Impact of Tourists' Psychological Ownership of an Eco-Friendly Trail on Their Behavior Intention: An Empirical Investigation of Jeju Olle Trail in South Korea

Abstract

By adopting psychological ownership theory, this study examines the factors influencing trail visitors' psychological ownership and behavioral intentions. A field survey was conducted with Korean tourists of Jeju Olle Trail on Jeju Island, South Korea, to test determining factors for psychological ownership and the role of commitment in the relationship between psychological ownership and intention to recommend. The results of the study show that tourists' participation and their sense of belonging were key predictors for psychological ownership. In addition, tourists' psychological ownership had a positive influence on their commitment and intention to recommend. As a result, this study discusses theoretical and practical implications along with suggestions for future research in this field.

Keywords: Psychological Ownership, Tourist Participation, Commitment, Sense of Belonging, Behavioral Intention, Eco-Friendly Trails

Introduction

Tourists tend to build a strong psychological or emotional attachment to a tourism destination when they perceive themselves as part of the destination, by participating in various destination activities (Darnell & Johnson, 2001). Tourists' attachment to the destination is believed to build a strong commitment to the destination as an advocate (Kim, Ng, & Kim, 2009). Researchers (Chen & Dwyer, 2018; Zhang & Xu, 2019) have indicated that when tourists show strong attachment to a destination, they tend to have positive behavior intentions toward the destination (i.e., recommending it to others, protecting the destination's image through word-of-mouth, and providing constructive suggestions for local tourism improvements).

As indicated in the psychological ownership theory, individuals can build a feeling of ownership regardless of the existence of a physical entity (Astryan, Slevitch, Larzelere, Morosan, & Kwun, 2013; Pierce, Kostova, & Dirks, 2001; 2003). In other words, individuals can establish a feeling of ownership with various targets, including both material and immaterial objects. Psychological ownership has been recognized as an important concept in understanding an individual's continuous relationship with the target (Pierce et al., 2003). In organizational research, psychological ownership indicated an employee's psychological state in which they feel ownership of the organization. Organizational research has shown that individuals with high psychological ownership tend to stay longer and have a strong commitment to the organization (Heskett, 2002; Saks, 2006). In the tourism context, considering psychological ownership as place attachment, researchers (Hosany, Prayag, Van Der Veen, Huang, & Deesilatham, 2017; Kyle, Graefe, Manning, & Bacon, 2004) purported that when tourists had high place attachment, they tended to have a positive emotional relationship with the place, and intention to recommend.

Located on Jeju Island in South Korea, the first Korean natural heritage site on UNESCO's world heritage list (Jeju Olle Trail, 2021), Jeju Olle Trail has drawn great attention from those who want to enjoy a beautiful and scenic natural environment. According to the Jeju Rural Revival Support Center (The Jeju Weekly, 2014), Jeju Olle Trail became a key tourism resource for the local economy, generating an annual scenic value of $32 million. Of the visitors the Rural Revival Support Center studied, about 95% reported that they would be willing to revisit Jeju Olle Trail and recommend it to others. Researchers (Hosany et al., 2017) addressed that travelers' intention to recommend were strongly related to their emotional and psychological attachment to the place or the objects. Thus, this study identifies what makes travelers' commit to a destination and share about Jeju Olle Trail with others, by adopting the concepts of psychological ownership. More specifically, this study aims to investigate key factors that affect Korean tourists' psychological ownership of Jeju Olle Trail and their effects on commitment and intention to recommend Jeju Olle Trail as an lifelong eco-friendly trail destination.

Literature Reviews

Jeju Olle Trail on Jeju Island, South Korea

In the past few decades, individuals' attention to and concerns about the environment have been continuously increasing (Han, Hsu, & Lee, 2009). With tourists' growing concerns about the environment, maintaining eco-friendly destinations has become a notable issue in the tourism context. The emergence of eco-tourism, a type of tourism that concentrates on sustainability and promotes environmental understanding and conservation, is an example that

reflects tourists' attention toward the environment and sustainability (Lee & Moscardo, 2005). Eco-friendly trails have been gaining keen interest from environment-conscious tourists because they want to experience surrounding natural areas along with the trails in a sustainable way through conserving natural resources.

