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Recreational Fishers' Motivations at Wetland Destinations: The Push and Pull Theory Approach

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ABSTRACT

This study aimed at developing and validating a scale to examine recreational fishing tourists' motivations at wetland destinations by applying the push and pull motivation theory. Drawing on both qualitative and quantitative data from travelers participating in recreational fishing activities in Turkey, a scale generation phase was followed to develop a purified push and pull motivation scale. The findings revealed three push motivations (e.g., fishing, nature, and socio-cultural aspects of the destination) and three pull motivations (e.g., geographic attributes and infrastructure, local culture and customs, and activity). Furthermore, several theoretical and managerial implications with suggestions for further studies were discussed.

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Introduction

Recreational fishing has become a substantial tourism market that provides economic, environmental, and social benefits (Food & Agriculture Organization, 2017), such as creating employment, earning income from fishers' expenditures, protecting aquatic biodiversity through catch and release fishing technique that enables more fish to survive and helps to catch and wipe off dangerous breeds (Crowx et al., 2010; Food & Agriculture Organization, 2017), sustaining and conserving diverse habitats, and bringing people together (Lewin et al., 2019). Primarily, the economic contribution of this activity supports various businesses in destinations (e.g., travel, hotels, equipment rentals) (Li et al., 2019). A report by The European Anglers Alliance (2020) demonstrated that a total of six million fishing tourists traveled for angling, which generated more than \$2.7 million with 30 million jobs through this sports activity in New York, New Jersey, Connecticut, and Rhode Island in 2014. However, due to the limited official numbers, the global number of recreational fishers is roughly estimated somewhere between a minimum of 220 million (The World Bank, 2012) and a maximum of 700 million (Cooke & Cowx, 2004).

Recreational fishing is an essential phenomenon in tourism research, which is broadly acknowledged within many different types of alternative tourism such as wildlife

tourism (Higginbottom, 2004; Swarbrooke et al., 2003), ecotourism (Ditton et al., 2002), rural tourism, special interest tourism (Borch et al., 2008), and adventure tourism (Huddart & Stott, 2020; Weber, 2001). Although recreational fishing has links with different tourism perspectives, Borch et al. (2008) highlighted that recreational fishing is associated with a form of nature-based tourism activity. Moreover, there is still a terminological confusion about the recreational fishing term, it is known by different terms (Pawson et al., 2008, p. 340); "*hobby fishing, subsistence fishing, recreational fishing, leisure fishing, sports fishing, angling, and recreational angling.*" In this study, recreational fishing is deemed more appropriate since it is understood as a nature-based tourism activity. In addition, there is not a consensus on a precise definition of recreational fishing in the relevant research stream. Some definitions include recreational fishing's economic side, fishing methods, and types of gear (Pawson et al., 2008; The European Anglers Alliance, 2020). For example, The European Anglers Alliance (2020) defines recreational fishing as fishing, which is not deemed to be commercial fishing. Apart from this, some definitions underline the motivational side of recreational fishing. Pitcher and Hollingsworth (2002) noted that the primary motivation of recreation fishing is fun. Taking this into consideration, Policansky (2002, p. 75) defined recreational fishing as; "fishing primarily for recreation or enjoyment as opposed to fishing whose main purpose is the production of food and other products."

Recreational fishing has become more prevalent in many destinations worldwide (Gordoa et al., 2019), attracting significant attention from destination managers and researchers (Stainback et al., 2019). The importance of recreational fishing has led both groups to understand the recreational fishing process better and gain valuable insights into recreational fishers' behavior (Sato et al., 2018). Several theoretical models have been used to understand and determine the travelers' motivations in the tourism research by now. For example, the escape-seeking dimensions' model of Iso-Ahola (1982), the travel career patterns of Pearce and Lee (2005), and the push and pull motivation model (Crompton, 1979; Dann, 1981). Among these, the push and pull motivation model is widely adopted in tourism motivation studies (Caber & Albayrak, 2016). While push motivation factors are related to people's travel and social-psychological reasons, pull motivation factors involve explaining tourists' destination selection criteria and are related to destination attributes or cultural motives (Crompton, 1979; Dann, 1981). Investigating these motivational factors within the push and pull motivation conception might provide some marketing strategies for the destination (e.g., segmenting, planning, and improving the market), enhancing tourism demand and affecting the supply in a mutual relationship.

Prior studies have also explored specific types of tourism motivations rather than general tourism motivations (Caber & Albayrak, 2016). For instance, motivations of rock-climbing tourists (Caber & Albayrak, 2016), birdwatchers (Chen & Chen, 2015), hikers (Taher et al., 2015), rafting (Albayrak & Caber, 2018; Sato et al., 2018), visitors of a specific national park (Kim et al., 2003) are all in play. Moreover, few studies (e.g., Ardahan, 2012; Ardahan & Turgut, 2013; Beardmore et al., 2011; Brenner, 2014; Connelly et al., 2001; Fedler & Ditton 1994) have also attempted to investigate recreational fishing tourists' motivations. Most studies in the field of motivation of recreational fishing have just focused on narrow perspectives such as natural environment,

social, competition, escape, or angler's typology. However, no previous study has yet explored the recreational fishing tourists' motivations in a holistic approach. Specifically, a comprehensive questionnaire of the recreational fishers' motivation is lacking.

Further to this, no research attempts to delve into understanding recreational fishing from a motivational theory perspective. In the extant literature, push and pull motivation theory is deemed more appropriate for such recreational experiences. This paper aimed to investigate recreational fishing tourists' motivations through the push and pull motivation approach to bridge these gaps. For this purpose, a mixed-method approach was adopted for this study. Firstly, to develop an item pool, the authors conducted semi-structured interviews with board members of recreational fishery associations at the 9th International Carp Fishing Competition Sapanca Lake, in November 2015 through a qualitative research approach. In this direction, the purposeful sampling method was deemed appropriate to adopt in the study. The reason for employing the board members of recreational fishery associations is that these members highly participate in fishing competitions and have more knowledge about recreational fishing in Turkey. Therefore, purposeful sampling was adopted at this research stage. Then, to test the validity and reliability of these items, a quantitative research approach was adopted. A questionnaire was applied to recreational fishers in Turkey to collect the data to be examined.

