Flow Experience Study for Outdoor Recreation: Ilgaz Ski Area Case Study

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Abstract
Outdoor recreation is considered within the nature tourism potential of destinations. The study aims to measure the effect of the psychological levels of the ski athletes skiing in Ilgaz Mountain in the context of the flow experience dimensions on their perceived value for their activity and their behavioral intentions towards the destination. In addition, measuring the effect of the perceived value of the activity on the behavioral intention towards the destination is also within the scope of the other purpose. The study population consists of ski athletes coming to Ilgaz National Park. The Flow Experience Scale, developed by Jackson and Marsh (1996), was used in the study. The questionnaire method – a face-to-face interview technique, was preferred as a data collection tool. The collected data were analyzed with SPSS and AMOS package programs. As a result of the regression analysis, it was determined that the flow experience had a positive effect on the perceived value and behavioral intention. In addition, it was concluded that perceived value positively affected behavioral intention. The perceived value of amateur and professional skiers coming to the Ilgaz ski area is important for the destination. Athletes' enjoyment in the context of their flow experiences influences their goal-directed behavioral intentions. Local government support is needed to develop the potential of destinations where winter tourism and recreation activities are carried out. This study is important for promoting and sustaining eco-tourism activities and outdoor recreation.

1. Introduction

The flow experience is a psychological state of surrender, enjoyment, and concentration (Tse et al., 2022). Csikszentmihalyi researched the nature and pleasure of entertainment in 1975 by interviewing chess players, mountaineers, dancers, and individuals participating in other entertainment activities and consequently developed the psychological flow theory, which is a multifocal mental state. Flow experience, as an optimal psychological state, shows the moment when all situations come together for the individual participating in the activity. (Guo, 2005; Metin, 2020). Liao (2006) defines the flow experience as the psychological state in which the individual leaves herself/himself to good feelings and feels cognitively effective, adequacy, happy and motivated. The flow experience is available in nine dimensions. These are clear goals, explicit feedback, difficulty-skill balance, concentration, sense of control, loss of self-consciousness, the transformation of time, autotelic experience/inner concern, and action and awareness (Csikszentmihalyi, 2002). Tse et al. (2022) proposed the continuum hypothesis that people are motivated to continue their flow experiences during adulthood as conditions permit. Individuals often experience flow during an action, work, game, entertainment or sport. Jackman et al.

(2021) stated that there were 39 studies conducted and published on physical activity and physical education in young people over a period of 36 years (1984-2020) with 17,123 young people.

Nature-based recreation in open areas rehabilitates people spiritually and provides socialization opportunities (Anderson et al., 1997). All recreational activities with active or passive participation in the open areas constitute open-area recreation. There are many natural resources for outdoor recreation, such as forests, streams, mountains, etc. Open space recreation is similar to the use of other natural resources such as agriculture, forestry, and grazing. Some outdoor recreation activities can be held officially. However, some activities, such as fishing, picnicking, and hiking, cannot be counted as official (Clawson & Knetsch, 1966).

Among nature-based outdoor recreation activities, the picnic, fishing, hiking, camping, mountaineering, climbing, skiing, cycling, bird watching, botanical visits, wildlife watching, safari, air sports, etc.. Outdoor recreation with nature, eco recreation is also called "eco recreation". Eco-recreation includes policies that make it necessary to preserve nature and leave it to future generations. (Akgul et al., 2017). Eco-recreation and eco-tourism are similar to each other in terms of experience. This similarity is due to the relationship between tourism and recreation. Both have fun and listening focus and free time. Tourism and recreation share many mental and behavioral outcomes (Mieczkowski, 1990). Almost all of the activities known as outdoor recreation are also counted in eco-tourism.

Traditional mass tourism, consisting of the sea-sand-sun trio, has gradually left its place to alternative tourism types. Destinations determine their goals and policies with a clean environment and a sustainable management approach. Skiing is a type of winter sport that is formally practiced professionally or informally as an amateur manner. Skiing is an eco-tourism activity based on sports as well as being an outdoor recreation. Ilgaz Mountain National Park, located in the Western Black Sea Region of Turkey, is suitable for many nature-based outdoor recreations. The most frequent activity in this region is skiing. Amateur or professional, people come here to ski. For this reason, our target in the study is professional skiers in the Ilgaz Mountain ski area. When the previous studies on Ilgaz Mountain are examined, it is seen that the studies generally focus on the touristic supply-demand structure (Akkuş, 2019), service quality and perceived image (Öztürk & Şahbaz, 2018) and an overview of recreation opportunities (Öztürk & Aydoğdu, 2012). In this study, the perceived value and behavioral intentions of skiers who come to the destination for skiing are emphasized with the flow experience measurement developed by Csikszentmihalyi.

The aim of this study is to determine the effect of the psychological levels of the individuals skiing in the context of the flow experience dimensions on the perceived value of the activity and behavioral intentions towards the destination. In addition, measuring the effect of the perceived value of the activity on the behavioral intention towards the destination is also within the scope of the study. From this point of view, the main questions of the study are as follows:

Question 1. Are the psychological levels of skiers in the context of flow experience dimensions effective on the individuals' perceived value for the activity?

Question 2. Are the psychological levels of skiers in the context of flow experience dimensions effective on individuals' behavioral intentions towards the destination?

Question 3. Are the perceived values of the skiers for the activity effective on their behavioral intentions towards the destination?

Within the framework of these basic questions, the aim of the study is to measure the effect of the psychological levels of the ski athletes skiing in Ilgaz Mountain, in the context of the flow experience dimensions, on their perceived value and behavioral intentions for the activity they do. In addition, measuring the effect of the perceived value of the activity on the behavioral intention towards the destination is also within the scope of the other purpose. Perceived value refers to the consumer's evaluation of the utility of a product based on the overall product (Zeithaml, 1988). Behavioral

intention, on the other hand, is the desire to revisit the business and recommend the product or service positively (Shoemaker & Lewis, 1999).

In the aforementioned study, the effect of the psychological levels of the ski athletes coming to Ilgaz Mountain to ski in the context of the flow experience dimensions on the perceived value of their activity was measured. Then, the effect of psychological levels in the context of flow experience dimensions on behavioral intention towards the destination was measured. Finally, the effect of their perceived value for the activity on their behavioral intention towards the destination was measured. In line with the data obtained from the study, it has been observed that there is a positive significant relationship between the flow experience and the perceived value, and the flow experience has a positive effect on the perceived value. Then, it has been determined that there is a positive significant relationship between the flow experience and the behavioral intention towards the destination, and the flow experience has a positive effect on the behavioral intention towards the destination. Finally, it has been observed that there is a positive significant relationship between the perceived value for the event and the behavioral intention towards the destination, and the perceived value for the event has a positive effect on the behavioral intention for the destination.

