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Leisure Loyalty: The Role of Involvement and Constraints

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Abstract

Although the effect of leisure constraints and involvement on loyalty has drawn attention in recent years, there are a limited number of studies for bicycle users. For this purpose, we investigated a) the main constraints for enrolled university students and the level of loyalty, b) the impact of perceived constraints on bicycle use c) the relationships between variables (leisure constraints, involvement, and loyalty) in the present study. This study consisted of 498 (289 female and 209 male) university students. When the main constraints of university students' participation were examined, the highest constraints average scores were determined as "infrastructure", "laws and legislation" and "physical and economic" constraints, respectively. The regression analysis demonstrated that bicycle constraints significantly influenced both leisure involvement and loyalty. Besides, the sub-dimension attraction and self-expression of involvement significantly affected participation loyalty. In conclusion, these results suggest that marketing strategies could be improved to strengthen leisure involvement and to minimize constraints in order to increase loyalty.

Keywords: bicycle use, leisure, constraints, involvement, loyalty, students

1. Introduction

The bicycle has been used both a sports and transportation vehicle for many years. The popularization of the bicycle use has a significant positive effect on issues such as public health, development of human relations and sports consciousness, reduction of environmental and air pollution, reduction of traffic density/ease of transportation (Ceyiz & Kocak, 2015). On the other hand, the mental and physical health benefits of physical activity are increasingly important in the recreation and entertainment literature (Halforty & Radder, 2015; Henderson & Bialeschki, 2005; Norling, Wells, & Christensen, 2010). In this context, recreation programs designed to increase the willingness of individuals to use bicycles may allow a lifestyle change in a social sense starting at the university campus level. Thus, the scope of significant benefits from the active lifestyle can be extended both individually and socially (Halforty & Radder, 2015).

Bicycles are widely used in European cities and some Far East countries with a geographically convenient structure. For example, 5% of total trips in Europe (50 million trips per day) are carried out by bicycle, the rate increases by 18% in Denmark, where bike use is supported, and 27% in the Netherlands (Barut & Yuceturk, 2017). In Turkey, there are no precise records regarding bicycle use. Alexandris, Kouthouris, Funk and Chatzigianni (2008) state that leisure constraints and involvement provide useful approaches to understand consumer behaviour. For example, while riding a bicycle, consumers may face many individual and social constraints, and these constraints can discourage them from cycling (Balcı, Ozbek, Kocak, & Ceyiz, 2017). On the other hand, Kyle and Mowen (2005) state that consumers with a high level of involvement for a particular activity are more likely to continue to participate in this activity in the future. Iwasaki and Havitz (1998) evaluate that involvement has strong attitudinal characteristics that predict or explain behaviour. As a matter of fact, involvement is used to understand/explain the leisure time behaviour decision-making process of consumers (Alexandris et al., 2008). However, academic research on the relationship between leisure constraints and involvement and its effects on consumer decisions is quite limited.

2. Literature

2.1 Leisure Involvement, Constraints and Loyalty

The concept of involvement is widely studied in marketing communication and consumer behaviour research (Mitchell, 1981; Kapferer & Laurent, 1985; Havitz & Howard, 1995; Kyle, Absher, & Graefe, 2003; Kyle & Mowen, 2005; Alexandris et al., 2008; Eskiler & Karakas, 2017). Mitchell (1979) draws attention to two dimensions of involvement, such as direction (originating from a specific stimulus or condition) and intensity (high level of excitement). Rothschild (1984) describes involvement as an unobservable interest, arousal, and motivation status, which is stimulated by a particular stimulus or condition. In this context, leisure involvement refers to a motivation, arousal or interest that cannot be observed in a leisure activity (Havitz & Howard, 1995). It has been drawn attention to disagreement among the authors on the conceptualization of involvement (Cakir, 2007). While Zaichkowsky (1985) conceptualizes involvement in one dimension, Laurent and Kapferer (1985) consider that involvement is a multi-dimensional structure and cannot be reduced to a single dimension. Based on previous research, Kyle et al. (2003, 2004) used a three-dimensional approach to involvement with attraction, centrality, and self-expression. Accordingly, the attraction has focused on the importance of an activity perceived by an individual and the pleasure resulting from participation in a particular activity (McIntyre & Pigram, 1992). Centrality takes place when an individual rearranged his life to ensure participation in a particular activity. Therefore, the activity becomes part of the individual's general lifestyle. Finally, self-expression is considered to be as the self-representation and/or the impression that individuals want to convey to others during leisure activities (Alexandris et al., 2008; Kyle, Absher, Norman, Hammitt, & Jodice, 2007; Norling, Wells, & Christensen, 2010).

