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Physical, mental and spiritual journey: Examining recreational yoga participants' flow experience and perceived health outcomes

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Abstract

The aim of this study is to examine the flow experience and perceived health outcomes of recreational yoga participants. The study utilized the relational screening model, one of the quantitative research methods. The sample group consists of 269 female (92.4%) and 22 male (22.6%), a total of 291 participants (28.67± 8.49 AgeMean) who participate in yoga activities recreationally. As data collection tools, demographic information form, Perceived Health Outcomes of Recreation Scale (PHORS) and Recreational Flow Experience Scale (RFES) were applied to the participants. When the results were examined, it was determined that the scores of the participants regarding perceived health outcomes and flow experiences in recreational yoga were generally high. Significant differences were found in the participants' yoga participation styles and participation frequencies. A moderate positive relationship was found between the Recreational Flow Experience Scale (RFES) and the sub-dimension of Perceived Health Outcomes of Recreation (PHORS) for prevention of a worse condition (r=0.567, p=0.001); and a high positive relationship was found between the realization of psychological experience (r=0.774, p=0.001), improved condition (r=0.768, p=0.001) and the PHORS total score (r=0.792, p=0.001). It has been determined that recreational flow experience in participation in yoga activities is a significant predictor of perceived health outcomes in recreation. Accordingly, 62.8% of perceived health outcomes in recreation are explained by recreational flow experience. The study results can be said that there is a relationship between perceived health outcomes and flow experience in recreational yoga participation. It has been concluded that the flow experience experienced by individuals in recreational yoga participation also affects perceived health outcomes.

Keywords: Perceived health outcomes of recreation, recreational flow experience, yoga

Fiziksel, zihinsel ve ruhsal yolculuk: Rekreasyonel yoga katılımcılarının akış deneyimi ve algılanan sağlık çıktıları

Öz

Bu çalışmanın amacı rekreasyonel yoga katılımcılarının akış deneyimi ve algılanan sağlık çıktılarının incelenmesidir. Çalışmada nicel araştırma yöntemlerinden ilişkisel tarama modelinden yararlanılmıştır. Örneklem grubunu rekreasyonel olarak yoga etkinliklerine katılan 269 kadın (%92,4) 22 erkek (%22,6) toplam 291 katılımcı (28,67± 8,49 Yaş Ort.) oluşturmaktadır. Veri toplama aracı olarak demografik bilgi formu, Rekreasyonda Algılanan Sağlık Çıktıları Ölçeği (RASÇÖ) ve Rekreasyonel Akış Deneyimi Ölçeği (RADÖ) katılımcılara uygulanmıştır. Sonuçlar incelendiğinde genel olarak rekreasyonel yogada katılımcıların algılanan sağlık çıktıları ve akış deneyimlerine ilişkin puanların yüksek olduğu tespit edilmiştir. Katılımcıların yoga katılım biçimleri ve katılım sıklıklarında anlamlı farklılıklar tespit edilmiştir. Rekreasyonel Akış Deneyimi Ölçeği (RADÖ) ile Rekreasyonda Algılanan Sağlık Çıktıları (RASÇÖ) daha kötü bir durumun önlenmesi (r=0,567, p=0,01) alt boyutu arasında pozitif yönde orta düzeyde; psikolojik deneyimin gerçekleşmesi (r=0,774, p=0,01), iyileştirilmiş durum (r=0,768, p=0,01) ve RASÇÖ toplam (r=0,792, p=0,01) puanı arasında ise pozitif yönde yüksek düzeyde ilişki tespit edilmiştir. Yoga etkinliklerine katılımda rekreasyonel akış deneyiminin, rekreasyonda algılanan sağlık çıktılarının önemli bir yordayıcısı olduğu tespit edilmiştir. Buna göre rekreasyonda algılanan sağlık çıktılarının %62,8'i rekreasyonel akış deneyimi tarafından açıklanmaktadır. Çalışma sonuçları rekreasyonel yoga katılımında algılanan sağlık çıktıları ve akış deneyimi arasında bir ilişki olduğu söylenebilir. Rekreasyonel amaçlı yoga katılımında bireylerin yaşadığı akış deneyiminin algılanan sağlık çıktılarını da etkilediği sonucuna ulaşılmıştır.