2. Literature review

2.1. Flow Experience

According to Csikszentmihalyi (1977), flow experience is all the sensations that an individual feels with her/his full participation in an activity (cited from Ayazlar, 2015). In addition, Ayazlar (2015) says that the phenomenon of flow is related to pleasure due to its nature. It should be emphasized that besides giving people happiness and motivation, it is also a cognitive experience. It is an optimal experience that stems from people's perceptions of self-assertion, ability and skill. Jones et al.(2003) gave us the following information about the flow experience in their study. Flow experience, also known as optimal experience, is based on Maslow's (1968) concept of "highest experience", which is the process of self-actualization of individuals through intense and intrinsically motivating activities. Csikszentmihalyi (1997) gathered the flow experience under nine dimensions. These are clear goals, clear feedback, difficulty-skill balance, concentration, sense of control, loss of self-consciousness, transformation of time, autotelic experience/inner interest and action and awareness (cited from Karasakal, 2020). Many people experience the flow state most of the time. During the flow experience, people can feel strong, resourceful, controlled and focused (Yeşiltaş & Andiç, 2021).

Özkara and Özmen (2016) stated that the sub-dimensions of concentration (50 studies), control (43 studies), internal awareness (33 studies) and transformation of time (32 studies) were used most in the formation of the flow state variable.

Metin and Dusmezkaldender (2022) examined the experiences of the individuals participating in the mountain climbing activity in the context of the flow experience. Interviewing 18 people in the field part of the study, they stated that the flow experience of the experiences was mostly in the dimensions of difficulty and skill balance, autotelic experience, instant feedback, sense of control, loss of self-consciousness, concentration and clear goals. Mountain climbing is classified as an outdoor recreational activity.

The first flow studies in the field of sports were made by Jackson and Roberts (1992) (cited from Swann, 2016). Surveys, interviews and performance measurements were made in the studies. These scales were later expanded to 36 items, with nine subscales of four items each to assess Csikszentmihalyi's nine flow dimensions. These scales are FSS-2 (state flow) and DFS-2 (dispositional flow) (Jackson & Marsh 1996; Swann, 2016).

Considering the studies on flow experience outside the field of tourism and recreation, Akçakanat et al. (2019) determined the effect of professional love on job satisfaction. The role that flow experience plays in this relationship has also been explored. According to the results of the study, a positive and significant relationship was found between the dimensions of flow experience and job satisfaction. In addition, it was concluded that all of the flow experience dimensions have a mediating role in the effect of vocational love dimensions on job satisfaction. In addition, Turan and Pala (2019) aimed to provide benefits for making inferences about being in flow in business life and to pave the way for studies on this subject by adapting the Flow Experience Scale (Çadö) to Turkish.

Ayhan et al. (2020) developed a scale by examining the literature on the potential five key features of recreational flow experience (a sense of focus and control, time transformation, challenge and difficulty-skill balance, pleasure and fun, and the experience itself) This study is also a completely recreational activity-oriented study. In the study, concentration, loss of self-consciousness, the transformation of time, autotelic experience and difficulty-skill balance dimensions of flow experience were discussed.

2.2. Perceived Value and Behavioral Intention

Perceived value can be described as the value that the customer gives in response to the benefit received from the product or service (Lapierre, 2000). Perceived value was defined by Holbrook (1994) as a hedonic and utilitarian experience. Eight different dimensions (efficiency, excellence, gamification, aesthetics, respect, status, ethics and spirituality) were revealed over two types of experience (Özbekler, 2019). Sweeney and Soutar (2001) divided the PERVAL scale into emotional value, social value (development of social self-concept), functional value (price/value for money), and functional value (performance/quality). Petrick (2002) measured perceived value in 5 dimensions: quality, emotional response, monetary price, behavioral price, and reputation (Ayyıldız, 2020). Kovanoviene, et al. (2021) classified the customer's perceived value under functional, emotional, social, epistemic and conditional value dimensions.

There are some studies on positive relationships and effects between flow experience and perceived value. In their study titled "Perceived value and flow experience: Application in a nature-based tourism context", Kim and Thapa (2018) measured the impact of the perceived values of individuals participating in eco-tourism activities on the flow experience in the context of emotional value, monetary value and social value dimensions. The results showed that perceived quality, emotional and social values significantly affect flow experience and satisfaction. Çeşmeci and Koçak (2020) found that the flow state positively affects the perceived value of hiking and destination loyalty. In addition, it has been determined that the perceived value of hiking has a positive and significant effect on destination loyalty. Based on these definitions and research, the following hypotheses and sub-hypotheses have been developed:

H1. Flow experience has an impact on perceived value.
h1a. The concentration size has an effect on the perceived value.
h1b. The dimension of loss of self-awareness has an effect on the perceived value.
h1c. The time transformation dimension has an effect on the perceived value.
h1d. The Autotelic Experience dimension has an impact on perceived value.
h1e. The difficulty-skill balance dimension has an effect on the perceived value.

Individuals' expected or planned future behaviours regarding particular conditions determine their behavioural intention (Štefko et. al., 2022). In this regard, behavioural intent is the situation in which customers give positive and negative feedback to service providers. Within this positive feedback, there is a situation to revisit the business or to make positive recommendations (Kock et al., 2016, Tavitiyaman et al., 2021). For instance, firms that understand tourist behaviour able to satisfy the needs of tourists, thus, they can draw attention of those people to become loyal visitors (Štefko et. al.,

2022). Zeithaml et al. (1996) classified behavioral intention under 4 dimensions in their study. These dimensions are loyalty, switch, pay more, external complaint and internal complaint.

When we look at the flow experience and behavioral intention-oriented studies; Although there is no study compatible with the one-to-one hypothesis, Hsu, et al. (2012) revealed that the flow experience is significantly and positively related to Internet shopping behavior (continue intention, purchase intention, and impulse buying). The issue discussed here is the relationship between flow state and internet shopping behavior. When looking at the examples given, it is seen that flow experience is mostly used for psychological measurement in studies in the fields of management, organization, marketing, tourism and recreation.

In an example of other studies focusing on behavioral intention, Çeti and Atay (2020) found that there is a significant relationship between the destination experience and the cognitive and emotional dimensions of the destination image and behavioral intention. There are cognitive and emotional image differences between domestic and foreign tourists; In addition, it was concluded that behavioral intention differs according to the number of visits.

Based on these definitions and research, the following hypotheses and sub-hypotheses have been developed:

H2. Flow experience has an impact on behavioral intention.
h2a. The concentration dimension has an effect on behavioral intention.
h2b. The dimension of loss of self-awareness has an effect on behavioral intention.
h2c. The time transformation dimension has an effect on behavioral intention.
h2d. The Autotelic Experience dimension has an impact on behavioral intention.
h2e. The difficulty-skill balance dimension has an effect on behavioral intention.

When considering the studies on the effect between perceived value and behavioral intention, Akkılıç and Varol (2015) found that the emotional value, functional value and economic value dimensions of the perceived value variable have a significant and positive effect on behavioral intention. In addition, they found that the effect of the social value dimension on behavioral intention was negative and significant. In another case, Dülger and Ünlüönen (2019) concluded that, depending on the authentic perceptions of the visitors, the perception of objective authenticity and existential authenticity has a positive effect on the perceived monetary value, generally perceived value, satisfaction and behavioral intention. Considering the studies examined based on the hypotheses created for the study, it was concluded that there was a significant relationship between flow experience and perceived value in general, and that flow experience and perceived value had positive effects on each other. In addition, significant relationships were determined between perceived value and behavioral intention, and between flow experience and behavioral intention. Results of previous studies show that positive perceived value influences positive behavioral intention. (Hutchinson at al., 2009).