Leisure activities create their own philosophy which can be seen to support the psychological, social and physical values of the individual (Ardahan & Yerlisu Lapa, 2011). Cycling is an important outdoor leisure activity (Ardahan & Mert, 2014) as well as a sustainable mode of transport, which allows the individual to establish a special bond between himself and nature that also liberates an individual and positively affects an individual's mental and physical health (Calik, 2016). However, bicycle users face many constraints in their transportation or their leisure activities.

In many studies, it has been investigated not to participate in leisure activities/services (Cho & Price, 2016; Elkins, Beggs, & Choutka, 2007; Hurd & Forrester, 2006; Hoang, Cardinal, & Newhart, 2016; Shifman, Moss, D'Andrade, Eichel, & Forrester, 2012). Crawford and Godbey (1987) suggest that the hierarchical model of leisure constraints is widely used in explaining consumer behaviours. In the leisure literature, the term "constraints" is conceptually referred to as the reasons that may reduce or prevent the possibility of an individual participating in a particular activity (Crawford & Godbey, 1987). These constraints in relation to cycling are evaluated with regard to internal (individual characteristics, motivation, etc.) as well as external factors (lack of time, family support, street facilities, etc.) which can change an individuals motivation or desire to continue to engage in the activity (Kienteka, Rech, Fermino, & Reis, 2012). On the other hand, Engbers and Hendriksen (2010) suggest that personal factors (perceived time and distance etc.) are the biggest constraints to cycling. Ahlport, Linnan, Vaughn, Evenson, and Ward (2008) state that family, environmental factors and personal characteristics are constraints to bicycle use. In this study, the constraints related to bicycle use, taking into account the work of Balci, Ozbek, Kocak, and Ceyiz (2017), investigated in five dimensions: individual, laws and regulations, socio-cultural, physical and economic and infrastructure.

The constraints faced during bicycle use can affect the level of involvement of individuals in a positive or negative way. Iwasaki and Havitz (2004) state that constraints are social and psychological predecessors of leisure time participation behaviour. Alexandris et al. (2008) support this contention by providing empirical findings that leisure constraints are a significant predictor of leisure involvement. In addition, the leisure constraints and level of personal involvement are closely related to the frequency of participation (Alexandris et al., 2008; Halforty & Radder, 2015).

Ensuring the continuous participation of individuals in a particular leisure activity (creating loyal customers) is crucial to the long-term financial performance of recreation businesses. As a matter of fact, research has shown that while loyalty has reduced marketing costs, it has also determined that loyalty increase the number of new customers (Aaker, 1991), positive word of mouth (Dick & Basu, 1994), re-participation in the activity (Hill & Green, 2000) as well as resistance to change for customers (Cronin, Brady, & Hult, 2000). Loyalty is defined as the emotional or psychological commitment to a brand, a person or a cause (Funk & James, 2006; Oliver, 1999). Leisure loyalty represents a psychological state in which there is a desire to continue a specific activity, or overall activity participation (Baghurst, Tapps, & Judy, 2014, Hagiwara, 2017). In the sports marketing literature,

loyalty is evaluated in both an attitude and behavioural dimension (Bauer, Stokburger-Sauer, & Exler, 2008; Kim & Scott, 1997). Behavioural loyalty represents costumers' past behaviour (re-purchase and positive word of mouth) and future behavioural tendencies (willingness to maintain positive and lasting behaviour) (Dietz-Uhler, Harrick, End, & Jaquemotte, 2000). On the other hand, the level of emotional and psychological proximity of an individual to a particular activity constitutes the attitudinal dimension of loyalty. For example, the individual's sense of commitment to a particular activity (internal commitment), the commitment to continue an activity over a period of time (perseverance), and resistance to criticism are considered to be three basic elements that constitute a high level of attitudinal loyalty (Bauer et al., 2008). On the other hand, according to Iwasaki and Havitz (2004), it is particularly useful for campus recreation service managers to understand how and why students develop loyalty to a particular leisure activity.

Finally, as a result of the decision of the Ministry of Health of the Republic of Turkey to promote the use of bicycles, (Turkey Healthy Eating and Active Life Program) (THEALP) 100 bicycles were granted in 2016 by Sakarya University. The program provides the opportunity for students to use bicycles free of charge. Participation in such activities was voluntary and there were some factors which limited the participation of students or the formation of loyalty. In this context, the aim of the study is to identify a) the main constraints experienced by university students with regard to bicycle use as well as the level of loyalty, b) the impact of perceived constraints on the use of bicycle and c) relationships between variables.