The study offers several theoretical and practical contributions to recreational fishing literature. First, to the best of the authors' knowledge, this study is among the first attempts to develop and validate a scale in order to examine recreational fishers' motivations through the push and pull motivation theory approach. Hence, this research contributes to the knowledge of push and pull motivation theory by applying it to recreational fishing. Second, the research findings will help contribute to the recent research agenda by developing a questionnaire and advancing existing knowledge on recreational fishers' motivation. Third, the study offers insights into the literature by focusing on the recreational fishing motivations from the wetland destination perspective. Fourth, the study findings (i.e., factors that occurred) will be tested and verified; in doing so, the main extrinsic and intrinsic motives will be determined holistically. Finally, the study's findings will be extremely helpful in establishing more effective destination-marketing strategies from the consumers' viewpoint.

Literature review

Use of push and pull motivation model in tourism

Motivation theories have been widely conceptualized through travelers' psychological/biological unmet needs and desires (Yoon & Uysal, 2005) and are associated with sociological frameworks in the tourism field (Dann, 1981). Early motivation theories in the tourism area approached tourist motivation from a content theory perspective (You et al., 2000). For instance, Burkart and Medlik (1981) divided travel motivation into two major classifications: "wanderlust" and "sun lust." Moreover, some studies suggest that tourist motivation differs according to destination and its attractions. For instance, several studies showed that travelers could be motivated by nature-based activities

(Chikuta et al., 2017), cultural attractions (Goeldner & Ritchie, 2009), resting (Yoon & Uysal, 2005), escaping from daily routine (Kim & Ritchie, 2014), education or knowledge (Bansal & Eiselt, 2004), and coming together with family members (Yoon & Uysal, 2005). These motivations were tackled under some theories and models, as we mentioned in the introduction.

Moreover, the studies on tourist motivation in the literature can be examined in three classifications (Caber & Albayrak, 2016): The first category consists of exploratory studies. These studies were focused on personal motivations that lead people to certain travel behaviors (e.g., Kim et al., 2003). The second category related to motivation factors is used to apply an effective market segmentation (Devesa et al., 2010). The relationships between motivation and other structures, such as tourist satisfaction and behavioral intentions, were examined in the third category (Caber & Albayrak, 2016). Considering overall categories, some theoretical studies shed light on some theories and models in the literature. For instance, the allocentric and psychocentrism model (Plog, 1974), push and pull motivation theory (Dann, 1981), optimal arousal theory (Iso-Ahola, 1982), leisure motivational model (Beard & Ragheb, 1983), and travel career ladder model (Pearce, 1988). Among these, the push and pull motivation theory is widely accepted and is still being used in tourism and recreation research (Suni & Pesonen, 2019).

The Push and Pull model was first introduced by Dann (1981) in the tourism field and is currently one of the reliable and validated motivational theories among tourism scholars (Su et al., 2020; Suni & Pesonen, 2019). The model is based on determining and exploring which factors push tourists (i.e., intrinsic factors) to travel and pull them (i.e., extrinsic factors) to any destination as well (Ryan & Deci, 2000; Yoon & Uysal, 2005). Crompton (1979) defined push motivational factors as socio-psychological reasons that encourage tourists to travel toward any destination. The pull motivational factors are referred to as cultural motives or the destination's features or attributes that encourage tourists to visit a destination. According to this theory, push motivational factors, as the primary elements of tourism motivation, have a significant effect on the travelers' perception of destination attributes (Correia et al., 2007) because internal factors stimulate tourists more than the features, attractions, or attributes of the destination itself (Michael et al., 2017).

In contrast, several authors (e.g., Lou & Deng, 2008; Yoon & Uysal, 2005) suggested that destination attributes' external factors are of primary importance compared with the push motivation since pull factors could enhance and improve push motivations. For instance, Michael et al. (2017) highlighted that the availability of museums and galleries in a destination encourages tourists to travel and experience some cultural values for gaining knowledge or having an education. Yoon and Uysal (2005) revealed that safety, fun, escape, knowledge, education, and achievement are essential for push motivation, while pull motivation consists of cleanness, shopping, reliable, weather, safety, different culture, and water resources.

On the other hand, despite the general support for the applicability of the push and pull model to the tourism destination studies, there are also some "however's". Specifically, a study by Uysal et al. (2008) highlighted some critical points in the push and pull motivation studies, which limits the extent of push and pull motivation studies'

findings: (1) the possibility of the large volume in the pull items according to the scope and nature of destination attributes, (2) the necessity of delineating the two factors simultaneously in the same research in better exploring the interactions, and (3) the quality of the tourism experience, as part of which may consist of the push and pull factors.

Notwithstanding, numerous studies (e.g., Bentz et al., 2016; Caber & Albayrak, 2016; Sato et al., 2018; Suni & Pesonen, 2019) examined tourists' motivations within various destinations based on push and pull theory. For example, Caber and Albayrak (2016) explored that a climbing tourist has some primary push motivations such as risk-taking, challenge, catharsis, recognition, creativity, and physical setting as well as pull motivation consisting of novelty seeking on climbing and destination, the infrastructure of the climbing area and other leisure activities about sport. Kim et al. (2003) identified the push (e.g., family togetherness and the desire to explore nature, being healthy, escaping from daily routine life, adventure, and making friends) and pull motivations (e.g., attractions, knowledge, and appropriate facilities, and accessibility and transportation) of national park visitors. Chen and Chen (2015) explored the push and pull motivations of birdwatchers, including birding, seeking novelty, contribution and sharing, spiritual or mental relaxation, building friendship, and competition with others, and four pull motivation factors including resources related to avian, professional guides, facilities and substructure of the area, and local culture and customs. Taher et al. (2015) proposed a set of essential motivations for hikers in Malaysia, such as the organization's effectiveness, trail accessibility, perceived safety risks, and the landscape of the mountain. Sato et al. (2018) studied a Chinese whitewater rafting context in Niseko, Japan. Social interaction, escaping from routine, family togetherness, and excitement of joining this tourism activity are push motivations.