Based on these definitions and studies, the following hypothesis has been developed:

H3. Perceived value has an effect on behavioral intention.

2.3. Ilgaz Mountain and Outdoor Recreation

Ilgaz Mountains extend in the west-east direction between Kastamonu Basin and Devrez Valley, in the inner parts of the western part of the Black Sea Region, and have a length of approximately 160 km (Öztürk & Aydoğdu, 2012). It is one of the highest mountains in the region. Due to its rich flora and fauna and rare landscape values, there are forest areas, forest clearings, accommodation and recreation facilities, ski slopes and streams forming the borders in the National Park area. (Kastamonu Culture and Tourism Directorate, 2021). Outdoor recreation activities such as skiing, hiking, mountain biking, photography, tent camping, wildlife watching, botanical excursions, bird watching, etc. are held here (Ministry of Agriculture and Forestry, 2021).

Image 1. **Location of Ilgaz Mountain National Park**
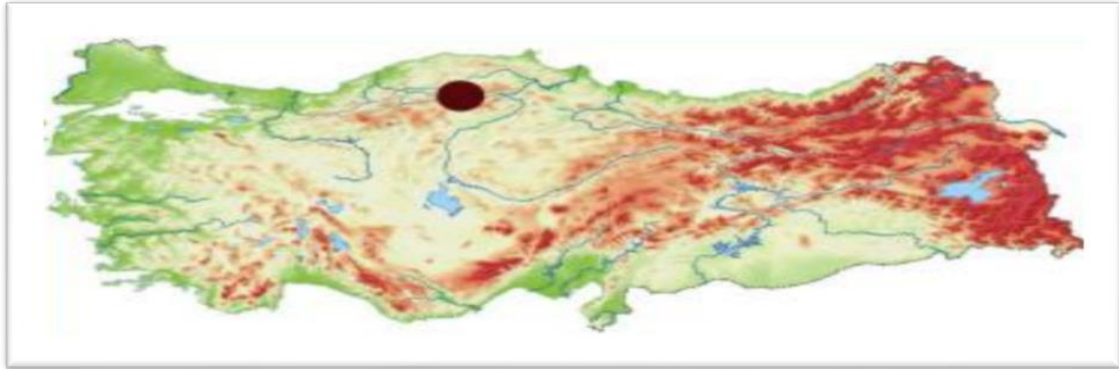
Source: Goker, 2018

One of the most important options that constitute the tourism potential of the national park area is "Skiing". In the winter season, there are intense visitor arrivals. There are 7 accommodation facilities in the Kastamonu region and 2 accommodation facilities in Çankırı region (Göker & Ünlüönen, 2018; Karaçar, 2016). There is an 800-meter-long ski track and two 1500-meter-long chairlifts and a ski lift in the Ilgaz Mountain ski area, which is in the national park (Culture Portal Ilgaz Mountain Ski Area, 2021). Professional ski athletes also come to Ilgaz Mountain. There is a facility in this region that belongs to the athletes of the Turkish Ski Federation.

3. Methods

The population of the study consists of ski athletes coming to Ilgaz Mountain National Park. The sampling method, on the other hand, has been the "convenience sampling" method, which is one of the non-probability sampling methods in order to reach all visitors easily and to get their opinions. In this method, the aim is to include everyone who wants to be included in the sample. (Kılıç, 2013; Ural & Kılıç, 2005). The sample of the study consists of athletes skiing on Ilgaz Mountain. In this study, it is limited to skiing activity because it is difficult to deal with all outdoor recreation activities in terms of time and space. Ilgaz Mountain ski area was preferred considering the spatial proximity and economic conditions. The questionnaire method, which is a face-to-face interview technique, was preferred as a data collection tool. The questionnaire of the study consists of two parts. There are statements about the flow experience scale in the first part, and there are statements about the perceived value and behavioral intention scales in the second part. Flow experience scale is a widely used scale with high internal consistency developed by Jackson and Marsh (1996). (Jackson & Marsh, 1996; Qunming et al., 2017). Statements for the flow experience scale were obtained from the work of Qunming et al. (2017). Concentration, loss of self-consciousness, transformation of time, autotelic experience, difficulty-skill balance dimensions were used. The first section consists of 15 statements about the Flow experience. In the first part, there are 3 statements for each dimension. Statements for measuring perceived value and behavioral intention were derived from the work of Jin et al.(2013). For the measurement of perceived value and behavioral intention, 3 statements from each were used. In the perceived value, 3 dimensions were taken as emotional value, quality value, monetary value. For the behavioral intention scale, positive thoughts, repeat visits, and recommendations were expressed. A research model was created in accordance with the research hypotheses. The model of the study is given in Figure 1.

Figure 1. **Research Model**
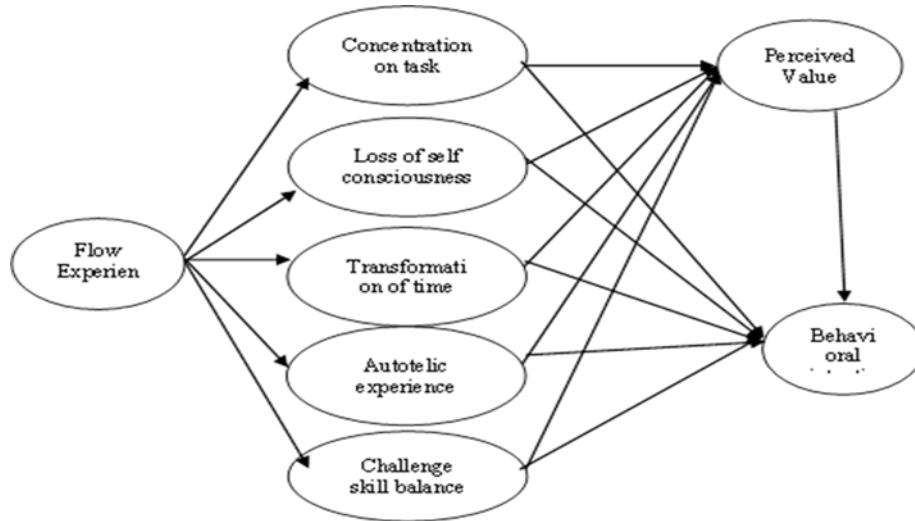
Source: own elaboration

Explanatory information about the variables and items of the study is given in Table 1

Table 1. **Variables and Items of the Study**

Variables	Items
Flow Experience-Concentration (Qunming et al., 2017)	1. My attention is all about what I'm doing.
	2. I don't keep in my mind what's going on right now.
	3. I am fully concentrated.
Flow Experience-Loss of Self-consciousness (Qunming et al., 2017)	1. I don't care what other people think of me at that moment.
	2. I don't worry about my performance during the event.
	3. I don't think about how I look or how I present myself.
Flow Experience-Time Transformation (Qunming et al., 2017)	1. Time seems to be too slow or too fast.
	2. Time seems to pass differently than usual.
	3. During my performance, it is as if time has stopped.
Flow Experience-Autotelic Experience (Qunming et al., 2017)	1. I am really enjoying this experience.
	2. I loved the feeling of this performance and I want to experience it again.
	3. This experience made me feel great.
Flow Experience-Difficulty Skill Balance (Qunming et al., 2017)	1. My abilities are in line with the difficulty of the event.
	2. I am competent enough to meet high expectations for the event.
	3. The challenges and my skills are at the same high level.
Perceived Value (Jin, N., Lee, H. & Lee, S., 2013)	1. My time at this event makes me feel good.
	2. The quality of the event is outstanding.
	3. Fees for this event are very reasonable.