The official website of Jeju Olle Trail (VisitKorea, 2020) indicates that the trail is a well-maintained eco-friendly destination where people can enjoy the beautiful scenery of coastlines and volcanic hills. Jeju Olle Trail has 26 routes, consisting of 21 main routes and five sub-routes (see Figure 1), which go through various landscapes along each trail, including small villages, beaches, farms, and forests. Each route differs in length and difficulty which allows visitors to choose the appropriate course that meets each individual's level, and offers a unique opportunity to soak in the beauty of Jeju Island and its culture. The shortest route takes approximately one hour and the longest up to eight hours to complete. The total length of the walking paths is more than 200 miles, connecting all trails. Jeju Olle Trail is constructed in a circular pattern, so that hikers can start and finish their hikes in the same location. Some of the routes are placed along beautiful coastlines and have been set up for hikers to enjoy a panoramic view of UNESCO heritage sites.

Insert Figure 1 here

Due to the high accessibility and popularity of eco-friendly hiking trails for all age ranges of tourists, the number of tourists to Jeju Olle Trail has noticeably increased since its opening in 2007, from 3,000 to 941,400 in 2015 (Baek, 2015). Jeju Olle Trail appeals to tourists through its slogan, "Be slow and enjoy walking," which is completely the opposite of fast-paced daily life (Lim, 2018). Jeju Olle Trail has captured tourists' attention not only through its slogan, but through various unique features such as an eye-catching, eco-friendly logo and stunning surrounding scenery (Jeju Olle, 2018). Focusing on tourists' well-being and eco-friendly environments, Jeju Olle Trail has reshaped tourists' destination activities and their tourism patterns on Jeju Island. Jeju Olle Trail's constant efforts to enhance tourists' experience have increased numbers of repeat tourists every year, potentially generating their strong attachment, psychological ownership, participation, sense of belonging, commitment, and word of mouth recommendation of Jeju Olle Trail.

Psychological Ownership

Individuals possess numerous objects, not just limited physical objects such as properties. In nature, individuals have exclusive feelings toward an object they own and establish a strong attitude toward their relationship with the object (Dittmar, 1992). An individual's state of mind in which he/she feels a sense of ownership toward the target is called psychological ownership (Pierce, Rubenfeld, & Morgan, 1991). Namely, psychological ownership refers to an individual's cognitive and emotional bond and possessive feelings toward target objects (Pierce et al., 2001). The essence of an individual's psychological ownership is that the individual is psychologically tied to the target objects (Pierce et al., 2001) or feels their possession as an extension of themselves (Belk, 1988; Dittmar, 1992). In other words, an individual feels ownership from his/her possession of objects, and the possession of materials strongly affects the individual's identity, which in turn plays a significant role in forming modern society (Pierce et al., 2001). It

has also been shown that the feeling of ownership, or psychological ownership, can have an effect similar to that of legal ownership on object valuation (Peck & Shu 2009; Shu & Peck 2011).

Research in philosophy and psychology indicated that an individual's feeling of ownership can be developed toward various objects, including both material and immaterial, and plays a critical role in terms of an individual's behaviors, emotions, and psychological reactions (Pierce et al., 2001). Because of the significance of psychological ownership in individual behaviors, researchers attempted to identify the effects of psychological ownership in a various settings, such as a restaurant setting (Asatryan & Oh, 2008), a destination (Zhang, 2018; Zhang & Hu, 2019), and an organization (Pierce et al., 2001; Pierce & Rogers, 2004; Vandewalle, Van Dyne, & Kostova, 1995). For example, organizational studies found that an employee's psychological ownership strongly affects his/her commitment toward the organization, attitude, behaviors, and productivity (Pierce et al., 2001; Pierce & Rogers, 2004; Vandewalle, Van Dyne, & Kostova, 1995). As psychological ownership indicated an individual's cognitive and emotional possession of the targets, it was distinct from legal ownership, indicating the concept of psychological ownership connected to both individualism and collectivism (Asatryan et al., 2013). For example, individuals can have a feeling of ownership toward the object shared with other people, such as their favorite restaurants (Asatryan & Oh, 2008) or their place of residence (Zhang, 2018; Zhang & Hu, 2019). Previous research shows that an individual's psychological ownership toward their organization is positively associated with commitment and organizational citizenship behaviors (Pierce et al., 2003). Also, it has been found that residents' psychological ownership is significantly related to the community and commitment (Vandewalle et al., 1995).