In contrast, natural attractions, destination culture, and rafting service are referred to as pull motivations for whitewater rafting tourists. Suni and Pesonen (2019) researched the hunting tourist's push and pull motivation. Push motivation factors for hunting tourists were identified as competence-mastery, nature, family, hunting, relaxation, social, and added benefits. Pull motivation factors for hunting tourists were listed as tourism services, destination novelty, costs, meal preparing possibilities, game, destination suitability for hunting, and hunting grounds.

The motivational factors of recreational fishing

Recreational fishers consider three major approaches while performing their activities; (1) sustainably using fish stocks, (2) protecting impaired habitats of wetlands, and (3) performing their practice morally or ethically (Unfer & Pinter, 2018). This activity also helps sustain the ecosystems and biodiversity rather than meet essential nutritional needs (Food & Agriculture Organization, 2017). Lyach and Čech (2018) noted that fishing is not only a leisure activity but also a political, social, and naturalistic experience. Recreational fishing is thus often complicated, multi-faceted, and linked to both catching and non-catch activities (Frijlink & Lyle, 2010). The primary pull motivation for recreational fishing is associated more with the quality of environmental quality (e.g., facility, destination size, congestion) and natural conditions of the destinations' angling sites (e.g., weather, water, fishing area), and regulations (e.g., fishing rate, license, rules)

(Ditton et al., 2002; Hunt, 2005; Hunt et al., 2007, 2019; Olausson & Liu, 2011). More basically, the quantity and size of the catch (Arlinghaus, 2006a; Beardmore et al., 2015), species diversity (Morey et al., 2006; Olausson & Liu, 2011; Schramm et al., 2003), accessibility (Waldo & Paulrud, 2012), and environmental cleanliness (Schramm & Gerard, 2004) are of prime importance for recreational fishers.

Numerous studies in various destinations explore the push motivation factors of recreational fishers. For instance, Fedler and Ditton (1994) examined the motivational characteristics of anglers and provided an insight into the question of ‘why do people go fishing?’ They determined 16 items, which merged under five main dimensions, emerging as the key constructs motivating anglers in a wetland destination, namely, general psychological and physiological (getting away from routine, relaxing, questing for something different and exercising physically), natural environment, social, fishery resource, and skill and equipment.

Given the fact that angling is the most popular recreational fishing activity (Stensland et al., 2021), which is commonly practiced with a rod or line out of commercial fishing within also angling tourism (European Anglers Alliance, 2021), it is not surprising that it is closely associated with fishing tourists’ integrated characteristics. In this regard, Brenner (2014) conducted a study to explore the motivation factors of angling tourists in the Westfjords, Iceland, and identified that overall motivations for recreational fishing are relaxation, to be outdoors, fishing for sports, fishing for food, and family or friends’ togetherness. Another study in Majorca showed that relaxing and enjoying water-related activities were the vital motivations for angler tourists (Morales-Nin et al., 2015). Beardmore et al. (2011) found that the angler motivation was grouped into five specific motivational types: (1) trophy-seeking anglers (catch-and-release is not a necessary practice), challenge-seeking anglers (rather than seeking trophies, oriented to achieve catch motivations), nature-oriented anglers, social anglers, and consumption-or meal-sharing- oriented anglers. Also, Ardahan (2012) developed a scale of recreational fishing motivation. This study explored the essential sub-categories of recreational fishing motivation: socialization, relaxing and being in nature, health-sport, competition-prestige, and escaping. Recreational fishing travel in the appropriate season, therefore, provides experiences that contribute to ones’ well-being (Arlinghaus, 2006b). In his study on wild tourism in Norway, Øian (2013) stated that the main visit motivations of the recreational fishers are to enjoy nature and to feel the life experience. Hunt et al. (2013) stated that cultural services of this recreational activity and its esthetic values for individuals are more important than provisioning of food. Therefore, recreational fishing activity is associated with the health and well-being of people by simply being out in nature (Liu et al., 2019), socializing (Mueller et al., 2008), and tasting different food (Cooke et al., 2018). Beyond well-being, recreational fishing activities also contribute to the conservation of nature (e.g., fish population conservation) for aquatic biodiversity (Cowx et al., 2010; Hunt et al., 2013).

In sum, there are some studies of recreational fishers’ motivation that were conducted in different destinations. The motives differ across studies and are assumed that specifically varied according to destination or individual. Moreover, the motives of previous research lack a general and structured direction for recreational fishing motivation. Hence, there is still little agreement on which motives push and pull fishers to this

recreational activity. Although the literature stream on recreational fishing has various motives available, none have entirely yet addressed a theoretical framework or theory to explain these motivations.

On the other hand, despite numerous attempts to explain travelers' motivational behaviors, Cropton (1979) proposed the push and pull model based on Maslow's hierarchy of needs to determine the two sides of the same motivational medallion. As a consequence, a comprehensive review of studies (e.g., Caber & Albayrak, 2016; Chen & Chen, 2015; Suni & Pesonen, 2017) on the concept of the push and pull approach reveals the popularity of that model which has generally been well-received and accepted. Because it principally contributes to a better understanding of reciprocal interaction between the two phenomena (e.i., push and pull factors) in the same context in terms of explaining how holidaymakers go about making travel decisions to opt for destinations and thereby assists destination authorities to conduct efficient marketing programs (Uysal et al., 2008). In this regard, given the above discussions, this study utilizes pull and push motivation theory to develop and validate a scale in examining the recreational fishing tourists' motivations at wetland destinations.

