisure activities, and for some of them, leisure groups provide closer social support than other friendships (Argyle & Lu, 1990; Hills & Argyle, 1998). The desire for social contact can be one of the main motivations for leisure. Individuals might look for satisfactory behaviors such as romance, informed advice, or sympathy from different individuals within the same activity (Aslan, 2002).

Activity with an attractive environment

Participation in some leisure activities can be encouraged or prevented according to the properties of entertainment facilities (Stover & Garbin, 1982). In a similar way, Hull (1990) noted that the environment of the activity changes the mood of an individual and the level of enjoying an activity. According to Klausner (1967), the main purpose of an individual in visiting environmental areas such as parks and monuments with a view is the environment. An environment or space where an activity is performed is considered a reason to enjoy the particular activity. It is shown that the activity itself and the environment where the activity is performed have importance (Craike, Hibbins, & Cuskelly, 2010).

Productive activity

The first component of Hull's (1990) mood theory related to leisure includes the expected stimulation and the degree of excitement concerning the activity. Delle Fave and Massimini (2003) highlighted that creative and productive leisure activities might lead to flow or optimal experiences, and these experiences enhance skills in terms of personal development and lifelong maintenance of certain occupations.

Esthetic activity

Esthetic beauty represents elegance and one of the characteristic features of leisure activities (Willis & Campbell, 1992). The esthetic expression and beauty draw the attention of participants (Wann, Grieve, Zapalac, & Pease, 2008). In a similar way, the flow during other leisure activities besides sports, visually attractive movements, certain moments, and environmental properties of the activity environment can be interpreted as

the pure expression of esthetics. Therefore, the participation levels may be affected when individuals who look for an esthetic feeling participate in leisure activities that include esthetic features.

Entertaining activity

Undoubtedly, one of the most important motives that enable participation in leisure activities, and increase and maintain the participation, is entertaining leisure activities (Braden, 1988). In this sense, entertainment can be considered as one of the most important reasons for children, young people, and adults to participate in leisure activities such as physical activities and sports (Dardis, Soberon-Ferrer, & Patro, 1994; Leung & Lee, 2005; Stebbins, 1982). The absence of entertainment in an activity can be a factor preventing participation in the activity or participation from being maintained (Carraro, Young, & Robazza, 2008; Murcia, Gimeno, & Coll, 2007).

Exciting activity

Zuckerman and Kuhlman (2000) asserted the hypothesis that states that seeking emotions is integrated into a common feature called stimulated search for excitement. In other words, the hypothesis argues that there is a correlation between the personal dimensions of stimulation and seeking excitement. It is noted that participants who seek excitement prefer activities that include a high level of luck, flexibility, and a set of risks (Zuckerman, 1979). Csikszentmihalyi (1988) analyzed leisure activities that are highly enjoyable and internally motivating such as artistic creativity, music, learning, chess, dance, and rock climbing, and revealed that the main factor of these activities is deriving pleasure/desire. Wankel and Kreisel (1985) found out in their study that the fundamental sources of deriving pleasure/desire are the excitement of competing and perception of being sufficient. Due to the fact that the motive for deriving pleasure/desire is one of the underlying feelings of enjoyment (Scanlan, Carpenter, Lobel, & Simons, 1993), the correlation between pleasure/desire, excitement, and enjoyment should, therefore, be taken into consideration.

Method

Scale development

A multi-stage approach was followed in the measurement tool development process. This procedure was suggested by Churchill (1979). The following sections provide information about the process of the Leisure Activity Participation Scale (LAPS).

Construct domain and generation of item pool

The starting point of the research study is the limitation of three main mediums (sports, art, and culture) used in leisure activities in terms of identifying leisure participation motives. In this context, the main purpose of the study is developing a measurement tool that can evaluate a leisure activity itself in an integrative manner. The relevant literature was reviewed in order to describe the motivators of participation in a leisure activity, features that a leisure activity should have, and structures that present the correlation between them. The questions that were developed as a result of the literature review were

asked to participants of four focus groups consisting of individuals who participate in leisure activities regularly. As a result of the analysis of the data obtained from the focus group interviews, eight themes were specified as: relaxing activity, developmental activity, socializing activity, activity with an attractive environment, productive activity, esthetic activity, entertaining activity, and exciting activity. In the light of the given themes, an item pool consisting of 57 questions was created.