As psychological ownership is distinctive from legal ownership and can be applied to shared objects, an individual's psychological ownership is also relevant in the context of tourism. Morais, Dorsch, and Backman (2004) stressed that a tourist's emotional attachment toward a tourism provider is significant in building long-term relationships. Psychological ownership was found to significantly influence forest owners' behaviors and their forest management decisions (Lähdesmäki & Matilainen, 2014). In the studies of Kyle, Graefe, Manning, and Bacon (2004) and Peck and Shu (2009), it was found that tourists had a strong place attachment when they perceived the destination to be part of their belongings.

However, there is limited discovery of the effect of psychological ownership from tourists' perspectives. Furthermore, the growing attention to the environment will influence tourists' psychological ownership toward eco-friendly attractions. Therefore, this study identifies the impact of psychological ownership toward an eco-friendly attraction, Jeju Olle Trail, from tourists' perspectives.

Antecedents of Psychological Ownership

The possession of an object does not sufficiently infer an individual's psychological ownership. An individual's psychological ownership is associated with the relationship between the individual and the target object, and whether the individual considers the target object closely connected to the self (Pierce et al., 2003; Furby, 1978). In other words, an individual's psychological ownership is object-specific (Asatryan & Oh, 2008; Zhang & Hu, 2019). Focusing on residents' perceptions toward a tourism destination, Zhang and Xu (2019) indicated that as far as the residents felt the destination was theirs, they tended to have a higher level of affective and functional attachment to the destination. Previous studies (Asatryan & Oh, 2008; Zhang & Hu,

2019) identified that individuals' psychological ownership was affected by three constructs: perceived control, customer participation, and a sense of belonging.

Perceived Control

Perceived control refers to an individual's ability to purposely affect psychological, behavioral, and environmental issues (Morling & Fiske, 1994). Specifically, perceived control can be divided into three types: behavioral control, decisional control, and cognitive control. Behavioral control reflects the possibility of direct action on the environment; decisional control refers to the control over selecting a choice among alternative courses of action; and cognitive control is associated with an individual's interpretation of potential events (Averill, 1973). In this study, perceived control is defined as the extent to which tourists perceive that they are capable of affecting Jeju Olle Trail by participating in hiking and/or tourism activities.

Prior studies have identified the positive relationship between perceived control and psychological ownership, which in turn predict behavioral intention. For example, Pierce, O'driscoll, and Coghlan (2004) found employees' perceived control had a positive influence on psychological ownership toward their organization. The same positive relationship between users' perceived control and psychological ownership toward websites was found in the study of Lee and Chen (2011). In the tourism context, tourists' perceived control positively affected their attitudes toward a tourism destination to predict their responsible environmental behaviors (Wang, Zhang, Yu, & Hu, 2018), their behavior intentions to visit a winery (Sparks, 2007) and their intentions to visit a tourist destination (Lam & Hsu, 2006; Quintal, Lee, & Soutar, 2010). However, Asatryan and Oh (2008) found that perceived control had no significant influence on diners' psychological attachment to the restaurant. Due to the inconsistent results found in previous studies, this study strived to identify a role of perceived control in a tourism context and its effects on psychological ownership toward an eco-friendly trail, Jeju Olle Trail. Based on the discussion above, the following hypothesis was derived:

H_1: Tourists' perceived control of Jeju Olle Trail positively influences their psychological ownership toward Jeju Olle Trail.