Research methodology

Research design, sampling, and data collection

Following Churchill's (1979) widely adopted conventional scale development process, this study aimed to develop and validate a scale for measuring recreational fishing tourists' motivation factors. An exploratory mixed-method research pattern was employed using the qualitative and quantitative methods (Creswell & Clark, 2007). According to the exploratory pattern, the qualitative part of the research is performed first, and a quantitative part is begun through the data obtained from the first part. According to this method, both qualitative and quantitative methods are equal. Thanks to this method, the qualitative research results' generalizability can be validated through the quantitative approach. The sequential exploratory design is presented in Figure 1.

The sampling and data collection process of the present study involved three stages. First, in-depth interviews were conducted based on a purposeful sampling method with twelve expert participants with a fishing license and managers in recreational fishing associations due to the power of their knowledge of recreational fishing (Braun & Clarke, 2021). The interviews were held at the 9th International Carp Fishing Competition in Sapanca Lake/Sakarya Turkey in November 2015. Hunt et al. (2019) addressed the fact that anglers who have a fishing license have more knowledge, and recreational fishing is dominantly represented with the environment that exists freshwater fish stocks. Therefore, this study's participants were recruited from managers of recreational fishery associations who have solid experiences in freshwater angling and holding a fishing license.

Moreover, Turkey has a reputation for its recreational fishing establishments. According to Ramsar Convention, beyond 14 registered Turkish wetlands on the list of Wetlands of International Importance, there are also over a hundred fishing areas in different cities (Ramsar, 2021).

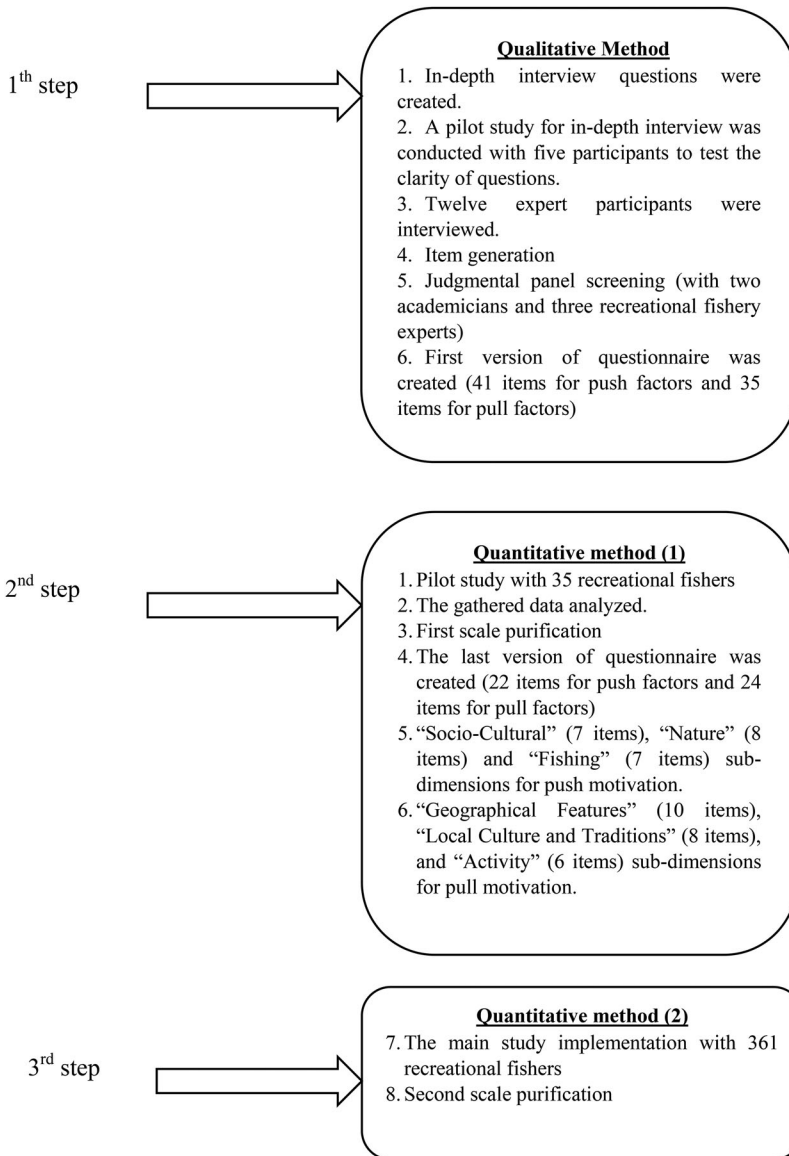


Figure 1. Sequential design of mixed method.

After item generation and judgmental panel screening, the questionnaire (in which all items are measured by 5-point Likert scale) for a pilot study was filled out by 35 elite participants from the board members of Turkey’s recreational fishery associations using the convenience sampling method.

Lastly, members and fishers with a fishing license in Turkey were recruited for second-scale purification recreational fishery associations. Hence, the population of this research consists of participants of Turkey’s recreational fishery associations and fishers with a fishing license. While there are around a minimum of 220 million and a maximum of 700 million (Cooke & Cowx, 2004; The World Bank, 2012) recreational fishers worldwide, the exact number of licensed fishers and participants of recreational fishery

associations in Turkey is unknown. Therefore, a convenience sampling method was used, and respondents were recruited while they were fishing at the competitions (Gesbader 4th Traditional Pike Competition – April 2019 at Sevindikli Lake in Turkey and ASOF Turkey Sports Carp Catch Competition – October 2019 at Golkoy Lake in Turkey) and collected through their e-mail addresses of the members of the different associations in Turkey. The data were collected between April 2019 and January 2020. By the cutoff date for data collection, out of 383 questionnaires, a total of 361 valid questionnaires were received.