Refinement of instruments

The item pool was presented to a panel of experts to obtain content validity before the pilot study (DeVellis, 2012). The opinions of seven experts who conducted studies on leisure time and scale development were received in order to assess the relevancy of the questions of the item pool with the feature that is required to be measured. For this purpose, the Content Validity Ratio (CVR) developed by Lawshe (1975) was employed. For each item, the experts shared their opinions as “1 necessary, 2 necessary but insignificant and 3 unnecessary.” According to Lawshe’s formula, the CVR should be higher than 0.74 for each item in a panel in which seven experts participated (Wilson, Pan, & Schumsky, 2012). As a result of the calculations, the number of items was reduced to 52 by subtracting five items with an average relevance rate of less than 0.74 CVR.

Data collection and purification of measures

For the pilot test, which is the first phase of conceiving the factor structure of the measurement tool, 243 individuals who participated in leisure activities held in Eskişehir Sazova Science, Culture and Art Park were selected by the convenience sampling method and included in the study. Sazova Science, Culture and Art Park is the biggest park in Eskişehir province, located in western Turkey, with its 400-square-meter area. Within the park area, there is a large pond for various water sports, open-air concert area, amphitheater, museum-ship, play groups of fairytale characters, playgrounds where children can perform various water activities, playground for children with disabilities, a Science and Experiment Center that includes the biggest space house, a Fairy Land Castle, which is the first in the country, underwater world, and a zoo. The majority of these services are provided by leisure businesses.

The data were collected from those who participated in leisure activities organized by leisure businesses in Sazova Park in March and April 2015, through a survey by using the face-to-face interview method. The survey consists of two sections. The first section of the survey includes the Leisure Activity Participant Scale, which consists of 52 questions in the form of a 5-point Likert scale. The second section consisted of questions regarding the demographics of participants. The female respondents (55.1%) outnumbered their male counterparts. The majority age group was 21–25 years old (37.7%). Most of the respondents had an associate degree and a bachelor degree (49.2%). As it relates to occupation, the most of (57.2%) respondents were students. Most of the respondents had a monthly income of between 1501 and 2250 Turkish Liras.

To reduce the number of items and simplify the scale, the present study included an exploratory factor analysis (EFA) in this step. Prior to factor analysis, the suitability of the data for factor analysis was verified. The Kaiser-Meyer-Olkin value was sufficient (0.911) to determine the suitability of the data for principal component analysis.

According to the results of the Bartlett test (5223.5705 $df = 561$, $p = 0.00$), it was observed that the data mostly come from multivariate normal distribution. The measure of sampling adequacy had a low value of 0.817 and a high value of 0.948.

As a result of data analysis, 10 items with a factor load of less than 0.500 (Hair, Black, Babin, & Anderson, 2013) and eight items which had a factor load under another dimension were subtracted from the scale and an eight-dimensional structure with 34 items was obtained. The contribution of the eight dimensions to the total variance was determined as 71.866%. Table 1 shows the factors of the scale and their factor loadings according to the results of EFA.

Testing the measurement model

Churchill (1979) suggested conducting a second survey with a different sample using the simplified questionnaire items to test the simplified scale. Three hundred and thirty-six individuals were selected from among participants who joined activities held in Sazova Park during August and September of 2015 using the convenience sampling method. The male respondents (52.1%) outnumbered their female counterparts. The majority age group was 23–28 years old (34.4%). Most of the respondents had an associate degree and a bachelor degree (48.6%). The most of participants were students (44.2%). Most of the respondents had a monthly income of between 1501 and 2250 Turkish Liras.

The final sample group provides a suitable sample size for factor analysis. Confirmatory factor analysis (CFA) was used with the purpose of testing the accuracy of the eight-dimensional 34-item structure. The CFA results for the Leisure Activity Enjoyment Scale are shown in Figure 1.