Tourist Participation

An individual's tourism experience is co-created by both the subject and tourism service provider. Tourists participate in various travel activities to generate memorable tourism experience and maximize their satisfaction with them (Auh, Bell, McLeod, & Shih, 2007; Teng & Tsai, 2020). In the tourism context, tourist participation behavior referred to his/her involvement in service production and the delivery process (Revilla-Camacho, Vega-Vázquez, & Cossío-Silva, 2015) and is a required behavior to create his/her values (Shamim & Ghazali, 2014; Yi & Gong, 2013). Tourist participation behavior mainly included information seeking, information sharing, responsible behavior, and personal interaction (Yi & Gong, 2013). Relationship quality between the service providers and tourists played a crucial role in customer engagement (Chen, 2017), customer citizenship behavior (So, King, Sparks, & Wang, 2016), and commitment (Shafiee, Tabaeeian, & Khoshfetrat, 2020). In this study, tourist participation is defined as the degree to which tourists are involved in the creation and delivery of the tourism experience and the quality of services provided. Specifically, tourists' feedback on their perceived quality of environment and services, expression of their hiking preference, and suggestion for further improvement can be considered as tourist participation.

Individuals feel a sense of ownership when they are involved in the creation of the experience by applying their skills or knowledge (Furby, 1978; Rudmin & Berry, 1987). In order

to enhance the fine tourism experience, tourists may be involved in various tourism activities based on their preferences and provide feedback or suggestions to the tourism service providers. Furthermore, individuals are likely to have psychological attachment as a result of their cooperation and co-creation with the target (e.g., eco-friendly trail) (Pierce et al., 2003). Tourists may find themselves psychologically connected to the place by actively participating in its offerings. Particularly, tourists may be psychologically tied to the eco-friendly destinations where they can experience unique and memorable eco-friendly tourism activities and offer their suggestions or feedback to destination management. Therefore, this study developed the following hypothesis:

> H_2: Tourists' participation in Jeju Olle Trail positively influences their psychological ownership toward Jeju Olle Trail.

Sense of Belonging

Sense of belonging is referred to as having an attachment, a sense of identification, and a sense of membership (Hagborg, 1998). Also, a sense of place refers to an emotional tie between people and a place (Mahon, 2007). Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier (1992) summarized a sense of belonging as 1) psychological, social, spiritual, or physical involvement, 2) attribution of meaningfulness to that involvement, and 3) establishment of fortification of a fundamental foundation for emotional, cognitive, and behavioral responses. An individual who has a strong sense of belonging is more willing to share his/her knowledge or information with others (Hars & Ou, 2002; Zhao, Lu, Wang, Chau, & Zhang, 2012). A sense of place positively affects tourism development support (Zhu, Liu, Wei, Li, & Wang, 2017) and tourists' behavior intentions (Hung, Peng, & Chen, 2019). A sense of belonging refers to an individual's feeling of being at home and creating an intimate relationship and affection with the place (Seamon, 1979). An individual's sense of belonging to a place is closely related to psychological ownership (Duncan, 1981). As an individual's motivation for psychological ownership is partly established in having a home, their own place (Pierce et al., 2003). People may perceive to be at home even toward non-material objects, such as language and skills (Dreyfus, 1991). Furthermore, a sense of belonging could be determined by an individual's perception that he/she was a member of the community (Woods, 2003). A tourist's sense of belonging and place attachment significantly affected satisfaction and behavior intention towards a destination (Abou-Shouk, Zoair, El-Barbary, & Hewedi, 2018). A destination, such as an eco-friendly trail, may be considered a place like home during travel. Moreover, tourists may feel a sense of ownership toward the place. For example, some tourists might have a special feeling toward a destination, such as their favorite hiking course. Researchers (Asatryan et al., 2013; Hurtado & Carter, 1997; Nora & Cabrera, 1993) discussed the impact of a sense of belonging on psychological ownership and the necessity of further studies about the sense of belonging and its consequences. Consistent with the discussion above, the following hypothesis was developed:

> H_3: Tourists' sense of belonging to Jeju Olle Trail positively influences their psychological ownership toward Jeju Olle Trail.

Outcomes of Psychological Ownership

Researchers (Heskett, 2002; Saks, 2006) addressed that there are two factors that can be predicted by psychological ownership: commitment and intention to recommend. In an organizational study (Avey, Avolio, Crossley, & Luthans, 2009) employees' psychological ownership toward their company could be a key predictor of their intention to stay in the

organization and commitment to the organization. In the context of tourism, a similar relationship could be predicted that when tourists felt strong psychological belonging to a destination, they tended to visit the place again and have a strong commitment to recommend it to others (Zhang & Xu, 2019). In other words, an employee's commitment to the organization can correspond to tourists' loyalty or commitment to a tourism destination. As the tourism destination heavily relies on repetitive tourists, outcomes of psychological ownership can be key predictors of tourists' future behavior.