Scale development

Item generation

Due to the qualitative study's nature, semi-structured questions were chosen, and two academicians progressively reviewed these questions in the field. The expert panel resulted in only a few changes. Moreover, a pilot test with five participants was conducted to test the clarity of questions. The pilot test ensured the comprehensibility of the questions. At the end of this process, twelve interviews were conducted by following the proposition of Glaser and Strauss (1967) regarding data saturation and the suggestion of Guest et al. (2006) that interviewing twelve people among homogeneous groups would be sufficient for qualitative studies. These interviews were conducted during the 9th International Carp Fishing Competition Sapanca Lake, in November 2015. Prayag and Ryan (2011) stated that it is essential to capture the essence of the relationship between motivation and place perception. Hence, the interviews were conducted at a fishing competition. The interviews lasted on average 45 minutes, and participants specifically were asked about their primary motivations for recreational fishing and experience with the destination choice (e.g., What made you choose a specific fishing destination? What is your main motivation for fishing?) and derived from previous research (Ardahan, 2012; Fedler & Ditton 1994). All interviews were digitally recorded and transcribed verbatim and analyzed by the conventional content analysis technique.

Judgmental panel screening

Based on the qualitative analysis and the literature review (e.g., Caber & Albayrak, 2016; Chen & Chen, 2015; Connelly et al., 2001; Kim et al., 2003; Sato et al., 2018; Taher et al., 2015), an item pool was created. To ensure the content validity of the measurement instruments, two academicians and three recreational fishery experts were involved in checking the questionnaire. As a result, a suitable questionnaire form was established with 41 items for push factors and 35 items for pull factors.

First scale purification

The quantitative data were analyzed with exploratory factor analysis (EFA) for the pretest study, and its results are explained as follows: In the findings of the pretest for push motivations; Cronbach Alpha analysis was used to measure the reliability of the subscale factor's sub-dimensions and it was determined that the sub-dimensions were higher than the expected value of 0.7 (Cronbach, 1951). KMO-Barlett analysis (Chi-

square 1343,565, $p < 0.00$) was tested, and it was found out that Kaiser Meyer Olkin's value was 0.841. Therefore, the total explained variance was 86,428%, indicating that the data were suitable for factor analysis. Exploratory factor analysis was applied, and 19 out of 41 items were removed from the form because the factor loads were below 0.40 (Costello & Osborne, 2005). Additionally, the varimax-rotated factor pattern indicated that factors merged under the Socio-Cultural sub-dimension (7 items, $\alpha = 0.950$), under the Nature sub-dimension (8 items $\alpha = 0.979$), and under the Fishing sub-dimension (7 items $\alpha = 0.933$).

In the pretest findings for pull motivations, Cronbach Alpha analysis was tested to measure the reliability of the sub-dimensions of the pull factor, and the sub-dimensions were determined to be higher than the expected value of 0.7 (Cronbach, 1951). KMO-Barlett analysis (Chi-square 1240,564, $p < 0.00$) was tested. It was found that Kaiser Meyer Olkin's value was 0.757 and, the total explained variance was 82.378%, indicating that the data were suitable for factor analysis. Eleven of 35 items were removed from the form with the exploratory factor analysis because the factor loads were below 0.40 (Costello & Osborne, 2005). Additionally, the varimax-rotated factor pattern indicated that factors merged under the Geographical Features and Infrastructure sub-dimension (10 items, $\alpha = 0.976$), under the Local Culture and Traditions sub-dimension (8 items, $\alpha = 0.949$), and under the Activity sub-dimension (6 items $\alpha = 0.921$).

Second scale purification

A principal component analysis in exploratory factor analysis with Varimax rotation was used to further examine the internal consistency criteria. The Kaiser–Meyer–Olkin measure of sampling adequacy (0.928 for push motivation and 0.928 for pull motivation) and Bartlett's Test of Sphericity criteria were acceptable (4705, 899; $p < 0.000$ for push motivation and 4705,629; $p < 0.000$ for pull motivation) for factor analysis. In the factor analysis, items that had been below 0.5 were eliminated to summarize items of all scales into a smaller set of dimensions (Tabachnick & Fidell, 2013). As a result of this analysis, it was necessary to eliminate seven items from push motivation factors and four pull motivation items. The factor analysis was employed for the remaining 16 items dealing with push motivation and 20 items dealing with pull motivation. All the items' commonalities varied between 0.567 and 0.884 values. The total explained variance of push motivation by three factors was 52.703%, with eigenvalues above 1. The factor loadings, eigenvalues, and explained variances for EFA are shown in Table 2. Furthermore, the coefficients α of all factors shown in Table 2 exceeded the expected score benchmark (0.70) (Cronbach, 1951). So, internal consistency for factors of push and pull motivations is satisfactory in this study.

Results

Socio-demographic profile of the sample

The participant demographics are presented in Table 1. Of the 35 respondents of the pilot study, 33 of them were male (94.3%). Most of the respondents were married (80%) and held a Master's or PhD degree (57.1%). The last characteristic is

Table 1. Sample characteristics of quantitative phases.

Demographics		Pilot study (N = 35)		Final study (N = 361)	
		N	%	N	%
Gender	Male	33	94.3	354	98.1
	Female	2	5.7	7	1.9
Marital Status	Single	7	20	70	19.4
	Married	28	80	291	80.6
Age	21-30	2	5.7	42	11.9
	31-40	32	91.4	158	44.6
	>40	1	2.9	154	43.5
Education Level	Primary	3	8.6	66	18.3
	High School	–	–	142	39.3
	University	12	34.3	134	37.1
	Master and PhD	20	57.1	19	5.3
Profession	Employee	22	62.9	3	0.8
	Employer	3	8.6	94	26
	Student	2	5.7	54	15
	Retired	8	22.9	210	58.2

exceptionally related to the higher educational status of participants; therefore, it contradicts the prior studies (e.g., Arlinghaus, 2006c; Hammen van der & Chen, 2020) that indicated the high level of participation rates of lower educated individuals compared to the higher educated. Their overrepresentation in this study might be because of their great interest in being a member of fishery associations and holding an official fishing license.