As a result of the analyses, model fit index values were as follows; $\chi^2 = 790$ $\chi^2/df = 1.53$, RMSEA = 0.50, RMR = 0.04, SRMR = 0.04, NFI = 0.95, NNFI = 0.98, CFI = 0.98, GFI = 0.83, and AGFI = 0.80. It was confirmed that the model fit statistics values were above the suggested criterion value suggested by Hair *et al.* (2013) and had a good fit with the model. In the light of the results obtained, the model representing the LAPS was acceptable for measurement.

The validity and reliability analyses of the measurement model were performed as a result of the CFA model giving good fit values. Convergent and discriminant analyses were conducted for validity. For convergent validity, the AVE (Average Variance Extracted) and CR (Construct Reliability) values were examined. AVE value should be greater than 0.5 (Bagozzi & Yi, 1988) and the CR rate should be above the rule-of-thumb threshold of 0.70 (Fornell & Larcker, 1981). When Table 2 is examined, all constructs are well above the rule-of-thumb threshold, excluding exciting activity (0.43, AVE). According to Hatcher (1994), when the CR value was acceptable, the low value of the AVE could be accepted. Thus, it is determined that the CR values of each factor are greater than the AVE values and the convergent validity of the scale is verified.

Discriminant validity analyses were conducted after the convergent validity was determined. First, the correlation analysis was used to assess whether the scale had discriminant validity. The result indicated that all correlation coefficients (Table 2) between factors were statistically significant and sufficiently below the recommended threshold (.85) by Kline (2011) ranging from .237 to .572. Second, the square of the correlation values of each factor were compared with their AVE values. For discriminant validity, the AVE values of each factor must be greater than the square of the correlation

Table 1. Factors of the Leisure Activity Participation Scale and factor loadings.

Items	F1	F2	F3	F4	F5	F6	F7	F8
Relaxing activity								
1. The activity relieved me.	.749							
2. The activity helped me to move away from stress.	.790							
3. The activity enabled me to feel psychologically positive.	.729							
4. I was mentally relieved after the activity.	.734							
5. I liked the feelings I experienced after the activity.	.731							
Developmental activity								
6. The activity had a positive impact on my physical status.		.775						
7. The activity helped me to protect my health.		.802						
8. The activity had a positive impact on my psychological status.		.764						
9. I liked that the activity increased my life quality.		.723						
10. I felt that my skills have improved by the activity.		.699						
Socializing activity								
11. I met new people during the activity.			.721					
12. I found a chance to socialize due to the activity.			.746					
13. I liked to use my talents within the social environment of the activity.			.675					
14. I came together with different individuals in the activity.			.808					
15. The activity offered me to participate in group work.			.745					
Activity with an attractive environment								
16. I liked that the activity environment was clean and well kept.				.793				
17. The activity environment was pleasant.				.836				
18. I was impressed by the design of the activity area.				.721				
19. I found the attractive environment that I expected in the activity.				.810				
Productive activity								
20. The activity strengthened my productive side.				.708				
21. I produced something as a result of the activity.				.832				
22. I felt more useful to myself and to my environment due to the activity.				.829				
23. I liked to be productive due to the activity.				.677				
Esthetic activity								
24. The activity appealed to my esthetic feelings.					.835			
25. The performances of the activity participants were esthetic.					.690			
26. The activity had an esthetic character.					.748			
27. I found a chance to express myself with the esthetic aspect of the activity.					.774			
Entertaining activity								
28. I had an entertaining time due to the activity.						.625		
29. The entertainment quality of the activity was very good.						.747		

(Continued)

Table 1. (Continued).

Items	F1	F2	F3	F4	F5	F6	F7	F8
30. I enjoyed that the activity was entertaining.							.737	
31. I experienced positive feelings due to the entertaining activity.							.778	
Exciting activity								
32. I found a chance to do something different to have fun during the activity.								.724
33. I experienced pleasant situations during the activity that I could not expect.								.788
34. I was impressed by the exciting aspect of the activity.								.642

values (Fornell & Larcker, 1981). Table 2 shows that the AVE values of each dimension are greater than the square of the correlation coefficient of factors.