Behavioral Intention (Jin, N., Lee, H. & Lee, S., 2013)	1. I want to come to Ilgaz Mountain again in the future.
	2. I recommend Ilgaz Mountain to everyone.
	3. I will tell my positive thoughts to my acquaintances about Ilgaz.

Source: own elaboration

The questionnaire was applied to 113 athletes skiing in Ilgaz Mountain ski resort between 01.03.2021 and 01.04.2021. Only 150 athletes could come during those dates due to the pandemic. Ural (2005) presented the standard of n=108 if N=150 in the sample determination table. Yazicioglu and Erdogan (2004) expressed in the sample table as follows: N=100-500 for n=80-217 (p=0,5-q=0,5, +-0.05 sampling error).

The athletes were reached through the ski trainer and the federation.120 of the questionnaires distributed to a total of 150 athletes were returned. Out of 120 collected questionnaires, 113 were included in the study. The collected data were analyzed with SPSS and AMOS package programs. First of all, reliability analysis was conducted with the SPSS program. Confirmatory factor analysis of the flow state scale was performed with the AMOS program to measure the effects between variables. Regression analysis was performed with Spss program to measure the effects of flow experience dimensions on perceived value and behavioral intention. Regression examines the relationship between dependent variable (y) and independent variable(s) (x,..). formulated as Y=a+bX or Y=B0+B1X (Kılıç, 2013). Correlation data for the relationship between variables were presented in the regression analysis. Considering the sample size, classical regression was preferred for analysis.

4. Results

4.1. Reliability Analysis

In the Flow State Scale reliability analysis, the Cronbach α reliability coefficient was measured to measure internal consistency. The FSS scale was 79%. When considered together with the Perceived Value and Behavioral Intention scales, the total result was 84%.

4.2. Confirmatory Factor Analysis

Confirmatory factor analysis was performed to confirm the 5-factor structure of the flow experience scale.

With the confirmatory factor analysis shown in Figure 2, the relationship of the whole latent variable with the separately observed variables was revealed. One-way arrows drawn from a latent variable to observed variables indicate how well each element represents its latent variable (factor load). Variables k2, zd3, and zbd1 with factor loadings less than 0.50 were excluded from the analysis. In this way, it was observed that the fit indices of the model were significantly improved. When the standardized values are examined after the items are excluded from the analysis, it is seen in the table below that the factor loads of the latent variables vary between .587 and 1.010. When factor loadings are considered, load values between 0.30 and 0.59 are defined as medium-level load values, while load values of 0.6 and above are defined as high-level load values (Kline, 1994). Unstandardized and standardized values, standard errors, t-values and squared multiple correlations (R^2) for the measurement model are shown in Table 2.

Figure 2. **Measurement model for flow state scale**
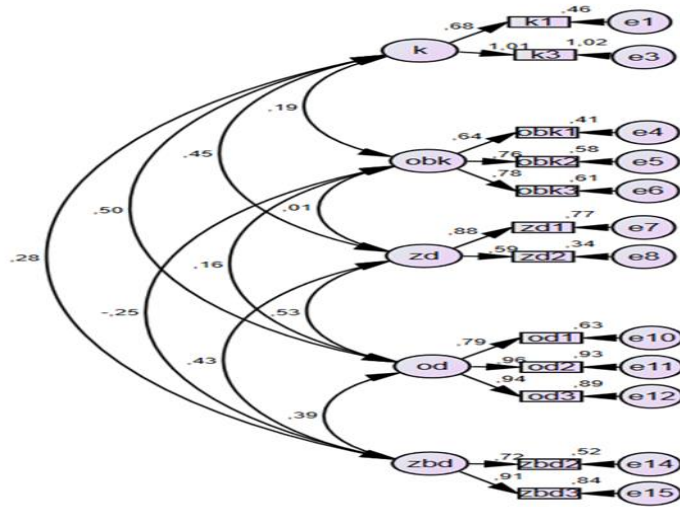
Source: own elaboration

Table 2. **Values for Confirmatory Factor Analysis**

Variable	Factor		Standardized Values	Standard Errors	t values	R²
k1	<---	k	.678			0.46
k3	<---	k	1.010	.296	5.388	1.021
obk1	<---	obk	.639			0.408
obk2	<---	obk	.764	.226	5.762	0.584
obk3	<---	obk	.783	.231	5.764	0.613
zd1	<---	zd	.879			0.773
zd2	<---	zd	.587	.122	4.312	0.344
od1	<---	od	.793			0.629
od2	<---	od	.964	.095	12.320	0.929
od3	<---	od	.941	.097	12.067	0.886
zbd2	<---	zbd	.722			0.522
zbd3	<---	zbd	.915	.251	5.295	0.837

Source: own elaboration

Within the scope of confirmatory factor analysis, first of all, the significance levels of the t-values related to the observed variables are checked. In this context, t-values greater than 1.96 indicates that the latent variable's statistical explanation of the observed variable is significant at the 0.05 significance level while being greater than 2.56 indicates that the observed value is significant at the 0.01 significance level. When the table is examined, it is seen that the t-values calculated within the scope of confirmatory factor analysis are greater than 2.56.

Obtaining statistically significant t-values within the scope of the measurement model is a necessary but not sufficient condition for the model to be acceptable or correct. In order for a model to be fully accepted within the scope of structural equation modeling (SEM), a number of goodness-of-fit criteria must be considered. According to Schermelleh-Engel and Moosbrugger (2003) acceptable and perfect fit criteria are given in table 3.

Table 3. **Acceptable and perfect fit criteria**

Fit Criteria	Perfect Fit	Acceptable Fit
$\chi2/df$	≤3	≤5
RMSEA	0 < RMSEA < 0.05	0.05 ≤ RMSEA ≤ 0.10
RMR	0 ≤ SRMR <0.05	0.05 ≤ SRMR ≤ 0.10
NFI	0.95 ≤ NFI ≤ 1	0.90 ≤NFI ≤ 0.95
CFI	0.95 ≤ CFI ≤ 1	0.90 ≤ CFI ≤ 0.95
GFI	0.95 ≤ GFI ≤ 1	0.90 ≤GFI ≤ 0.95
AGFI	0.90 ≤ AGFI ≤ 1	0.85 ≤ AGFI ≤ 0.90

Source: own elaboration

The calculated goodness-of-fit criteria for the Confirmatory Factor analysis are shown in Table 4.