3. Method

In this study, correlational research method among quantitative research methods was used. Before the data collection process, necessary permits were obtained through the cooperation with the university. The questionnaire was initially piloted with approximately 34 participants to minimize the uncertainties associated with the survey. The data was collected from the students of Sakarya University Esentepe Campus between February and April 2018 (questionnaires distributed in different cafeterias at different days and hours of the week) by researchers through a face-to-face survey method. The purposeful sampling method was used in the study. In order to control the perceptual differences, the aim and structure of the study were briefly explained to the students who benefited from THEALF at least once in the data collection process and all of the students volunteered to participate in the study. SPSS 20.0 was used for data analysis. A total of 498 people, aged between 13-29 (Mean=21.49±2.01), 289 (58%) female and 209 (42%) male, participated in the study. The participant characteristics were detailed in Table 1.

Table 1. Descriptive statistics

Age	**Mean**	**Sd.**	**Faculty**	**f**	**%**
18-29 age	21.49	2.01	Faculty of Computer and Information Sciences	39	7.8
Gender	**f**	**%**	Faculty of Arts and Sciences	96	19.3
Male	209	42.0	Faculty of Law	30	6.0
Female	289	58.0	Faculty of Communication	23	4.6
What is your cycling time?	**f**	**%**	Faculty of Management	46	9.2
5 days a week and more	11	2.2	Faculty of Engineering	118	23.7
3-4 days a week	16	3.2	Faculty of Political Science	74	14.9
1-2 days per week	37	7.4	Faculty of Sports Science	30	6.0
3-4 days per month	106	21.3	Faculty of Technology	42	8.4
1-2 days per month	328	65.9			

3.1 Instrumentation

Bicycle Constraints Scale (BCS) consists of 30 items and 5 sub-dimensions (individual (eight items), laws and regulations (six items), socio-cultural (five items), physical and economic (seven items), infrastructure (four items). In the scale development study, Cronbach alpha values of the scale sub-dimensions ranged between .738 and .890. Participants were asked to respond using a 5-point Likert scale (1=Strongly disagree, …, 5=Strongly agree). A high score from the subscales of BOS indicates that an individual is more likely to discontinue cycling (Balci et al., 2017).

Leisure involvement scale, which is commonly used in the literature, was used to measure the leisure involvement of participants (Alexandris et al., 2008; Kyle, Graefe, Manning, & Bacon, 2004; Kyle & Mowen, 2005; Mclntyre & Pigram, 1992). The leisure involvement scale consisted of 9 expressions and three

sub-dimensions (attraction) (three items), centrality (three items) and self-expression (three items). Three items adapted from the study of Alexandris et al. (2008) in the measurement of loyalty were added to the measurement instrument. Alexandris et al. (2008) reported the Cronbach's alpha internal consistency coefficient as .95. In all expressions, participants were asked to respond using a 7-point Likert scale (1=Strongly disagree, …, 7=Strongly agree).

The internal consistency reliability of bicycle use constraints, leisure time and loyalty variables were calculated (Table 2).

Table 2. Means and Reliability Analysis

	Mean	Sd.	Skewness	Kurtosis	Cronbach's Alpha
Individual (BCS)	2.81	.960	-.024	-.814	.810
Law and legislative (BCS)	3.32	.911	-.187	-.382	.867
Socio-cultural (BCS)	2.68	.856	.190	-.474	.741
Physical and economic (BCS)	3.21	.908	-.083	-.466	.717
Infrastructure (BCS)	3.84	.914	-.530	-.422	.835
Attraction (Involvement)	5.57	1.256	-.755	-.136	.829
Centrality (Involvement)	2.68	1.152	.078	-.991	.843
Self-expression (Involvement)	2.90	1.628	.540	-.747	.924
Loyalty	3.17	1.656	.501	-.691	.863

The internal consistency coefficients of the BCS sub-dimensions had Cronbach's Alpha values ranging from 0.717 to 0.867. When the average scores of the scale sub-dimensions were analyzed, the dimensions of "infrastructure" and "laws and legislation" had the highest mean scores (3.98 and 3.37, respectively). Other subscales were listed as "physical and economic" (3.21), "individual" (2.81) and "socio-cultural" (2.68). The internal consistency coefficients of the leisure sub-dimensions were between .829 and .924. Similarly, the internal consistency coefficient of the loyalty variable was .863. In terms of the descriptive statistics, the mean scores of the four dimensions were as follows: loyalty=3.17 (SD=1.656), attraction=5.57 (SD=1.256), centrality=2.68 (SD=1.152) and self-expression=2.90 (SD=1.628).