One of the important points for the discriminant validity is that the target model fits better than the other theoretical factor models (Lance & Vandenberg, 2002). Therefore, the superiority of the theoretical model is compared with other possible models as a third step. In addition to the fit indices commonly used in the comparison of models, Schreiber (2008) suggested the use of the Akaike Information Criterion (AIC), the Consistent Akaike Information Criterion (CAIC), and the Expected Cross-Validation Index (ECVI) values when testing alternative models using the same data. For comparison, small values indicate that they are the best fit. The generated target model, common model, and null models are compared. The common factor model has been determined by assuming that all the factors are not conceptually and statistically significant in the previous factors, taking on a single factor. This model has a weaker fit than the target model. In addition, Chi-square value differences show that the target model is superior to the common factor model ($\Delta \times 2 = 4191.9$, $\Delta df = 3$, $p < .001$). The significance of the Chi-square value supports the fact that the common factor model should not be identified as an accurate model. It also shows that the LAPS has a multidimensional structure. In the null model, where parameters or estimates are free, every item in the scale is suggested as a factor and is expected to have a weaker fit in the target model. In this direction, it has been determined that the target model is a better fit. When the Chi-square differences are compared, it is seen that the target model is superior to the null model (Table 3). The results of the analysis reveal that the measurement tool provides the discriminant validity.

The present study verified the reliability of the scale after validity analyses. When the Cronbach's alpha coefficient for the internal consistency is examined, all the dimensions of the scale are above the acceptable limit (Nunnally & Bernstein, 1994) and the total for the Cronbach's alpha value of the scale is .945. In terms of these results, it can be said that the scale has a generally high reliability level.

The item-total correlation was used to determine the adequacy of scale items in differentiating individuals. The lowest item-total correlation score of the scale is $r = .301$ and the highest correlation score is $r = .683$. Positive and significant ($p < 0.01$) correlations were confirmed for all items of the scale. Given that items with scores of 0.30 and above are considered sufficient in the interpretation of item-total correlation (Ko & Stewart, 2002), it can be said that the item-total correlations on the dimensions of the scale are sufficient.