Anahtar Kelimeler: *Rekreasyonel akış deneyimi, rekreasyonda algılanan sağlık çıktıları, yoga*

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INTRODUCTION

Individuals participate in different recreational programs in order to protect their physical, mental and social health by going beyond the responsibilities required by daily life (Street et al., 2007; Iwasaki et al., 2010; Litwiller et al. 2016; Litwiller et al., 2017). Among the participation preferences of individuals, there are activities that especially cover their inner journey and meet their need for self-actualization (Elkington, 2011; Vogler, 2012; Gulam, 2016). In terms of all these processes and experiences, yoga stands out as one of the important recreational activities that contribute to both mental and physical health, preferred by individuals from different segments of society (Pham, 2013; Adams et al., 2019; Wiles et al., 2021; Nguyen et al., 2024). It is thought that the individual's goals of staying in the flow by maintaining body-mind balance and achieving positive results through perceived health outcomes are an important factor in the choice of yoga as a recreational activity. The subjective aspect of this study is the results it will contribute to the literature in terms of the flow experience experienced by individuals during recreational yoga participation, its interaction with perceived health outcomes, participation format and participation duration variables.

Yoga

It is thought that examining yoga activities with different approaches rather than addressing them conceptually with a single definition will contribute to a better understanding. The first written use of the term is seen in the Rig-Veda, the oldest of the ancient Indian scriptures, where it is defined as "the mental process and discipline of an individual". The ancient Indian sage Patanjali, in the Yoga Sutra, the first work written on yoga, expresses the concept as "the control or stopping of all fluctuations/transformations of the mind/consciousness at all levels" (Pradhan & Pradhan, 2015:6). When yoga is examined etymologically, the root of the word is Sanskrit, meaning "to join" (yuj) or "to bring together, to concentrate" (yoke). However, yoga refers to a method of unification or discipline. While the practices in which the individual self unites with the holistic self are accepted as the content of yoga, it is also stated that the teaching comes from an oral tradition in which the teaching is passed from teacher to student (Garfinkel & Schumacher, 2000). In the study conducted by Konecki et al. (2016) on how participant individuals define yoga; "first the body, then the mind", "an individual action in which the person examines himself and his abilities" as practical applications in calming the mind and body from a therapeutic perspective, or "a solitary journey, getting to know oneself" with an emphasis on the spiritual aspect for more experienced participants, are expressed with definitions such as. Yoga is a multidimensional activity that is

associated with many different positive outcomes in terms of health. It includes different styles, components, combinations or durations such as postures, breathing, meditation and relaxation (Mandlik et al., 2023). In this study, flow experiences and health outcomes of all participants in a recreational activity were examined, without any distinction in terms of yoga styles.

Recreational flow experience

Recreational activities performed during leisure are a strong source of motivation in terms of experiencing flow, and it can be said that the concepts are related to each other (Stebbins, 2010). The most important function of flow experiences, such as these activities, is to provide enjoyable experiences (Csikszentmihalyi, 1992). However, Csikszentmihalyi, who conceptualized the flow experience, argues that the relationship between recreational activities and the flow experience can emerge with the harmony of the balance between motivation, competence and activity (Rojek, 2005). Flow is simply defined as the balance between challenges and skills in activities (Csiksentmihalyi & Le Fevre, 1989). There are various studies in the literature on the flow experience provided by recreational activities (Decloe et al., 2009; Houge et al., 2010; Cheng & Lu, 2015; Chang, 2017; Boudreau et al., 2020; Göker, 2022; Houge Mackenzie et al., 2023; Jackson et al., 2023). The common point of the mentioned studies is that they are related to activities that involve high levels of risk or are performed outdoors (skiing, surfing, rock climbing, scuba diving, etc.). However, in addition to this situation, there are also studies on the flow experience of individuals participating in yoga activities, albeit in a limited number (Phillips, 2005; Briegel-Jones, 2013; Hsu & Liu, 2020; Hecquet, 2024). Studies on yoga and flow have shown that mental focus has positive effects and makes participants happy. This situation was examined in another study with yoga and climbing activities, and it was shown that mental focus can provide the flow experience by examining the effects of different activities on each other (Shostak-Kinker, 2012). The fact that the flow experience is a psychological state and a state of consciousness resulting from discipline and that it has similarities with yoga in this respect supports this situation. When individuals have the harmony between the difficulties in the activities and the abilities and skills required to achieve or meet these difficulties, they can achieve a state of balance (Elkington, 2011). It can also be said that the flow experience obtained by participating in recreational yoga activities individually or as a group has an effect on mental well-being (Ayhan & Alanoğlu, 2023). This situation can contribute to individuals gaining mental and physical health through recreational activities.