4. Results

4.1 The Influence of Bicycle Constraints on Involvement

A multivariate multiple regression analysis was used to measure the influence of constraints on involvement. The three sub-dimensions of involvement (attraction, centrality, and expression) were evaluated as the dependent variables and the five constraint dimensions were evaluated as the independent variables. The overall regression model was significant at $p < .01$.

Table 3. Regression Analysis to Determine the Effect of Bicycle Constraints on Involvement

Variables	B	β	t	Sig.
Law and legislative	-,172	-,125	-2,323	,021
Individual	-,059	-,045	-,966	n.s.
Infrastructure	,039	,029	,525	n.s.
Physical and economic	,038	,028	,506	n.s.
Socio-cultural	,021	,014	,279	n.s.
Dependent Variable: Attraction, F= 2.67, p< 0.05, Adjusted R^2= 0.02				
Individual	-1,141	-,941	-61,193	,000
Physical and economic	-,080	-,063	-3,468	,001
Infrastructure	-,075	-,059	-3,285	,001
Law and legislative	-,072	-,057	-3,191	,002
Socio-cultural	,007	,005	,307	n.s.
Dependent Variable: Centrality, F= 818.91, p< 0.01, Adjusted R^2= 0.87				
Infrastructure	-,552	-,310	-5,956	,000
Physical and economic	-,373	-,208	-3,981	,000
Law and legislative	,221	,124	2,401	,017
Socio-cultural	-,220	-,115	-2,336	,020
Individual	-,020	-,012	-,260	n.s.
Dependent Variable: Self-expression**,** F= 11.53, p< 0.01, Adjusted R^2= 0.10				

Bicycle constraints predicted a significant amount of variances in the three involvement sub-dimensions. For the attraction, 2% of the variance was explained by law and legislative dimension (t=-2.323, p<.05, β=-.125). For centrality, individual (t=-62.193, p<.01, β=-.94), physical and economic (t=-3.468, p<.01, β=-.063), infrastructure (t=-3.285, p<.01, β=-.059) and law and legislative (t=-3.191, p<.01, β=-.057) explained 87% of the variance. For the self-expression, infrastructure (t=-5.956, p<.01, β=-.31), physical and economic (t=-3.981, p<.01, β=-.208), law and legislative (t=2.401, p<.05, β=.124) and socio-cultural (t=-2.336, p<.05, β=-.115) dimensions explained 10% of the variance.

4.2 The Influence of Bicycle Constraints on Loyalty

An overall regression equation model was significant at the .01 level (F=5.66, p<.01) as shown in Table 4. The adjusted R^2 value was .05, indicating that the bicycle use constraints in the overall model explained 5% of the variance in loyalty.

Table 4. Regression Analysis to Determine the Effect of Bicycle Constraints on Loyalty

BC dimensions	B	β	t	p
Infrastructure	-,427	-,235	-4,400	,000
Physical and economic	-,368	-,202	-3,750	,000
Law and legislative	,166	,091	1,724	n.s.
Individual	-,026	-,015	-,324	n.s.
Socio-cultural	,020	,010	,205	n.s.
F= 5.66, p< 0.01, Adjusted R^2= 0.05			Dependent Variable: Loyalty	

Infrastructure explained the most variance (t=-4.4, p<.01, β=.235), followed by physical and economic (t=-3.75, p<.01, β=-.202). The three sub-dimensions of bicycle use constraints (law and legislative, individual and socio-cultural) were not significant (p>.05).

4.3 The Influence of Involvement on Loyalty

A third regression analysis was performed to evaluate the relationship between involvement sub-dimensions and loyalty (Table 5). The results indicated that involvement predicted 58% of the variance in loyalty (F=230.6, p<.01).

Table 5. Regression Analysis to Determine Effect of Involvement on Loyalty

Involvement dimensions	B	β	t	p
Self-expression	,682	,669	21,912	,000
Attraction	,284	,215	7,031	,000
Centrality	-,015	-,011	-,369	n.s.
F= 230,60, p< 0.01, Adjusted R^2= 0.58			Dependent Variable: Loyalty	

Finally, self-expression explained the most variance (t=21.912, p<.01, β=.669), followed by attraction (t=7.031, p<.01, β=.215). The centrality sub-dimension of involvement was not significant (p>.05).