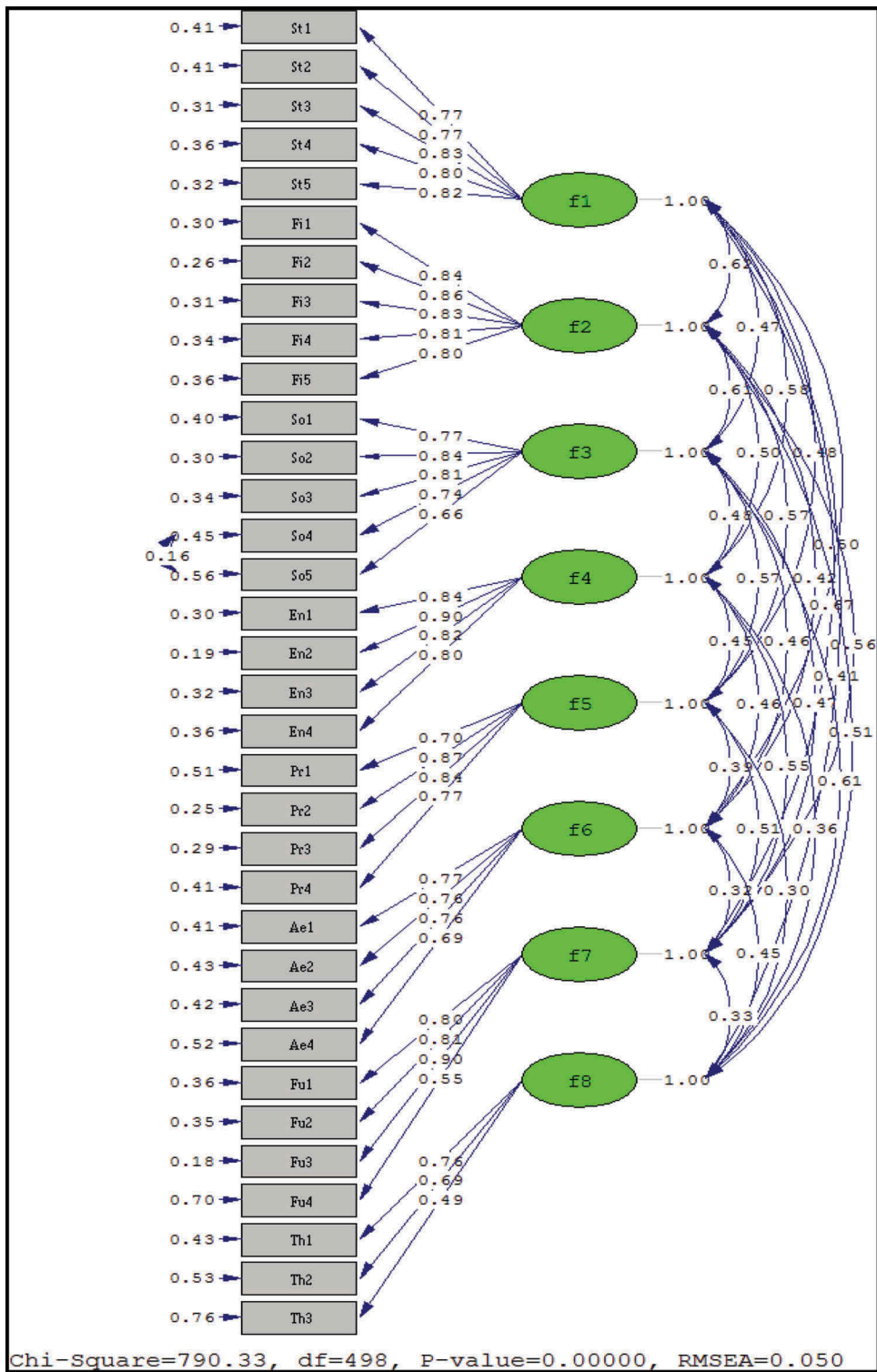


Figure 1. CFA analysis of the Leisure Activity Enjoyment Scale.

Table 2. AVE and CR values, factor correlations and the square of correlation values of the factors of the Leisure Activity Participation Scale.

	RA	DA	SA	AAE	PA	AA	EA	EXA	AVE	Construct reliability
RA	-	.303*	.162*	.279*	.186*	.182*	.327*	.095*	0.63	0.89
DA	.551**	-	.295*	.222*	.283*	.139*	.244*	.164*	0.68	0.91
SA	.403**	.544**	-	.185*	.265*	.142*	.151*	.225*	0.58	0.87
AAE	.529**	.472**	.431**	-	.172*	.164*	.231*	.059*	0.79	0.93
PA	.431**	.532**	.515**	.415**	-	.109*	.198*	.061*	0.79	0.92
AA	.427**	.373**	.377**	.405**	.331**	-	.070*	.114*	0.79	0.91
EA	.572**	.494**	.389**	.481**	.445**	.265**	-	.056*	0.79	0.91
EXA	.309**	.406**	.475**	.244**	.248**	.338**	.237**	-	0.43	0.68

*The square of correlation values.

**Correlation is significant at the 0.01 level.

Relaxing Activity: RA, Developmental Activity: DA, Socializing Activity: SA, Activity with an Attractive Environment: AAE, Productive Activity: PA, Esthetic Activity: AA, Entertaining Activity: EA, Exciting Activity: EXA.

The test-retest method was utilized to determine the time invariance of the scale. The measurement tool was applied to the sample group that participated in the leisure activities of 30 people over a two-week interval. The correlation coefficient between the measurements was .734 (high correlation).

Discussion and conclusion

This study aimed to develop a measuring instrument with strong psychometric properties that would measure the individual's participation in leisure activity. For this purpose, the validity and reliability of the scale were tested by combining the data obtained with techniques such as a literature review, focus group, and expert opinion.

The construct validity is specified in terms of the completeness of the abstract or theoretical structure of the items in a scale (Churchill, 1979). Explanatory factor analysis and confirmatory factor analysis were utilized in order to form the scale structure within the scope of the research. Items that did not have sufficient features were removed from the scale. There are no items with a common variance value below 0.30 in the scale. The common variance of the 34 items on the scale was found to be between 0.509 and 0.847. In addition, it was found that the 34-item scale can be summarized in eight factors and discloses 71.866% of the total variance. Therefore, it can be said that the percentage of the total variance is sufficient and construct validity is ensured. Additionally, according to the findings obtained from the analyses made, it has been revealed that the LAPS is a multidimensional structure.