Commitment

An individual's commitment to an object indicates an inclination to maintain his/her relationship, which he/she values (Moorman, Zaltman, & Deshpande, 1992). When people have a strong commitment to the target, they are more likely to repeatedly consume the target and reject competitors' suggestions or offer even if the options are better than their committed target (Reynolds & Arnold, 2000). In the context of tourism, when tourists have a strong commitment to a tourism destination, they tend to return to the destination and reduce switching behaviors and build a strong loyalty to the destination (Oliver, 1999; Reynolds & Arnold, 2000). When gastronomers travel, they are so motivated about local and authentic foods at the tourism destination, building a strong commitment to both food and travel (Afyeiwaah, Otoo, Suntikul & Huang, 2019). Shafiee, Tabaeeian, and Khoshfetrat (2020) also addressed in their study that tourists' participation in tourism activities positively influenced their commitment and satisfaction toward their behavior intentions. Tourists' strong commitment to the destination is critical in maintaining a loyal relationship in this highly competitive tourism destination market (Asatryan & Oh, 2008) and eventually leads to an increase in tourism revenue as returning tourists bring in higher profit (Berezan, Raab, Yoo, & Love, 2013; Kandampully, Zhang, & Bilgihan, 2015). Thus, the following hypothesis was derived:

H$_4$: Tourists' psychological ownership toward Jeju Olle Trail positively influences their commitment to Jeju Olle Trail.

Intention to Recommend

When individuals feel a strong attachment toward the target, they might share their positive experiences with others, such as friends, relatives, and colleagues (Kumar, Bohling & Lassa, 2003; Westbrook, 1987). With such an attachment toward the target, tourists' psychological ownership should generate a passion, positive emotions, and intention to share destination information with others (Asatryan & Oh, 2008). Intention to share with others and recommend has been abundantly studied in the tourism discipline. Specifically, the effect of experience sharing and recommendation has been critical in the fields of service marketing (Garnefeld, Helm, & Eggert, 2011, Kandampully et al., 2015; Oh, 2002). Particularly, word-of-mouth has been considered an important factor that helps bring new customers to the company (Garnefeld et al., 2011) as individuals perceive the information more credible and equitable (Chueng, Sia, & Kuan, 2012; Kandampully et al., 2015). Many studies supported the significant effect of word-of-mouth on tourism products, destination image, satisfaction, and travel decision making (Hosany, et al., 2017; Hosany & Witham, 2010; Litvin, Goldsmith, & Pan, 2008; Morgan, Prayag, Hosany, Muskat, & Del Chiappa, 2017; Pritchard, & Piggott, 2003; Shanka, Ali-Knight, & Pope, 2002). In addition, researchers (Chen & Dwyer, 2018; Choo, Park, & Petrick, 2011; Zenker & Rütter, 2014; Zhang & Xu, 2019) examined how residents developed their psychological ownership or attachment toward a destination. According to Chen and Dwyer

(2018), residents' place attachment positively affected their destination brand such as word-of-mouth and ambassador behavior. Zhang and Xu (2019) also empirically examined the impact of residents' psychological ownership on their place citizenship behavior, resulting in the positive recommendation to others. In the tourism setting, tourists who have psychological ownership toward a particular destination are likely to share their positive tourism experience and recommend the destination to others. Based on the discussion above, the following hypotheses were developed:

H$_5$: Tourists' psychological ownership toward Jeju Olle Trail positively influences their intention to recommend Jeju Olle Trail to others.

H$_6$: Tourists' commitment to Jeju Olle Trail positively influences their intention to recommend Jeju Olle Trail to others.

Research Framework and Hypotheses

Building upon the previous studies in psychological ownership, this study developed a theoretical framework along with the hypotheses, as shown in Figure 2.