Table 4. **Criteria for goodness of fit**

X²/df	p	RMSEA	CFI	GFI	AGFI	NFI	RMR
1.934	.000	.091	.939	.898	.819	.885	.078

Source: own elaboration

It can be said that while the χ2/df ratio, which is the most accepted by statisticians in the literature, of less than five is sufficient for acceptable fit, the χ2/df ratio being less than three indicates that the model has a good fit (Hair et al., 1998). In this model, χ2/df = 1.934 is in the perfect fit range. A GFI exceeding 0.90 is considered a good model indicator (Munro 2005; Waltz, Strcikland and Lenz 2010). In this model, the GFI was observed as 0.898. In RMSEA, the index is required to give values close to 0. In this context, values between 0.10 and 0.05 indicate acceptable fit, and values equal to or less than 0.05 indicate a good fit. In this model, the RMSEA value falls within the acceptable fit range. Since the basic criteria of confirmatory factor analysis are met, it is seen that the relationships in the model are consistent with the sample data. The NFI value is below the limits in the table. However, there are opinions that the NFI value is acceptable up to 0.80 (Hooper et al., 2008).

Combined reliability values (CR) used within the scope of discriminant and convergent validity, average variance extracted (AVE) values and correlations between variables are presented in Table 5.

Table 5. **Average variance extracted (AVE) values and correlations between variables**

	CR	AVE	MSV	MaxR(H)	k	obk	zd	od	zbd
k	0.846	0.740	0.253	1.020	**0.860***				
obk	0.774	0.535	0.061	0.786	0.187	**0.731***			
zd	0.709	0.559	0.282	0.797	0.447	0.010	**0.747***		
od	0.929	0.815	0.282	0.958	0.503	0.156	0.531	**0.903***	
zbd	0.807	0.679	0.187	0.862	0.284	-0.247	0.433	0.390	**0.824***

Source: own elaboration
*the square root values of the average variance extracted (AVE).

For convergent validity, all CR values of the scale are expected to be greater than AVE values and 0.70, and AVE values are expected to be greater than 0.50. All CR values are greater than AVE values and 0.70. All AVE values also meet the condition of being greater than 0.50. These results mean that convergent validity is provided for all latent constructs in the measurement model. The necessary condition for discriminant validity is that the square root coefficient of AVE belonging to a latent variable is larger than the correlation coefficients of that variable with other variables (Fornell and Larcker, 1981; Hair et al., 2010). When the square root coefficients of the AVE and the correlations between the variables were examined, it was determined that discriminant validity was also formed for all latent structures.

4.3. Regression Analysis

A regression analysis was conducted regarding the relationship between flow experience and perceived value and the effect of flow experience on perceived value. Correlation data for the relationship between variables were presented in the regression analysis.

Table 6**. İnfluence of Flow Experience on Perceived Value**

Variable	β	Standard Error	t	p
Constant (Perceived Value)	6.236	1.452	4.296	0.000
Flow Experience	0.097	0.025	3.842	0.000
$R^2 = 0.109$				
F= 14.758	P = 0.000	Durbin Watson= 1.957		
Constant (Perceived Value)	10.464	1.005	10.413	0.000
Concentration	0.113	0.086	1.320	0.190
$R^2 = 0.007$				
F= 1.742	P= 0.190	Durbin Watson= 2.098		
Constant (Perceived Value)	11.031	0.767	14.387	0.000
Loss of self-consciousness	0.070	0.071	0.990	0.324
R2 = 0.000				
F= 0.981	P= 0.324	Durbin Watson= 2.066		
Constant (Perceived Value)	10.094	1.024	9.861	0.000
Transformation of Time	0.149	0.090	1.664	0.099
R2 = 0.016				
F= 2.769	P=0.099	Durbin Watson= 2.086		
Constant (Perceived Value)	5.657	1.122	5.039	0.000
Autotelic Experience	0.451	0.082	5.515	0.000
R2 = 0.208				
F= 30.416	P = 0.000	Durbin Watson= 1.832		
Constant (Perceived Value)	8.260	0.908	9.869	0.000
Difficulty-Skill Balance	0.964	0.083	3.165	0.002
R2 = 0.075				
F= 10.017	P= 0.002	Durbin Watson= 2.069		

Source: own elaboration

Linear regression analysis is one of the most important statistical methods. It examines the linear relationship between a dependent variable (also called an intrinsic, explanatory, response, or predicted variable) and one or more independent variables (also called an extrinsic, explanatory, control, or predictive variable) (Skiera, et al.,2018). The flow experience dimensions and their sum are the independent variables, while the perceived value is the dependent variable. All analysis results are given in Table 6.

It was determined that the relationship between flow experience and perceived value was positive. (F= 14.758 P= 0.000). It was determined that the flow experience alone explains the perceived value by 10.9%. (R^2 = 0.109). Variables not included in the model explained 89.1% of the perceived value. Flow experience has a positive effect on perceived value (p=0.000).

Perceived Value= 6.236+0.097*Flow Experience

When the flow experience is increased by one unit, it is observed that the perceived value is positively affected by 0.097. There is a positive effect between total flow experience and perceived value. A positive increase in the level of flow experience positively increases the perceived value of the participant.

When the analysis results for the flow experience dimensions (concentration, loss of self-consciousness, the transformation of time, autothetic experience, difficulty-skill balance) were examined,

it was observed that the relationship between concentration and perceived value is not significant. (F= 1.742 P= 0.190). It was determined that the concentration alone explains the perceived value by 7%. (R^2 = 0.007). Variables not included in the model explained 93% of the perceived value. Concentration size has no effect on the perceived value (p=0.190).

It was observed that the relationship between loss of self-consciousness and perceived value was not significant. (F= 0.981 P= 0.324). Loss of self-consciousness alone does not explain the perceived value (R^2 = 0.000). The dimension of loss of self-consciousness does not have any effect on the perceived value (p=0.324).

It was observed that there was no significant relationship between the Transformation of Time and the perceived value. (F= 2.769 P= 0.099). Transformation of time alone explains the perceived value by 1.6% (R^2=0.016). Variables not included in the model explained 98.4% of the perceived value. The Transformation of Time dimension has no effect on the perceived value (p=0.099).

There is a positive significant relationship between the autotelic experience and the perceived value. (F= 30.416 P=0.000). Autotelic experience alone explains the perceived value by 20.8% (R^2=0.208). Variables not included in the model explained 79.2% of the perceived value. The autotelic experience dimension has a positive effect on the perceived value (p=0.000).

Perceived Value= 5.657+0.451* Autotelic Experience

When the autoletic experience is increased by one unit, it is seen that the perceived value is positively affected by 0.451. There is a positive effect between autoletic experience and perceived value. A positive increase in the level of autoletic experience positively increases the participant's perceived value.

There is a positive significant relationship between Difficulty-Skill Balance and perceived value. (F= 10.017 P= 0.002). Difficulty-skill balance alone explains the perceived value by 7.5% (R^2=0.075). Variables not included in the model explained 92.5% of the perceived value. Difficulty-Skill Balance dimension has a positive effect on perceived value (p=0.002).