Perceived health outcomes of recreation

When the conceptual basis of perceived health outcomes in recreation is examined, it is seen that Gomez et al. (2016) created their study by utilizing the Driver's Typology of Leisure Benefits (DTLB) and the Recreational Experience Preference (REP) scale. In the same study, by using three aspects of the benefits of leisure and recreation, the sub-dimensions related to perceived health outcomes in recreation were determined as improved condition, the prevention of a worse condition and the realization of a psychological experience. These sub-dimensions also constitute the conceptual framework of the Perceived Health Outcomes in Recreation Scale, the validity and reliability of which were tested by Gomez et al. (2016). The first sub-dimension, improved condition, refers to individuals' participation in recreational activities in order to maintain their physical and psychological health, thus improving their status compared to the previous period. Another sub-dimension, the prevention of a worse condition, represents participation in activities in order to protect physical health by preventing injury or illness. The last sub-dimension, the realization of a psychological experience, is defined as participation in the activity for the purpose of reaching the intrinsic psychological value of the activity or a satisfying recreational experience for the individual (Gomez et al., 2016; Lapa et al., 2020). Studies in the relevant field show that it has been tested on different activity programs or groups such as outdoor and adventure recreation participants (Hill & Gomez, 2020; Zwart & Ewert, 2022) and park & recreation participants (Gómez & Hill, 2016). The common aspect of these studies is that it has positive effects on three dimensions that are stated regarding the perceived health outcomes in recreation through participation in activities and reveal the benefits of recreation.

Based on the studies and literature, the limited literature on the flow experience and perceived health outcomes experienced by individuals in participating in yoga practices, which are preferred as a recreational activity by many participants, reveals the necessity of this study and constitutes its subjective aspect. However, since yoga is an activity in which individuals aim to be healthy in terms of mind-body balance, it is considered important to examine the relationship between the flow experience experienced by participants in this state of balance and the health outcomes they perceive. In this context, the aim of the study is to examine the flow experience and perceived health outcomes of recreational yoga participants. The research model and hypotheses related to the study are as follows:

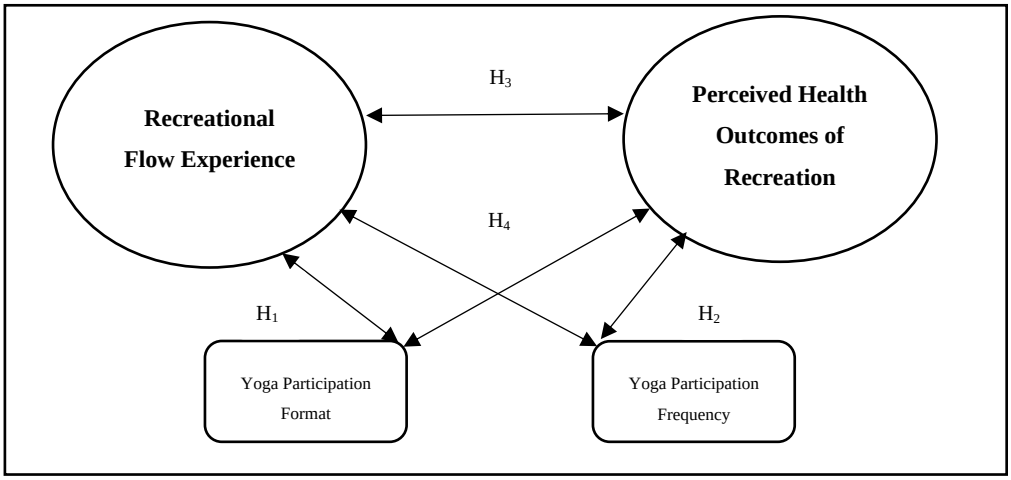

Figure 1. Research model

Hypothesis 1 (H_1): There is a significant differences in the flow experience and perceived health outcomes of recreational yoga participants according to their yoga participation patterns.

Hypothesis 2 (H_2): There is a significant differences in the flow experience and perceived health outcomes of recreational yoga participants according to their frequency of yoga participation.

Hypothesis 3 (H_3): There is a significant relationship between the flow experience and perceived health outcomes of recreational yoga participants.

Hypothesis 4 (H_4): Recreational yoga participants' flow experience has a significant impact on perceived health outcomes.

METHOD

Research design

In this study, the relational screening design, one of the quantitative research methods, was used. The relational screening design provides a quantitative description of trends, attitudes, and thoughts in a universe or tests the relationships between variables by examining a sample of the universe. However, the relational screening design helps researchers answer the following three questions: a) descriptive questions b) questions about the relationships between variable and c) questions about the predictive relationships that occur between variables over time (Cresswell & Cresswell, 2021).

Study group

The sample group of the study consists of 291 individuals with an average age of 28.67±8.49 who participate in recreational yoga activities in İstanbul, Türkiye. Probability-based sampling techniques, simple random sampling technique, were used in the selection of

participants. This technique allows each element in the defined universe to have an equal and independent chance of being included in the study. Each sample unit has an equal chance of being included in the study and the selection of one does not prevent the other (Coşkun et al., 2019).

Table 1. Findings regarding the demographic characteristics of the participants

Variables	**X̄**	**S.d.**
Age	28.67	8.49
Gender	**N**	**%**
Female	269	92.4
Male	22	7.6
Yoga Participation Format	**N**	**%**
Personal	162	55.7
Group	129	44.3
Yoga Participation Frequency	**N**	**%**
1-2 day	183	62.9
3-4 day	67	23.0
5 day and above	41	14.1

*S.d.=Standart deviation

When table 1 is examined, it is seen that the majority of the participants, 92.4%, are female, while the number of male participants is quite low at 7.6%. In terms of yoga participation format, it is seen that 55.7% participate individually, and 44.3% participate in group activities. In terms of weekly yoga participation frequency, it was determined that 62.9% participate for 1-2 days, 23% for 3-4 days, and 14.1% for 5 days or more.

Data collection tools

In the study, the demographic information form (age, gender, yoga participation format and frequency of yoga participation), Recreational Flow Experience Scale (RFES) and the Perceived Health Outcomes of Recreation Scale (PHORS) created by the researcher were used as data collection tools.

Recreational flow experience scale (RFES): Recreational Flow Experience Scale (RFES) was developed by Ayhan et al. (2020) to determine the flow experience of individuals participating in recreational activities. The scale, consisting of 9 items and a single-factor structure, has a 7-point likert-type structure ranging from 1-strongly disagree to 7-strongly agree. While the reliability coefficient was determined as α=0.93 in the scale development study, the reliability coefficient was determined as α=0.95 in the current study.