Following the pilot study, the main research was applied to 361 respondents. Out of them, the vast majority of respondents were male (98.1%) and married (80.6%). Out of 361 respondents, 44.6% were between 31-40 years old, and 43.5% were above 40 years old. Most of the respondents held a university degree. The majority (58.2%) were retired. According to Arlinghaus et al. (2015), the growing wealth in industrialized countries changes people's attitudes toward recreational fishing because welfare allows people to meet their basic needs and hence provides them more free time to pursue higher-order psychological outcomes. As this study's population consisted of an industrialized country, the demographic factors of this current investigation may be associated with the larger population of recreational anglers in Europe or North America.

Outer model (measurement model tests)

The data were analyzed with exploratory factor analysis and Cronbach's alpha (α) coefficient (Table 2). Moreover, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to confirm and validate the scale's structure. PLS-SEM is more powerful, flexible, and sophisticated for the model assessment to predict and test the theory than covariance-based SEM with the Bootstrapping method (Hair et al., 2011, 2017). Besides, it performs whether variables used in the research are distributed with normality or non-normality with a small sample size (Chin & Newsted, 1999). In PLS-SEM, confirmatory factor analysis (CFA) was first applied to each motivational factor obtained from the exploratory factor analysis. Standardized factor loadings of CFA are shown in Table 2.



Table 2. Internal consistency results of exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability of factors.

EFA	CFA							
	Factor Loading	Eigenvalue	Variance Explained (%)	Cronbach Alpha	Outer Loadings	AVE	rho_A	(CR)
Push Motivation		8.432	52.703	0.791		0.561	0.835	0.864
socio-cultural								
To taste local food on the site-destination.	0.717					0.627		
To buy local food.	0.765					0.694		
To get away or escape from my daily routine life.	0.569					0.784		
To experience local people's life.	0.699					0.789		
To learn different cultures.	0.559					0.833		
Nature		1.370	8.565	0.957		0.787	0.961	0.967
To sport in a healthy environment.	0.807					0.866		
To enjoy the natural environment.	0.861					0.930		
To have a good time in nature.	0.838					0.918		
To sport in a natural environment.	0.877					0.909		
To sport in a clean environment.	0.884					0.920		
To camp and stay in nature.	0.667					0.796		
To contribute to the protection of the wild.	0.787					0.872		
To explore nature.	0.788					0.880		
Fishing		1.215	7.592	0.691		0.624	0.733	0.832
To participate in competitions related to recreational fishing.	0.636					0.833		
To catch the biggest fish.	0.766					0.834		
To take and share a picture on social media of the fish I caught.	0.799					0.694		
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.928								
Bartlett's Test of Sphericity: 4705,899 ; p < 0.000								
Pull Motivation		9.849	49.244	0.911		0.581	0.922	0.932
Geographic attribute and infrastructure								
Large fish sizes.	0.652					0.719		
There is a suitable ground for fishing.	0.798					0.833		
Possibility to set up appropriate camping sites for recreational fishing.	0.763					0.818		
Availability of an environment that meets hygiene and cleanliness standards.	0.776					0.836		
Convenient transportation facilities.	0.593					0.700		
Availability of the necessary health services.	0.608					0.772		
Reliable communication facilities.	0.678					0.739		
Wild hunting grounds in the destination.	0.772					0.834		
Availability of a safe environment.	0.644					0.690		
Underwater cleaning is carried out for recreational fishing.	0.518					0.657		
Local culture and custom		1.706	8.528	0.886		0.697	0.896	0.920
It is offered the opportunity to participate in cultural activities at the destination.	0.737					0.868		
The destination has different local traditions and forms of belief.	0.781					0.828		
Local handmade souvenir is available.	0.765					0.792		

The opportunity to participate in different touristic activities is offered.	0.764			0.870
Organizers have extensive knowledge of the history of the local area.	0.578			0.813
Activity		1.036		
Recreational fishing competitions are organized in the destination.	0.754		5.180	0.641
The destination has a name that is referred to by sportive activities.	0.755			0.871
The activities to be done are prepared by the travel agency.	0.567		0.847	0.898
Activities are carried out by people with knowledge and equipment on fishing.	0.679			
The event organizers have excellent communication.	0.636			
Kaiser-Meyer-Olkin measure of sampling adequacy: 0.943				
Bartlett's Test of sphericity, 4705,629; p < 0.000				

Table 3. Heterotrait monotrait ratio values.

Heterotrait Monotrait Ratio							
Push Factors				Pull Factors			
	Fishing	Nature	Socio-Cultural		Activity	Geographic	Local Culture
Fishing	–	–	–	Activity	–	–	–
Nature	0.684	–	–	Geographic	0.789	–	–
Socio Cultural	0.569	0.775	–	Local Culture	0.809	0.732	–

It was initially to validate and confirm the data set for scale development. To ensure the constructs' reliability and validity, convergent validity and discriminant validity were assessed. Convergent validity can be referred to as (Cunningham et al., 2001, p. 164), "the extent to which different measures that are designed to tap the same construct correlate with each other." To confirm convergent validity factor loadings, AVE and CR were tested. The factor loadings should be 0.60 or above, and composite reliability (CR) should be above 0.70. Table 2 shows that all factor loadings were between 0.610-0.930 scores and CR values (0.832-0.967) are within the recommended values (Hair et al., 2017). The Average Variance Extracted (AVE) value of any factor was referred to determine the convergent validity. As stated by Ali et al. (2018, p. 6) AVE, "reflects the overall variance in the indicators accounted for by the latent construct." The recommended threshold scores of Average Variance Extracted (AVE) should be above 0.5 (Fornell & Larcker, 1981). As seen in Table 2, all AVE values are above the recommended threshold. It can be concluded that convergent validity is well established for this scale development.