Insert Figure 2 here

Methodology

Sampling

This study conducted an on-site intercept survey at one of the course exits of Jeju Olle Trail for a week using a systematic sampling method. The systematic sampling method was selected due to its equal probabilities of selection and its practical advantages, such as the capability to collect samples at a fixed time interval (Trochim, 2001; Yates, 1948). Specifically, professionally trained survey administrators conducted the survey by contacting every fifth person at the seventh course exit of Jeju Olle Trail, regardless of his/her residency, because the population of interest was all tourists of Jeju Olle Trail. As trained, survey administrators contacted every fifth individual and asked his/her willingness to participate in the survey. Once the individual agreed to participate, he/she received the survey questionnaire and was asked to complete and return it to the administrator. The survey consisted of three sections. The first section included the study description, consent form, and questions asking about respondents' travel characteristics. The second section included questions for the key constructs in the study. The last section asked respondents for their socio-demographic information.

Measures

All measurement items were adopted from previous literature, and each construct was measured with multiple items for reliability and validity. All measures were adopted from Asatryan and Oh (2008) and modified to fit in the context of this study. Specifically, customers' participation, sense of belonging, and psychological ownership were measured by five items, respectively. Three items were used to measure perceived control, intention to recommend, and commitment, respectively. All items were measured on a 5-point Likert scale. Since the official language of the study site is Korean, the measures were developed in English and translated into Korean. In order to ensure the reliability and validity of the measures, the Korean translated version of the study was translated back to English and reviewed.

Data Analysis

This study employed the two-step approach (Anderson & Gerbing, 1988) to analyze the data. R version 3.5.2 was used to conduct all data analyses in this study (R Core Team, 2018). Before testing the measurement and structural models, the data were tested for the normality of the distribution. The measurement model was tested by conducting confirmatory factor analysis (CFA) based on the maximum likelihood estimation with robust standard errors (MLR). The model was tested through the structural equation modeling approach, based on MLR estimation technique.

Results

Demographic Profile of Respondents

During the period of data collection, a total of 400 questionnaires were distributed. For the data analysis, 377 out of 400 questionnaires were used due to the incompleteness of 23 responses. Table 1 shows the results of respondents' demographic profile. More than half of the respondents (55.4%) were female. The age range of the respondents was from 18 to 70. More than half of the respondents (59.64%) were younger than 40 years old. The majority of the respondents were employed (50.7%). Most of the respondents (84.7%) were highly educated with at least an associate degree. As Jeju Olle Trail has been a popular destination among Koreans, the majority of the respondents (93%) were tourists from different regions in South Korea.

Insert Table 1 here

Measurement Model Test

This study examined the normality of the data by using Skewness and Kurtosis statistics, resulting in the univariate normal distribution of the data. As Skewness values ranged from -1.10 to +.23 and Kurtosis value fell between -.59 and 2.13, indicating that the distribution of the data was normal (Kim, 2013). As this study employed a self-administered survey method, a test for common method bias was conducted using Harman's (1960) single-factor test, the most commonly used method to detect common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). When all items were loaded onto one construct without any rotation technique, the variance explained by the general factor was .35, which was less than the threshold of .50 (Podsakoff et al., 2003). Thus, the absence of common method bias was demonstrated. An iterative process of confirmatory factor analysis (CFA) was conducted to test the overall fit of the measurement model. Due to the low factor loadings, one item from participation (.652), two items from the sense of belonging (.547, .695), and one item from commitment (.368) were dropped. After eliminating the low loaded items, the results of CFA indicated that the overall fit of the model was satisfactory (CFI: .958; TLI: .949; RMSEA: .055; SRMR: .048). As shown in Table 2, the factor loadings were equal to or greater than .704, indicating the variance with the constructs measured was greater than the error variance (Gefen, Straub, & Boudreau, 2000). The average variance extracted (AVE) for each construct was greater than .50, indicating that the shared variance of indicators was greater than the error variance (Fornell & Larker, 1981), showing sufficient convergent validity. The square root of AVE was greater than the bivariate

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correlation between constructs, indicating sufficient discriminant validity (see Table 3) (Fornell & Larker, 1981). Cronbach's alpha and composite reliability were greater than .7, indicating sufficient reliability.