Table 2. Average scores relating to scales

		N	X̄	S.d.	α
PHORS	The Realization of a Psychological Experience	291	5.76	1.23	0.95
	The Prevention of a Worse Condition	291	5.63	1.39	0.92
	Improved Condition	291	6.09	1.16	0.92
RFES	Recreational Flow Experience	291	6.05	1.04	0.95

*S.d.=Standart deviation

Perceived health outcomes of recreation scale (PHORS): It was developed by Gomez et al. (2016) to measure the perceived health outcomes of individuals participating in recreational activities, the conceptual substructure of which was created by utilizing Driver's Typology of Leisure Benefits (DTLB) and Recreational Experience Preference (REP) scale. PHORS, the Turkish validity and reliability study of which was conducted by Lapa et al. (2020), has a 7-point Likert-type structure with the options 1-definitely does not express me 7-completely expresses me. The sub-dimensions of the scale are the realization of a psychological experience expressing the benefits of leisure-recreation, the prevention of a worse condition, and improved condition. The reliability coefficients of the scale in the current study were determined as α=0.95 for the realization of a psychological experience; α=0.92 for the prevention of a worse condition and α=0.92 for the improved condition. These results show that both measurement tools are highly reliable in terms of Cronbach Alpha reliability coefficients (George & Mallery, 2019).

Data collection

In order to collect data in the study, the necessary permission was obtained from the İstanbul Aydın University Social and Human Sciences Ethics Committee with the commission decision dated 21.12.2023. In this direction, the prepared forms and scales were collected online and face to face. Data were collected from individuals participating in recreational yoga activities in Istanbul, Turkey, in January and February 2024. During the data collection, the participants were given the necessary preliminary information about the study.

Analysis of data

SPSS 25 package program was used in the analysis of the data. In the statistical display of the obtained data, arithmetic mean, standard deviation and frequency values were presented. In order to examine the normality distribution of the data set, Shapiro-Wilk (Field, 2009) and Skewness and Kurtosis tests (Tabachnick & Fidell, 2013) were used and it was determined that the data showed a normal distribution. In order to examine the differences in the flow

experience and perceived health outcomes of recreational yoga participants, Independent Sample T-Test was applied for yoga participation format, and One Way-ANOVA was applied for comparison in terms of yoga participation frequency. Pearson Correlation Test was used to examine the relationship between recreational flow experience (RFES) and perceived health outcomes in recreation (PHORS). Simple Linear Regression Analysis was used to examine the direct effect of recreational flow experience on perceived health outcomes in recreation.

FINDINGS

This section includes the analysis results of the data obtained in the study. An Independent Sample T-test was applied to examine the differences in the total score or sub-dimensions of recreational flow experience and perceived health outcomes in recreation in the participants' individual or group participation in yoga practices. While the T-test for independent samples is used to compare the means of two independent sample groups, the two groups in question are independent of each other (George & Mallery, 2019). The results obtained regarding the analysis are presented in Table 3.

Table 3. Independent sample t-test results according to participants' yoga participation patterns

	Yoga Participation Format	N	X̄	S.d.	F	t	df	p
The Realization of a Psychological Experience	Personal	162	5.57	1.26	1.492	3.061	289	**0.002***
	Group	129	6.01	1.15				
The Prevention of a Worse Condition	Personal	162	5.49	1.46	3.217	-2.022	289	**0.044***
	Group	129	5.82	1.28				
Improved Condition	Personal	162	5.91	1.29	8.871	-3.152	286.031	**0.002***
	Group	129	6.32	0.92				
PHORS Total	Personal	162	5.63	1.18	3.888	-3.116	288.219	**0.002***
	Group	129	6.03	0.99				
Recreational Flow Experience	Personal	162	5.94	1.10	3.109	-2.093	289	**0.037***
	Group	129	6.19	0.93				

*<0.05; S.d.=Standart deviation; df= Degrees of freedom

According to the results in Table 3, significant differences were found in the PHORS sub-dimensions in terms of individual or group participation styles of recreational yoga participants; the realization of a psychological experience (t=-3.061; p=0.002), the prevention of a worse condition (t=2.022; p=0.044) and improved condition (t=3.152; p=0.002). However, significant differences were found in the PHORS total score (t=3.116; p=0.002) and the PHORS total score (t=2.093; p=0.037). It can be said that all these significant differences are in favor of individuals participating in yoga activities as a group. These results show that individuals participating in recreational yoga practices as a group have higher flow experience and perceived health outcomes.