Discriminant validity is a critical analysis for testing a relationship between latent variables, and discriminant validity ensures construct measures' uniqueness (Henseler et al., 2009). Examination of the Fornel-Larcker criterion and cross-loadings are usually referred to evaluate discriminant validity. However, Henseler et al. (2009) stated that the heterotrait-monotrait ratio of correlations is an alternative way to assess discriminant validity. Hence, discriminant validity was investigated through Heterotrait-Monotrait Ratio. Table 3 shows the HTMT scores for each factor, which is proposed to be below 0.9 (Gold et al., 2001; Henseler et al., 2009). All scores for HTMT are presented below 0.9.

Conclusion

Theoretical implications

This study has clarified recreational fishers' motivations by conceptualizing recreational fishing by applying push and pull motivation theory. To the best of the authors' knowledge, this may be among the first study that explored and assessed the occurrence of recreational fishing tourists' motivations through push and pull motivation theory by following the scale generation phases recommended by Churchill (1979). By doing so, this current study responds to a recent call by Hall (2021) for conducting more studies for investigating the role of recreational fishing in tourism destinations.

The findings overlap the items used by previous studies, which were conducted for developing a scale to measure the recreational fishers' motivations. For instance, our

push motivations (i.e., social-cultural, nature and fishing) overlap the Fedler and Ditton (1994) framework of anglers' motivations, namely natural environment, social, and fishery resource; besides, partially overlap also with anglers' preferences that determined by Connelly et al. (2001), which are desire for the catch, skill development, and fish consumption. Furthermore, it expands specific motivational types of Beardmore et al.'s (2011) study by adding the local culture and custom pull dimension that links to the tourists' motives of participating in the locals' cultural activities, traditions, and forms of belief. Our final study findings also show conceptual convergence with Ardahan's (2012) and Ardahan and Turgut (2013) recreational fishing motivation scale dimensions (e.g., socialization, relaxing and being in nature, health-sport, competition-prestige, and escaping). Three dimensions (i.e., socialization, relaxing, being in nature) were overlapped by two push motivations of our study (i.e., social-cultural and nature), and the remaining three motivations (i.e., health-sport, competition-prestige, and escaping) were recompensed with fishing and activity dimensions of our study findings. Moreover, this current study's findings have overlapped and broadened recreational fishing motivational factors of Brenner's (2014) study (i.e., relaxation, waiting for outdoor, fishing for sports activity and food, and family or friends' togetherness) by adding the geographic attributes and infrastructure dimension that links to the tourists' needs in wetland destinations for recreational fishing.

However, the quantitative findings reveal that escaping from daily routine, relaxing, nature, food, and fishery resources remained important reasons for recreational fishing on the demand-side internal factors that cause travel movement. These, or equivalent items, are consistently measured in recreational fishing motivation studies (Ardahan, 2012; Ardahan & Turgut, 2013; Beardmore et al., 2011; Brenner, 2014; Connelly et al., 2001; Fedler & Ditton, 1994; Steffens & Winkel, 2002).

Conversely, participating in cultural activities with competitions instead of socializing with family or friends, catching the biggest fish instead of the high harvest of fishing, and protecting nature rather than being outdoors increased substantially in importance. Beyond these, this current study demonstrates the importance of geographic attributes and infrastructure, local culture, and custom and recreational fishing activities on the external supply-side factors that pull the travelers to specific wetland destinations. Therefore, given the information above, it can be stated that this current study is original for recreational fishing literature.

This study explained push motivations in three dimensions, namely fishing, nature, and socio-cultural. In contrast, pull motivations were identified in three dimensions: geographic attributes and infrastructure, local culture and custom, and activity. These push motivational factors are primarily consistent with previous studies on the motivations of different types of tourism activities (e.g., Caber & Albayrak, 2016; Chen & Chen, 2015; Suni & Pesonen, 2017). Furthermore, species diversity (Morey et al., 2006; Olausson & Liu, 2011; Schramm et al., 2003) and fishing as a sports activity are critical factors determining recreational fishing (Brenner, 2014).

This study confirmed that the most crucial push motivational factor was the activity itself. Consistent with the literature, this research also found that recreational fishers give importance to the sense of being in the natural environment and having a good time in nature and a clean environment, sport in a healthy environment, and

contributing to nature's protection. The second push motivation factor, nature, supports other studies in the tourism area (e.g., Caber & Albayrak, 2016; Chikuta et al., 2017; Kim et al., 2003; Suni & Pesonen, 2017). Also, recreational fishers perform their activity on wetland destinations, and being in nature is so important that they communicate with the destination environment (Ardahan & Turgut, 2013). Øian (2013) suggested that it has a great sense of feeling the nature for recreational fishers and enhances their destination experience.

Social-cultural interaction with the local community encourages tourists to travel to destinations and plays a crucial role in determining and understanding tourist motivation (Goeldner & Ritchie, 2009). In tourism push and pull motivation studies, tourists feel a sense of escaping from daily routine and a desire to encounter different cultures, which builds relationships with locals through their products. In this study, recreational fishers are pushed by social-cultural indicators of the destination. This result corroborates previous motivational studies (Chen & Chen, 2015; Fedler & Ditton, 1994; Sato et al., 2018). The three push motivations identified in this study are proposed as critical dimensions of recreational fishing experiences.