When the reliability of scale is examined, it can be said that the scale has a generally high reliability level according to Cronbach's alpha values (Nunnally & Bernstein, 1994). As a result, it has been proven that the LAPS is a valid and reliable measuring tool and the purpose of the study has been achieved.

Leisure businesses require knowing the motives of their customers to participate in leisure activities and restructuring their services according to these motives. However, the literature review shows that there is an absence of a measurement tool that can comprehensively fulfill these needs. Because the existed scales are structured based on three main mediums (sports, art, and culture), the current measurement tools included

Table 3. The comparison of the fit indices between models.

Model	χ^2	df	χ^2/df	RMSEA	RMR	GFI	AGFI	CFI	$\Delta\chi^2$	Δdf	AIC	CAIC	ECVI
Target	790.33	49	1.53	.05	.04	.83	.80	.98	-	-	984.33	1417.33	4.19
Common factor	4982.23	52	9.45	.19	.46	.45	.37	.82	4191.90	3	5118.23	5421.77	21.78
Null	3206.04	52	6.95	.15	1.62	.55	.50	.89	1040.04	3	3344.04	2415.71	14.23

in the literature focused on the motivation for participation, and made interpretation through motives. It can be accepted that this is the starting point. However, it should be considered that besides internal emotions, features of an activity based on leisure can be a motivator for consumption. In the present study, the dimensions and questions of the developed scale were formed in a way so as to complete the activity by considering both the participation motivators and main features of leisure. The main reasons for this structuring can be grouped under four subjects. The first is developing a measurement tool that can be used for leisure activities in terms of time, cost, and functionality regardless of the medium of a leisure activity (sports, art, and culture). The second is defining the reason for which feature/features of a leisure activity leads/lead to consumer participation. The third is identifying weak features of an activity and obtaining information for restructuring, and finally, the fourth is obtaining the basic knowledge required for the sale of an activity (what kind of activity?). Because the LAPS was developed in light of these reasons, it contributes to filling a gap in the literature and also facilitates the acquirement of the basic knowledge required for the evaluation of services provided by leisure businesses. In this context, it can play a key role in terms of the analysis of motives to participate in a leisure activity based on activity features, and for leisure businesses to reach their goals. Therefore, the relationship between the features of activity and participation in the activity is a significant issue that should be addressed by leisure businesses, leisure retailers, and leisure business managers.

Some practical implications can be derived from the study. The development of the LAPS allows managers and program designers to identify participation differences among individuals. Doing this can provide managers and program designers with the opportunity to segment the market (e.g., female/male, age, income, profession). Leisure business can use the LAPS to understand participants' expectations, which supplies an opportunity to evaluate and improve their relationship with customers and enhance the effectiveness of customer relationship management. Additionally, the LAPS can be used to assist individuals to self-evaluate their participation. This information can help them plan their leisure activities.

There are some limitations to this study. First, the conceptual model has been developed primarily with regard to participation in a leisure activity. However, considering the diversity of leisure activities, more work needs to be done to determine whether the proposed frameworks are equally applicable to specialized leisure activities, even if the sub-dimensions are appropriate for generalization. Second, only eight factors affecting the participation of leisure activities are taken into consideration. Other factors influencing the participation of leisure activities should be sought out in future studies. Third, the use of a convenience sampling method may not reflect the sample population. In future studies, investigations of leisure activity participation could include respondents who participate in other activities as well as those from other geographical locations. Fourth, it could be important to test the psychometric properties of the scale used in other languages and cultures in order to increase the generalization, validity, and reliability. In addition, future research may focus on consequence relationships between leisure activity participation and other constructs, such as experience, satisfaction, and behavioral intention.

In summary, despite the limitations of the study, the conceptual model and proposed scale will help leisure activity managers and programmers establish and maintain a competitive edge by identifying their advantages and weaknesses in the leisure sector. This will provide a solid experimental base for the potential development of leisure businesses.

Disclosure statement

No potential conflict of interest was reported by the authors.

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