Analysis of Variance-ANOVA was applied to examine whether the frequency of yoga participation of the participants in the study differed according to recreational flow experience and perceived health outcomes. Analysis of Variance-ANOVA is an analysis method for statistically comparing the differences between two or more unrelated groups (Griffith, 2007; Büyüköztürk, 2018). The results are presented in Table 4.

Table 4. Results of analysis of variance-anova according to the frequency of participants' yoga participation

Variable		Sum of Squares	df	Mean Square	F	P	Sig. Dif.
The Realization of a Psychological Experience	Between Groups	41.025	2	20.512	14.746	**0.001***	1-2 1-3
	Within Groups	400.631	288	1.391			
	Total	441.656	290				
The Prevention of a Worse Condition	Between Groups	8.182	2	4.091	2.124	0.121	-
	Within Groups	554.772	288	1.926			
	Total	562.953	290				
Improved Condition	Between Groups	7.511	2	3.755	2.811	0.062	-
	Within Groups	384.734	288	1.336			
	Total	392.245	290				
PHORS Total	Between Groups	16.347	2	8.173	6.762	**0.001***	1-2
	Within Groups	348.108	288	1.209			
	Total	364.455	290				
Recreational Flow Experience	Between Groups	14.398	2	7.199	6.928	**0.001***	1-2 1-3
	Within Groups	299.264	288	1.039			
	Total	313.662	290				

*<0.05; df= Degrees of freedom

When the results in Table 4 are examined, no significant difference was found in the PHORS the prevention of a worse condition (F=2.124; p=0.121) and improved condition (F=2.811; p=0.062) sub-dimensions according to the frequency of yoga participation of the recreational yoga participants. However, a significant difference was found in the PHORS the realization of a psychological experience (F=14.746; p=**0.001**) sub-dimension. In the Tukey post-hoc test applied to determine the source of the significant difference, it was determined that the significant difference was between individuals who participated in recreational yoga practices for 1-2 days and those who participated for 3-4 days and between individuals who participated for 1-2 days and those who participated for more than 5 days. When other findings were examined as a result of the Tukey post-hoc test, it was determined that the significant difference in terms of the PHORS total score was between those who participated in recreational yoga activities for 1-2 days and those who participated for 3-4 days. In terms of RFES total

score, it was concluded that the significant difference was between those who participated in recreational yoga practices for 1-2 days and those who participated for 3-4 days.

Tablo 5. Pearson correlation test results of yoga participants' recreational flow experience (RFES) and recreational perceived health outcomes (PHORS)

Variable		Recreational Flow Experience
The Realization of a Psychological Experience	r	**0.774****
	p	0.001
The Prevention of a Worse Condition	r	**0.567****
	p	0.001
Improved Condition	r	**0.768****
	p	0.001
PHORS Total	r	**0.792****
	p	0.001

** <0.01

The Pearson Correlation test is a statistical analysis that aims to measure the strength of the relationship between two variables and their relationships with each other. The r value, which represents the correlation coefficient, can vary between +1 and -1. Values close to 0 indicate that there is no linear relationship between the variables (DeCoster & Claypool, 2004; Tabachnick & Fidell, 2013). When Table 5 is examined, a positive, high level (r=0.774; p=*0.001*) relationship was found between the RFES total score and the PHORS "the realization of a psychological experience" sub-dimension; a positive, moderate level (r=0.567; r=*0.001*) relationship was found between the RFES total score and the PHORS "the prevention of a worse condition" sub-dimension; and a positive, high level (r=0.768; p=*0.001*) relationship was found between the RFES total score and the PHORS "improved condition" sub-dimension. However, a positive, high-level correlation was found between the total RFES score and the total PHORS scores of recreational yoga participants (r=0.792; p=*0.001*).