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Structural Model Test

The structural model was tested with R version 3.5.2 and lavaan package (R Core Team, 2018; Yves Rosseel, 2012). Specifically, the structural model was tested based on MLR estimation technique. The results of structural equation modeling showed an acceptable fit with the data (CFI: .944; TLI: .935; RMSEA: .062; SRMR: .066). All hypotheses, except H1, were supported (see Table 4). Hypothesis 1 was not supported, indicating no significant impact of perceived control on psychological ownership ($\beta = 0.151$, $p = .077$). On the other hand, hypotheses 2 and 3 showed that participation ($\beta = 0.312$, $p = .000$) and sense of belonging ($\beta = 0.944$, $p = .000$) had significant impacts on psychological ownership. Hypotheses 4 and 5 were supported, resulting in the significant relationship between psychological ownership and its consequences (i.e., commitment and intention to recommend). Specifically, psychological ownership positively influenced commitment ($\beta = 0.371$, $p = .000$) and intention to recommend ($\beta = 0.455$, $p = .000$). Commitment appeared to have a significantly positive relationship with intention to recommend, supporting hypothesis 6. From the results of hypotheses 4, 5, and 6, the mediation analysis using the causal step approach was conducted (Baron & Kenny, 1986). The results revealed that the effect of psychological ownership on intention to recommend decreased ($\beta = 0.610$, $p = .000 \rightarrow \beta = 0.455$, $p = .000$) when commitment was added as mediator between psychological ownership and intention to recommend, indicating commitment was partially mediating the relationship between psychological ownership and intention to recommend ($\beta = 0.168$, $p = .011$).

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Conclusion and Discussion

Conclusion

Hiking trails have grown rapidly in tourism destinations to improve sustainable development efforts. The growth of sustainable development of eco-friendly destinations is especially true in South Korea, where both national and local governments support the development of eco-friendly trails to promote domestic and international travel, thereby boosting the regional economy. According to the psychological ownership theory (Astryan et al., 2013; Pierce et al., 2001; 2003), individuals who have psychological ownership of an object are likely to have positive feelings toward the object. In the context of tourism, when tourists have a feeling of ownership to a certain destination, they are more likely to feel attached to the destination and recommend it to others (Garnefeld et al., 2011, Kandampully et al., 2015). Particularly, it would be easier to shape tourists' psychological ownership if the destination is

sustainably well-developed and an eco-friendly walking trail located on the Korean's first UNESCO heritage site, Jeju Island. As indicated in the study of Peck, Kirk, Luangrath, and Shu (2020), people's psychological ownership was a driving factor to increase their perceived responsibility toward the target object, leading to active sustainable behavior. Therefore, in order to examine key factors affecting tourists' psychological ownership toward an eco-friendly tourism destination, the researchers chose Jeju Olle Trail, which is well-known as one of the most successful sustainable tourism destinations.

Understanding tourists' psychological ownership toward tourism destinations, such as the eco-friendly Jeju Olle Trail, is imperative for the tourism industry as the industry is highly competitive and has low switching costs (Asatryan & Oh, 2008). This study attempted to investigate tourists' psychological ownership toward an eco-friendly trail and its antecedents and consequences. The tested research model of psychological ownership in the context of eco-friendly tourism helps to explain the importance of psychological ownership in creating tourists' commitment and intention to recommend to other people. Specifically, the findings indicate that tourist participation and sense of belonging have positive influences on psychological ownership toward Jeju Olle Trail, suggesting the more tourists are involved in the creation of their tourism experience, the stronger psychological ownership toward Jeju Olle Trail they have. When tourists perceive themselves as members of the community or feel at home at the destination, they feel a sense of ownership toward Jeju Olle Trail.

However, different from what the study proposed, this study found that there was no significant positive effect of perceived control on psychological ownership, indicating tourists would not build strong psychological ownership no matter how much control they have over the management and/or their experience with Jeju Olle Trail. This is consistent with the findings of Asatryan and Oh (2008). The insignificant relationship between perceived control and psychological ownership might be because tourists do not think they have much direct control over, or they cannot see their control immediately. The other two antecedents, participation and sense of belonging, have significant positive relationships with psychological ownership toward Jeju Olle Trail, confirming the consistent results from the previous studies (Yi & Gong, 2013; Pierce et al., 2003). The findings of this study also show the positive influence of psychological ownership on commitment and intention to recommend (Oliver, 1999; Reynolds & Arnold, 2000), indicating tourists with psychological ownership are more likely to share their experience with Jeju Olle Trail with others and to recommend others to visit Jeju Olle Trail. Furthermore, the positive impact of commitment on the intention to recommend indicated that tourists who are committed to Jeju Olle Trail tend to share with others about their experience with Jeju Olle Trail, compared to other options and to encourage them to visit the Trail as well.