5. Discussion

When the main constraints limiting the participation of university students were examined, it was determined that the constraints with the highest average scores were as follow "infrastructure", "laws and legislation" and "physical and economic" constraints, respectively. The locus of control theory has focused attention on the impact of events both the positive or negative on an individual as a result of their behaviour (internal) in nature or external (chance, luck and etc.) forces (Rotter, 1966). The research findings showed that the students were more likely affected by infrastructure (such as lack of bicycle track), laws and regulations (such as the lack of bicycle protection laws), physical and economic (cost of bicycle parts/maintenance) constraints outside their control. In line with this information, it could be stated that university students constituting the research group exhibited "External Locus of Control" behaviour. Shifman et al. (2012) have reported that structural constraints play an important role in sports participation. Shifman et al. (2012) 's study result is similar to the result of the current study. In addition, Gomez Lopez et al. (2010) have been reported that structural and interpersonal constraints are the main reasons why students choose to be inactive. This result demonstrates that effective strategies are needed to eliminate perceived constraints.

As a result of the analysis of the effect of bicycle use constraints on involvement (Table 3), it provides evidence that these are important predictors of leisure involvement. This result would also support the findings of previous

studies in the leisure literature (Alexandris & Carroll, 1997; Gilbert & Hudson, 2000; Halforty & Radder, 2015; Hurd & Forrester, 2006). The constraints predicted a significant amount of variance (especially in the sub-dimension of centrality) for leisure involvement. The obtained results indicated that perceived constraints negatively affect involvement in cycling. In this regard, campus recreation administrators can improve students' involvement in cycling by making improvements/arrangements in the field of "law and legislative", "physical and economic" and "infrastructure". In fact, Hoang et al. (2016) have stated that high-quality facilities, services, and programs offered to students can increase the participation of students in activities. On the other hand, appropriate strategies for eliminating individual and socio-cultural constraints can be implemented (Alexandris et al., 2008).

Another finding obtained in the study is that the perceived constraints ("infrastructure" and "physical and economic") negatively affect loyalty. According to Alexandris et al. (2008), creating customer loyalty is an important task for recreation managers in today's conditions. Therefore, "infrastructure" and "physical and economic" constrains should be eliminated. In this regard, on-campus recreation areas can be arranged for cycling and free bicycle repair and maintenance services can be provided on campus (see Norling et al. (2010). The Aggie Blue Bikes program: Implications of leisure involvement towards bicycle commuting Recreational Sports Journal, 34 (1), 34-44).

Furthermore, the findings indicated that leisure involvement is an important determinant in predicting participation loyalty. According to this, "self-expression" and "attraction" are of great importance for the formation of loyalty in individuals. In other words, the pleasure that individuals feel to participate in the activity with the self or self-expression creates a serious loyalty effect for the students. Iwasaki and Havitz (2004) have stated that leisure involvement plays an important role in the formation of loyalty. Similarly, Lee and Graefe (2002) have found that involvement directly or indirectly influences loyalty. The findings are consistent with previous studies. For example; Alexandris et al. (2008), Cho and Price (2016), Masmanidis, Gargalianos, & Kosta (2009) have demonstrated that structural, interpersonal and intrapersonal constraints have a negative effect on leisure involvement and participation loyalty. According to Park (1996), loyalty is very important in terms of ensuring participation and continuity in leisure activities. In this context, it is an important requirement to minimize perceived constraints and implement practices that increase the activity of the involvement level of students.

6. Conclusion

Campus recreation can be considered as a unique opportunity to develop activities directly affecting students' attitudes, abilities, and quality of life (Kaltenbaugh, Molnar, Bonadio, Divito, & Roeder, 2011). For this reason, campus recreation administrators need to develop effective marketing strategies using a systematic plan to increase students' awareness and participation in activities. At the beginning of these strategies, structural and environmental regulations should be implemented to minimize the perceived constraints by the students. On the other hand, considering the relationships between the attraction and self-expression dimensions of loyalty and involvement, campus recreation managers should implement strategies that involve the development of these dimensions. In contrast to this study, Alexandris et al. (2008) suggest that there is a relationship between the attraction and centrality dimensions of involvement and loyalty, however there is no relationship between the loyalty and self-expression dimension of involvement. This difference may be due to cultural characteristics and/or leisure activity differences. However, it can be stated that campus recreation managers need to develop unique marketing strategies by taking into account the target segment characteristics. Furthermore, this study had some limitations due to the specific student population. Thus, the effects of cultural, socio-economic and psychological variables on the relationship between constraints, involvement and loyalty should be further investigated in future studies. In addition, cultural studies including different leisure activities should be carried out on a larger sample population.

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