Table 6. Results of simple linear regression analysis on recreational flow experience and perceived health outcomes in recreation

Dependent Variable	Independent Variable	B	Standart Error	β	t	p	Binary r
Perceived Health Outcomes of Recreation	(Constant)	0.636	0.238		2.675	0.008	
	Recreational Flow Experience	0.854	0.039	0.792	22.077	**0.001***	0.792

R= 0.792[a] R^2=0.628 Adj. R^2=0.626 F=487.393 p=0.001

** <0.01

Simple linear regression analysis was used to test the direct effect of recreational flow experience on perceived health outcomes in recreation. Simple Linear Regression analysis tests the effect of a dependent variable on an independent variable. The analysis tests whether some independent variables have more effects than others and determines how well the dependent variable predicts the independent variable (Griffith, 2007). The results of the simple linear

regression analysis performed in this direction are presented in Table 6. According to the results, the R value showing the value of the relationship between the variables is 0.792 as in the correlation test. The R^2 value explains how much of the health outcomes perceived in recreation, which is the dependent variable, depends on the recreational flow experience, which is the independent variable. Accordingly, 62.8% of the health outcomes perceived in recreation depend on the recreational flow experience. The adjusted R^2 value shows how much of the health outcomes perceived in recreation, which is the dependent variable, is explained by the recreational flow experience, which is the independent variable (Gürbüz & Şahin, 2018). Accordingly, it can be said that 62.6% of the variance in the health outcomes perceived in recreation depends on the recreational flow experience.

DISCUSSION AND CONCLUSION

This study was conducted to examine the flow experience and perceived health outcomes of recreational yoga participants. When the literature is examined in line with the hypotheses established regarding the research model and the results obtained, it is seen that the studies on the effects of participation in recreational yoga activities are focused on therapeutic recreation and support positive health outcomes (Bonadies, 2004; Pham, 2013; Fiore et al., 2014; Hawkins et al., 2018; Adams et al., 2019; Reina et al., 2020; Wiles et al., 2021; Adams et al., 2022). In addition, similar to the current study, there are also studies examining the participation of individuals in yoga activities for the purpose of improving health as a recreational experience (Piletić & Čabarkapa, 2011; Hsu & Liu, 2020; Alper & Başaran, 2023; Zafeiroudi et al., 2023).

According to the results obtained within the study, it is seen that the flow experience and perceived health outcomes of recreational yoga participants differ according to individual or group participation. It was determined that the significant difference was in favor of individuals participating in recreational yoga activities in groups. This situation can be interpreted as individuals participating in recreational yoga activities in groups support more efficient results in terms of perceived health outcomes in recreation and their flow experience is also higher. When the literature is examined, Harris et al. (2019) stated in their study on the perceived benefits of participation in yoga practices that individuals who participated in group activities felt physical and mental development. Similarly, Nguyen (2024) obtained positive results in terms of physical and mental health in his study examining the perceived health levels of individuals who participated in group yoga activities. Adams et al. (2019) examined the effects of regular group participation in recreational yoga activities and revealed that participants perceived psychosocial and physical benefits. In addition, the study emphasized that

participation in yoga activities increases individuals' motivation to participate in different types of physical recreational activities. It is seen that no comparison is made between group and individual participation in yoga activities in the mentioned studies. When the literature is examined in terms of flow experience, studies showing that individuals participating in recreational yoga practices in groups experience flow support the results of the current study (Kulkarni et al., 2017; Hsu & Liu, 2020; Hecquet, 2024).

This study has shown that the perceived health outcomes and flow experience of recreational yoga participants differ significantly according to their frequency of yoga participation. It shows that as the frequency of participation in activities increases in terms of perceived health outcomes of recreation, the psychological experiences of the participants and their overall perceived health outcomes reach their goal. At the same time, the research findings show that the flow experience increases in line with the frequency of participation in activities in terms of recreational flow experience. Erkin and Akçay (2018) conducted a study on the health status perception of individuals participating in yoga practices and concluded that individuals' physical health perception increases positively as the frequency of yoga participation increases. Ross et al. (2012) stated in their study on the prediction of health by yoga practices that it is not important how long individuals have participated in yoga activities, but how often they do yoga. The study also revealed that the frequency of yoga participation is an important predictor of health factors, including awareness and subjective well-being. When the flow experience is examined in terms of the frequency of participation in yoga activities, it is seen that participation in yoga activities with certain frequencies has positive effects on physiological, cognitive and some performance parameters related to awareness and flow experience (Briegel-Jones et al., 2013; Butzer et al., 2016; Lear, 2018).