Recreational fishers are pulled by geographic attributes (e.g., large fish stock, suitable ground for fishing and camping, accessibility of transportation, and a safe environment) and infrastructure, local culture and customs, and activities in the destination. These pull motivational factors corroborate the findings of previous studies. For instance, the destination's geographic attributes and infrastructure play a pivotal role in recreational fishing. Without educated geographic conditions and infrastructure, an effective tourism movement cannot be created in wetland destinations. In a study by Caber and Albayrak (2016), the climbing area's infrastructure is a pull motivational factor for climbing tourists. Chen and Chen (2015) also suggested that the infrastructure's suitability at a destination is of great importance for birdwatchers.

In conclusion, geographic attributes and infrastructure are key factors that might enable tourists to perform the type of specific tourism activity. This result agrees with the findings of other studies, determining and exploring recreational fishing tourism motivations. Another key pull motivation factor, local culture, and custom of the destination motivate tourists to visit destinations. Tourists are pulled by local culture and customs indicators such as cultural activities, local traditions, forms of belief, local handmade souvenirs, and the local area's history. It is an important motivational factor of the destination attributes. This result agrees with previous studies (Chen & Chen, 2015; Sato et al., 2018; Yoon & Uysal, 2005). Activities in the destination pull tourists to participate in various types of tourism. In this study, recreational fishers give importance to fishing-based activities in the destination to be with their family and enjoy a pleasant time with them.

Managerial implications

The findings suggested that recreational fishing is a complex and multi-dimensional type. It is also essential for local tourism authorities in wetland destinations to better insight into tourists' satisfaction based on how their motivations influence their attitudes and behaviors toward the destination. Thus, managers should identify recreational fishing motivations and improve operational strategies to exceed travelers' expectations in

wetland destinations. We also agree with previous studies (e.g., Cowx et al., 2010; Hunt et al., 2013; Shrestha et al., 2002; Unfer & Pinter, 2018), which are calling for enhancing the recreational fishing activities in wetland destinations for the conservation of aquatic biodiversity. Therefore, the government's appropriate recreational fishing policy is in line with this requirement for the sustainable development of wetland destinations.

The study reveals that fishing, nature, and socio-cultural are key push factors to encourage tourists to visit the destination. Therefore, supporting Ditton and Sutton (2004) suggestions, destination authorities should make some decisions to sustain their natural resources and socio-cultural attractions to fulfill recreational fishers' sense of being in a natural environment and different cultures. Given the potential contributions of recreational fishing tourists in preventing the decline of fish stock (Cardona & Morales-Nin, 2013; Michael Hall, 2021), responsible authorities should also pay special attention to developing specific nature-based recreational fishing activities for tourists regarding the preservation of the destination endemic fish.

One of the fundamental reasons that push recreational fishers to a destination is the nature factor. Recreational fishers expect a place with sufficient health conditions and want to conduct this activity in a clean environment. Also, security and easy accessibility are essential for recreational fishers. For this reason, destination managers should make investments in an easily accessible place, health services and take actions for cleaning the destination. Additionally, social-cultural values as having a good time, meeting with local culture, and tasting local foods are vital for attracting recreational fishers to the destination. Therefore, authorities should invest in areas where local culture and recreational fisherman can meet.

Furthermore, geographic attributes and infrastructure, local culture and customs, and activity are the most noticeable pull motivational factors of recreational fishers. Managers of wetland destinations, local governments, and policymakers should develop their geographic attributes and infrastructure for recreational fishing activities and local culture and customs. However, this infrastructure should not mean that building a harbor may harm the nature of recreational fishing that provides economic, environmental, and social benefits for local populations. Likewise, Garcia Rodrigues et al. (2017) noted that constructing a port will increase boat rental opportunities for tourists while reduces the probability of locals taking advantage of ecosystem services such as flood management, lifecycle preservation (aquatic habitat) for seafood provisioning, or recreational opportunities for others who do not own boats. Along with the same line, building platforms for fishing and camping areas are essential details that can attract tourists. It is thought that sustainably conducting these activities can make an outstanding contribution not only in terms of destination promotion but also in terms of economic gain. Finally, fishing-based activities are essential for recreational fishers to have a good time participating in fishing organizations. Given qualitative data results that highlight the opportunity to have natural water sources, organizing the abundance of fishing-based activities can encourage tourists to stay longer in the destination.

Limitations and future research

Finally, there are limitations for this research that should be considered for future studies. First, the generalizability of these results is subject to certain limitations. For

instance, this study was conducted on only Turkish recreational fishers and members of recreational fishery associations in Turkey, who hold an official fishing license. Therefore, the participants of this study may be considered highly skilled anglers. The cross-sectional research design limits this research generalizability; thus, future studies using other research designs would be more generalizable by including other countries' citizens with amateurs.

Moreover, comparing the traditional recreational fishing studies (e.g., Arlinghaus, 2006c; Hammen van der & Chen, 2020), the socio-demographic profile of this study's participants are primarily biased toward older and highly educated individuals. Therefore, it is challenging to analyze whether the power of the push and pull motivation factors among education level and age of travelers. Thus, this study sheds light for further studies to investigate any differences between push and pull factors among the socio-demographic factors of travelers.

Although the study has successfully demonstrated the recreational fishing motivation within the push and pull motivational theory, it has certain limitations in investigating the recreational fishers' motivation in a certain way. Thus, it might be necessary to explore recreational fishing motivations using different approaches such as the Travel Career Patterns and Escaping-Seeking Dimensions model.

Further research is needed to understand the implications of recreational fishers' motivations fully. Recreational fishers have different motivations; it should be essential to determine a motivation-based segmentation in recreational fishing. Future studies should examine the impact of recreational fishing motivation on visitors' overall satisfaction and behavioral intentions. In addition, future studies need to be carried out to cross-national validation of this questionnaire. Also, future studies regarding the role of engagement, different attitudes, experience, place attachment would be worthwhile.

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