Perceived Value= 8.260+0.964* Difficulty-Skill Balance

When the difficulty-skill balance is increased by one unit, it is seen that the perceived value is positively affected by 0.964. There is a positive effect between difficulty-skill balance and perceived value. A positive increase in the level of difficulty-skill balance positively increases the participant's perceived value. H1.Flow experience has an impact on perceived value.

Regression analysis was conducted for the relationship between flow experience and behavioral intention and the effect of flow experience on behavioral intention. The flow experience dimensions and their sum are the independent variables, while the behavioral intention is the dependent variable. Correlation data for the relationship between variables were presented in the regression analysis. All analysis results are given in Table 7.

Table 7. **İnfluence of Flow Experience on Behavioral Intention**

Variable	β	Standard Error	t	p
Constant (Behavioral Intention)	4.555	1.368	3.329	0.001
Flow Experience	0.143	0.024	6.053	0.000
$R^2 = 0.241$				
F= 36.637	P = 0.000	Durbin Watson= 2.099		
Constant (Behavioral Intention)	10.305	1.006	10.239	0.000
Concentration	0.214	0.086	2.494	0.014
$R^2 = 0.045$				
F= 6.222	P = 0.014	Durbin Watson= 2.069		
Constant (Behavioral Intention)	12.178	0.784	15.525	0.000
Loss of self-consciousness	0.056	0.073	0.772	0.442
$R^2 = -0.004$				
F= 0.596	P= 0.442	Durbin Watson= 1.967		
Constant (Behavioral Intention)	9.275	1.003	9.248	0.000
Transformation of Time	0.312	0.088	3.550	0.001
$R^2 = 0.094$				
F= 12.602	P=0.001	Durbin Watson= 2.099		
Constant (Behavioral Intention)	5.667	1.099	5.156	0.000
Autotelic Experience	0.524	0.080	6.545	0.000
$R^2 = 0.272$				
F= 42.833	P = 0.000	Durbin Watson= 1.824		
Constant (Behavioral Intention)	7.840	0.841	9.319	0.000
Difficulty-Skill Balance	0.464	0.077	5.999	0.000
$R^2 = 0.238$				
F= 35.987	P = 0.000	Durbin Watson= 2.081		

Source: own elaboration

There is a positive significant relationship between flow experience and behavioral intention (F= 36.637 P=0.000). It was determined that the flow experience alone explained the behavioral intention at a rate of 24.1%. (R2 = 0.241). Variables not included in the model explained 75.9% of behavioral intention. Flow experience has a positive effect on behavioral intention (p=0.000).

Behavioral Intention = 4.555+0.143* Flow Experience

When the flow experience is increased by one unit, it is observed that the behavioral intention is positively affected by 0.143. There is a positive effect between total flow experience and behavioral intention. A positive increase in the level of flow experience positively increases the behavioral intention of the participant.

When the analysis results for the flow experience dimensions (concentration, loss of self-consciousness, transformation of time, autotelic experience, difficulty-skill balance) were examined,

it was observed that there was no significant relationship between concentration and behavioral intention. (F= 6.222 P= 0.014). It was determined that concentration alone explains the behavioral intention at a rate of 4.5%. (R2= 0.045). Variables that were not included in the model explained 95.5% of behavioral intention. The concentration dimension has no effect on behavioral intention (p=0.014).

It was observed that there was no significant relationship between loss of self-consciousness and behavioral intention (F= 0.596   P= 0.442). Loss of self-awareness alone does not explain behavioral intention (R2 = -0.004). The dimension of loss of self-consciousness does not have any effect on behavioral intention (p=0.442).

There is a significant relationship between the transformation of time and behavioral intention (F= 12.602   P= 0.001). The transformation of time alone explains the behavioral intention at a rate of 9.4% (R2=0.094). Variables not included in the model explained 90.6% of behavioral intention. The transformation of time dimension has a positive effect on behavioral intention (p=0.001).

Behavioral Intention = 9.275+0.312* Transformation of Time

When the transformation of time is increased by one unit, it is observed that the behavioral intention is positively affected by 0.312. There is a positive effect between transformation of time and behavioral intention. A positive increase in the level of transformation of time positively increases the behavioral intention of the participant.

It was determined that the relationship between autotelic experience and behavioral intention was positive. (F= 42.833   P= 0.000). Autotelic experience alone explains behavioral intention by 27.2% (R2=0.272). Variables not included in the model explained 72.8% of behavioral intention. Autotelic Experience dimension has a positive effect on behavioral intention (p=0.000).

Behavioral Intention = 5.667+0.524* Autotelic Experience

When the autotelic experience is increased by one unit, it is observed that the behavioral intention is positively affected by 0.524. There is a positive effect between autotelic experience and behavioral intention. A positive increase in the level of autotelic experience positively increases the behavioral intention of the participant.

It was determined that the relationship between difficulty-skill balance and behavioral intention was positively significant. (F= 35.987 P= 0.000). Difficulty-Skill Balance alone explains the behavioral intention by 23.8% (R2=0.238). Variables not included in the model explained 76.2% of behavioral intention. Difficulty-Skill Balance dimension has a positive effect on behavioral intention (p=0.002).

Behavioral Intention = 7.840+0.464* Difficulty-Skill Balance

When the difficulty-skill balance is increased by one unit, it is observed that the behavioral intention is positively affected by 0.464. There is a positive effect between difficulty-skill balance and behavioral intention. A positive increase in the level of difficulty-skill balance positively increases the behavioral intention of the participant.

H2. Flow Experience has an impact on Behavioral intention.

Regression analysis was conducted to measure the relationship between the perceived value of the activity and the behavioral intention towards the destination, and the effect of the perceived value of the activity on the behavioral intention. Perceived value is the independent variable, and behavioral intention is the dependent variable. Correlation data for the relationship between variables were presented in the regression analysis. The results of all analyzes are given in Table 8.

It was determined that there is a significant relationship between perceived value and behavioral intention (F= 91.026 P=0.000). Perceived value alone explains behavioral intention by 44.6%. Variables not included in the model explained 55.4% of behavioral intention. Perceived Value has a positive effect on behavioral intention (P=0.000).

Behavioral Intention=4.698+0.686* Perceived value

Table 8. İnfluence of Perceived value on Behavioral Intention

Variable	β	Standard Error	t	ρ
Constant (Behavioral Intention)	4.698	0.860	5.463	0.000
Perceived value	0.686	0.072	9.541	0.000
R² = 0.446				
F= 91.026	P = 0.000	Durbin Watson= 1.987		

Source: own elaboration

When the perceived value is increased by one unit, it is observed that the behavioral intention is positively affected by 0.686. There is a positive effect between perceived value and behavioral intention. A positive increase in the level of perceived value positively increases the behavioral intention of the participant.

H3. Perceived Value has an impact on behavioral intention

5. Discussion

The aim of the study is to measure the effect of the psychological levels of the ski athletes skiing in Ilgaz Mountain in the context of the flow experience dimensions on their perceived value for their activity and their behavioral intentions towards the destination. In addition, measuring the effect of the perceived value of the activity on the behavioral intention towards the destination is also within the scope of the other purpose. Regression analyzes were performed for the hypotheses developed in line with the purpose.