According to the findings obtained from individuals participating in recreational yoga practices, it has been determined that perceived health outcomes are positively related to the flow experience. When individuals participating in yoga activities experience recreational flow by achieving a balance between challenges and skills, the mental, physical and spiritual outcomes they will obtain from the activity can contribute to their lives as benefits from recreational activities. In addition to the positive benefits of recreational yoga activities on the mind and body, their effects on physical development and psychological well-being in terms of health have been revealed by past studies (Hallsall et al., 2018; Jia, 2018; Litwiller et al. 2021; Akdeniz & Kaştan, 2023). It can be said that the relationship between the level of flow that individuals experience in recreational activities and the benefits of leisure and therefore the

perceived health outcomes is important for a better life by increasing personal well-being and quality of life (Tao et al., 2022).

It was concluded that the flow experience experienced by recreational yoga participants during their participation in the activities had a significant effect on perceived health outcomes. The consciousness regulation and balance required in yoga practices are similar to the principle of providing balance between skills and difficulties in the flow experience. This situation experienced by participants in yoga activities can also allow individuals to achieve the outcomes they perceive or aim for as being healthy. Breathing techniques, postures, meditation and relaxation processes in yoga practices allow the individual to focus and thus achieve physical, mental and spiritual integrity in a healthy way through the flow experience. In another approach, flow experience is an important predictor on the way to positive health outcomes (Riva et al., 2016). Hsu and Liu (2020) state that participation in yoga activities as a serious leisure activity has a positive effect on leisure benefits and flow experience, which also constitute the conceptual structure of perceived health outcomes in recreation. Ayhan and Alanoğlu (2023) found that recreational flow experience has a positive effect on mental well-being. Cheng and Lu (2015) similarly state that recreational participation has an effect on psychological well-being through recreational flow experience. Tse et al. (2021) concluded that autotelic personality has an effect on psychological well-being through flow experience. These results support the effect of flow experience especially on psychological health and are similar to the positive effect of recreational flow experience on perceived health outcomes obtained in the current study.

The study revealed that individuals who prefer yoga activities recreationally create differences in terms of flow and perceived health in terms of group or individual participation. In addition, the frequency of participation is a determining variable that creates differences in terms of flow experience and perceived health outcomes. It has been revealed that the flow experience experienced by recreational yoga participants is related to perceived health outcomes in recreation and that flow experiences are an important predictor in terms of perceived health outcomes. Today, it is seen that individuals prefer different recreational activities in order to protect their physical and mental health. Yoga is one of these experiences that individuals prefer as a recreational activity and that provides physical, mental and spiritual integrity. The results of this study show that yoga is a recreational activity that can provide the opportunity to experience flow and that perceived health outcomes can be added to the lives of individuals as a contribution. This study, which was conducted with mostly female participants,

includes some limitations. The benefits of participating in yoga activities recreationally can be examined with different conceptual dimensions, measurement tools and different sample groups.

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Fikir ve Kavramsal Örgü *Idea or Notion*	Araştırma hipotezini veya fikrini oluşturmak *Form the research hypothesis or idea*	Batuhan ER Recep CENGİZ
Tasarım *Design*	Yöntem ve araştırma desenini tasarlamak *To design the method and research design.*	Batuhan ER Recep CENGİZ
Literatür Tarama *Literature Review*	Çalışma için gerekli literatürü taramak *Review the literature required for the study*	Batuhan ER Recep CENGİZ
Veri Toplama ve İşleme *Data Collecting and Processing*	Verileri toplamak, düzenlemek ve raporlaştırmak *Collecting, organizing and reporting data*	Batuhan ER Recep CENGİZ
Tartışma ve Yorum *Discussion and Commentary*	Elde edilen bulguların değerlendirilmesi *Evaluation of the obtained finding*	Batuhan ER Recep CENGİZ

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