In Hypothesis 1, the flow experience was considered as a whole and its effect on the perceived value for the activity was measured. Flow is a state of deep incorporation for a task and a state of cognitive efficiency and inner pleasure that makes one feel whole with the activity in which they are involved (Moneta, 2004). Considering the results of the analysis for Hypothesis 1 , it was observed that the Flow experience had a positive effect on the perceived value of the activity. During the ski activity, the psychological levels of the athletes in the flow state were effective on their perceived values (emotional value, quality value, monetary value) for this activity. In the sub-hypotheses developed depending on hypothesis 1, the effects of the flow experience dimensions on the perceived value were calculated separately. Voiskounsky et al. (2004) listed the dimensions of flow experience as follows: temporary loss of self-awareness and sense of time, high concentration on the task and a high level of control over the task, intrinsic motivation, inner and outer awareness, feedback, difficulty and skill status, and clear goals.

Ayazlar (2015) reported the existence of flow state in paragliding, and the difficulty from the direct responses of the subjects was determined as skill balance, control, time transformation, clear goals and concentration flow dimensions.

In this study, only 5 dimensions (concentration, loss of self-consciousness, transformation of time, autotelic experience, difficulty-skill balance) were considered. Considering the results of the analysis, it was observed that the autotelic experience dimension and the difficulty-skill balance dimension had a positive effect on the perceived value. However, it was determined that the dimensions of concentration, loss of self-consciousness and transformation of time did not have any effect on the perceived value.

When other studies are examined, there are few studies that directly measure the effect of flow experience on perceived value. Mostly, the combined effects of flow state and perceived value on satisfaction, loyalty, and behavioral intention were measured. On the contrary, Kim and Thapa (2018)

measured the effect of perceived value on flow experience. This study can be considered as the first in the literature in terms of hypotheses and measurement. Kim and Thapa (2018) did not take the flow experience on the basis of dimensions, in general, the participants were asked whether they were in flow. In my study, an evaluation was made on the basis of dimensions.

In a similar study, the role of flow experience and perceived value in consumer loyalty was examined by Guerra-Tamez et al. (2021). In the study, attention, concentration, sense of control and the concept of time, which are the dimensions of flow experience, were used. In the perceived value, 3 dimensions were taken as quality, pleasure and price. Based on the analysis of the data, they concluded that perceived value was statistically significantly and positively correlated with repurchase intention and word of mouth communication. It was also concluded that flow experience had a positive effect on repurchase intention and WOM in experiential events (tours and tastings).

The flow experience scale has been used in the measurements for game experiences with indoor recreational activities, apart from tourism, marketing and management. Chu and Wen (2021) measured the effect of flow experience (alternating sense of time, loss of self-consciousness, and sense of control) on perceived value (hedonic value and utilitarian value) and user stickiness. As a result of the analysis of the data, it was observed that the transformation of time, loss of self-consciousness and control dimensions had an effect on the hedonic value. In our study, the concentration dimension was used instead of the Control dimension. Contrary to this study, loss of self-awareness and time conversion did not affect perceived value in my own study. Since outdoor recreation is focused on sports and adventure, the dimensions of autotelic experience and difficulty-skill balance come to the fore.

Considering the effects on utilitarian value, the transformation of time and control gave negative results, while loss of self-consciousness gave positive results. Only the dimension of loss of self-awareness had an effect on the utilitarian value. Considering the effects on user stickiness, it was observed that none of the flow experience dimensions had an effect. It was observed that perceived value dimensions (hedonic value, utilitarian value) have positive effects on user stickiness. In his study on the gaming experience, which is also closed recreation, Chang (2013) examined the users' intention to continue using social network games within the scope of flow experience. As a result of the study, they found that flow experience and satisfaction had a positive effect on the continuation of their intention to use social networking games. They also determined that the flow experience positively mediated the relationship between user satisfaction and intention to continue.

As mentioned in the theoretical part, Çeşmeci and Koçak (2020) found that the flow state positively affects the perceived value of walking and destination loyalty. In this study, time transformation, otothelic experience and concentration dimensions were used. In the hypotheses and analyzes, the dimensions are considered as a whole, not separately. In my study, on the contrary, dimensions are within the scope of hypothesis and analysis one by one.

Qunming et al. (2017) deleted four dimensions of the flow state (action-awareness combination, clear goals, feedback, and sense of control) as a result of factor analysis. He suggested that the deleted dimensions would be appropriate for use in slower activities such as Golf. In this study, the effect of flow experience on positive emotions and destination commitment was measured. As a result of the study, it was revealed that the loss of concentration and self-consciousness did not affect positive emotions. Also, the transformation of time and loss of self-consciousness did not affect loyalty. difficulty-skill balance and autotelic experience affected both variables. This result supports the idea proposed by us at the beginning of the discussion section.

In Hypothesis 2, the Flow experience was again considered as a whole and its effects on behavioral intention towards the destination were measured. For the behavioral intention scale, positive thoughts, repeat visits, and recommendations were expressed. Considering the results of the analysis for Hypothesis 2, it was observed that the flow experience has a positive effect on the behavioral intention towards the destination. During the skiing activity, the psychological levels of the athletes in the flow state were effective on their behavioral intentions towards this destination.

In the sub-hypotheses developed depending on Hypothesis 2, the effects of the flow experience dimensions on the behavioral intentions towards the destination were calculated separately. Considering the results of the analysis, it was observed that the dimensions of autotelic experience, the transformation of time and difficulty-skill balance had positive effects on behavioral intention. Concentration and loss of self-awareness dimensions were found to have no effect on behavioral intention.

As seen in the perceived value effects, the autotelic experience and difficulty skill balance also affected behavioral intention. In addition to Hypothesis 1, the time transform dimension has been added. Equivalent to the explanation made in the first hypothesis, a generalization can be made that the primary dimensions for outdoor recreation are the autotelic experience and the difficulty-skill balance. Looking at the studies related to this, Lin (2020) investigated the effect of brand image and atmospheres on experiential values and revisit intention. In the results of the study, it was determined that participation, flow experience, brand image and atmospheres do not have a direct effect on experiential values and revisit intention, but experiential values as a mediator have indirect effects on visitors' revisit intentions. Conversely, in my study, the flow experience positively affected the revisit intention.

Sitinjak et al. (2021) analyzed the effect of experience quality and flow experience on behavioral intention mediated by satisfaction on millennial travellers. As a result of the study, it was observed that the quality of experience had a positive effect on satisfaction and behavioral intention. However, no effect of flow experience on behavioral intention was observed. On the contrary, flow experience positively affected behavioral intention in my study.

When considering other studies, Cho and Kim (2012) examined the effects of website designs, self-congruity, and flow on behavioral intention. At the end of the study, it was observed that the flow state (interest, curiosity, control) had a positive effect on behavioral intention.

Kim (2022) examined the effect of digital features on flow experience, satisfaction, and behavioral intention. As a result of the study, it was revealed that behavioral intention was positively affected by flow experience and satisfaction.

Finally, in hypothesis 3, the effect of the perceived value towards the activity on the behavioral intention towards the destination was measured. Considering the analysis results for Hypothesis 3, it was observed that there is a significant relationship between perceived value and behavioral intention, and that perceived value has a positive effect on behavioral intention. During the skiing activity, the perceptions of the athletes towards the activity have an effect on their behavioral intentions towards the destination. When the studies related to this are examined; It is seen that Başaran and Aksoy (2017) examined the relationship between perceived value and behavioral intentions in intercity passenger transportation. As a result of the study, they determined that functional, social and emotional values were more effective on repurchase intention and word of mouth communication. Similarly, they concluded that monetary cost and emotional value had an effect on willingness to pay more and intention to complain. Chen et al. (2014) examined the effects of tourists' perceived relevance levels on their revisit the destination and behavioral intentions. It showed that perceived relevance, addressed by the phrases novelty, credibility, interesting, and understandable, influences behavioral intention through blogging enjoyment of blog use, novelty, comprehensibility, and relevance of blog content. A research on outdoor recreation can be conducted at perceived relevance.

Akgül (2021) examined the relationship between perceived value, flow experience and behavioral intention in guided tours. Perceived value (emotional value, social value, monetary value, and quality value) and flow experience (skill-difficulty balance, action-awareness combination, clear goals, feedback, task focus, sense of control, time transformation, self-consciousness, and autotelic experience), it was concluded that there is a relationship between In addition, it has been determined that the perceived value has an effect on the flow experience. Finally, it has been observed that positive behavioral intentions emerge with the flow experience and the perceived value effect.

When the results of other studies are examined, it is seen that flow experience generally has a positive effect on perceived value. Although the dimensions used in other studies are different, the results of the study support hypothesis 1. Although it is a little difficult to give a clear idea about the effect of flow experience on behavioral intention, it is observed that it generally has positive effects. Similar cases support hypothesis 2. In the results of this study, flow experience had an effect on behavioral intention when considered as a total. Finally, although the dimensions used are different from the dimensions in this study, analyzes in similar studies have concluded that perceived values or perceptions generally have positive effects on behavioral intention, revisit or purchase intentions. Similar cases support hypothesis 3.

We discussed the flow experience on the basis of dimensions compared to other studies and this showed our difference. In addition, we have seen in this study that the dimensions of autotelic experience and difficulty-skill balance are applicable in outdoor recreation studies. Flow experience scale can directly or indirectly measure tourist loyalty, behavioral intention, perceived value, etc. in the context of eco-tourism, eco-recreation, adventure tourism and sports tourism. We can also put forward the idea that there may be a mediating role in marketing-based research.

6. Conclusion

The effect of the psychological levels of skiers skiing on Ilgaz Mountain, in terms of flow experience dimensions, on the perceived value of their activities and their behavioral intentions towards the destination was measured in this study. When other studies on flow experience are examined, it is observed that they are generally in the fields of tourism, recreation, marketing, and management. Flow experience is the state of being in action (sport, work, game, etc.) by fully focusing and enjoying. Ilgaz Mountain ski area is suitable for almost all nature-based outdoor recreation activities. As a result of this study applied to athletes, it was concluded that the flow experience of individuals had a positive effect on their perceived value (emotional value, quality, and monetary value) and behavioral intentions (revisit, recommendation, positive recommendation). Finally, it was observed that individuals' perceptions of the activity positively affect their behavioral intentions towards the destination. After comparison with other studies, it is observed that all hypotheses are supported.

This study is important in terms of highlighting the potential of the Ilgaz Mountain ski area for outdoor recreation activities. A number of applications can be made in order for the athletes to get caught in the flow more during the skiing event. First of all, the ski slopes can be expanded further. A separate area can be created for athletes and professionals. Amateur groups should also be prevented from being in the area and creating confusion. Athletes can completely immerse themselves in the flow with pleasure in a controlled and concentrated manner. Ulema et al. (2020) analyzed the complaints of customers in a similar destination Uludag ski resort, and they mostly found that it was expensive and the ski slopes were inadequate. First of all, studies on the capacity of the ski track can be done. staying at the flow level can increase perceived emotional value. Reasonable arrangements should be made for prices. The perceived value for the price is very important in this respect. Kafa and Bozkurt (2022), in their study on travel motivation and satisfaction for winter tourism, found that tourists mostly experience dissatisfaction with the price. Here, the importance of the perceived price value becomes evident once again.In another study, Çalık (2022) examined the effect of service quality in Erzurum Palandöken winter tourism centers on customer satisfaction and destination loyalty. It has been determined that perceived service quality has an effect on satisfaction. Sağlık and Kocaman (2014) stated in their study that the most important factor affecting the service quality perceived by the customer in winter tourism is the ski slopes. Winter tourism is defined as "the type of tourism that includes travels to mountainous regions where snow thickness and ski slopes are suitable for skiing and, accordingly, activities such as accommodation, food and beverage, rest and entertainment" (İlban &

Kaşlı, 2008). Studies on the quality of service can also be carried out in the Ilgaz mountain ski area. Reasonable price and quality service increase perceived value. Athletes who are completely immersed in the flow will further increase their perception of the activity. Flow and perceived value mutually affect each other. Especially in cases of overcrowding, concentration, and loss of self-consciousness, it negatively affects the athlete or the person actively participating in the activity. The message given in this study is that the perception of the event, which is performed by completely immersing in the flow, directly touches the behavioral intention towards the destination where the event is held. For Ilgaz Mountain, a recreation and ski area, to attract more visitors, ski destination operators and local governments should work to increase the quality of skiing activity. In this study, perceived value consists of emotional, quality, and monetary dimensions. The number of other event services that make individuals feel positive about the destination and that they can reach with high quality and reasonable prices should be increased.

In addition, more studies are also needed within the scope of flow experience for other nature-based (hiking, camping, air sports, rafting, botanical observation, safari, etc.) outdoor recreational activities. Ayazlar (2015) studied paragliding within the scope of flow experience. Jones (2003) studied Flow state and Adventure experience. The application was made on rafting and water sports at Cheat River Canyon in West Virginia. Such studies can be carried out in areas where rafting is practiced in Turkey (Antalya, Manavgat, Tunceli Munzur). Kim and Thapa (2018) studied flow state and nature tourism. Metin (2020) performed a study on mountain climbing within the scope of flow state. Boudreau et al (2019) studied flow states in adventure tourism. The number of these and similar studies should be increased. On Ilgaz Mountain, where other outdoor recreations are performed besides skiing, flow experience studies can be conducted for other activities (hiking, camping, air sports, rafting, botanical observation, safari, etc.). Local governments should support these destinations to increase the potential of destinations where eco-tourism or nature-based outdoor recreation activities can be done. Eco-touristic or recreational activities can be held here in a sustainable framework with good promotions. In terms of contribution to the related literature, it is necessary to carry out more studies similar to this one. This study was applied to the athletes who came to the Ilgaz Mountain ski area only in a single period. This study can also be carried out in other ski destinations in Turkey (Uludağ, Kartalkaya, Erciyes, Sarıkamış, Palandöken), the studies can be compared, and their number can be increased. In addition, this study is important in terms of prioritizing studies for such activities in important ski resorts and outdoor recreation areas outside of Turkey.

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