Theoretical implications

The findings of this study offer theoretical implications to enhance further the concept of psychological ownership and adopt its idea to improve tourism marketing strategies for the use of eco-friendly trails like Jeju Olle Trail. Despite the volume of studies about the precursors of commitment and intention to recommend, not many studies focused on the psychological aspects as a precursor in the eco-friendly tourism context. Particularly, the importance of psychological ownership toward destinations and its empirical validation have been limited in tourism research. Therefore, this study examined the relationships between psychological ownership and its antecedents and consequences in the tourism context. The findings of this study were consistent with previous research about psychological ownership in a different context (e.g., organizational

research) (Heskett, 2002; Saks, 2006). In other words, the findings of this study were the extension of psychological ownership theory to the tourism context. The results show the significant relationships between psychological ownership and its antecedents and consequences, indicating that psychological ownership theory, which has mostly been studied in organizational studies can be applied in the tourism setting (Asatryan et al., 2013).

This study found the insignificant impact of perceived control on psychological ownership. It should be noted that the finding was consistent with the previous study (Asatryan & Oh, 2008) in the hospitality setting, thereby indicating the possibility of the existence of insignificant construct in psychological ownership theory in the hospitality and tourism context. Future studies investigating plausible explanations of the insignificant relationship would be valuable in understanding individuals' psychological ownership in the tourism and hospitality setting.

Practical implications

This study provides the tourism industry with practical implications by examining the significant impact of psychological ownership on tourists' commitment and intention to recommend. As the tourism industry has fierce competition among destinations and has relatively low switching costs, recognizing the importance of psychological ownership in the tourism context will be beneficial for destinations. Furthermore, this study identified the antecedents of psychological ownership, thereby helping the industry focus on the factors that enhance tourists' psychological ownership toward the destination, which will eventually increase the number of repeat tourists and profits. Based on the findings of this study, Jeju Olle Trail management might develop marketing platforms to engage tourists in all activities available at Jeju Olle Trail to enhance their psychological ownership. A Jeju Olle Trail mobile app or social media accounts would be plausible platforms to connect tourists and trail management to share feedback and suggestions and co-create their experience. Moreover, destination marketing organizations (DMOs) may develop marketing strategies that improve tourists' sense of belonging to the destination. For instance, Jeju Olle Trail has already started issuing a certificate of completion of Jeju Olle Trail, which is named the Jeju Olle Passport (Jeju Olle, 2018). Further marketing programs related to this Jeju Olle passport would be helpful in enhancing tourists' sense of belonging to Jeju Olle Trail.

Limitation and future research

The findings of this study are subject to several limitations. Focusing on Jeju Olle Trail as a study setting, the findings of this study cannot be generalized to other trails. Future studies that investigate tourists' psychological ownership of other eco-friendly trails would be helpful for improving the generalizability of the current study. Due to the nature of the current study, this study examined key factors affecting tourists' psychological ownership and its consequences. Future research would be strongly recommended to examine whether the residency (i.e., tourists vs. residents) differentiates the relationships between psychological ownership and its antecedents and consequences. Additionally, individual tourists' traits should be included in a future study to identify how they can affect psychological ownership toward eco-friendly trails like Jeju Olle Trail, assuring environmental conscious people would have a strong attachment toward eco-friendly trails which might consider it as part of themselves. Finally, a future study is strongly recommended to investigate the extent to which tourists' psychological ownership

toward an eco-friendly trail will be transformed by global warming or unprecedented social and economic situations, such as the COVID-19 pandemic.

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Figure 1. The Map of Jeju Olle Trail in Jeju Island

Source: www.jejuolle.org
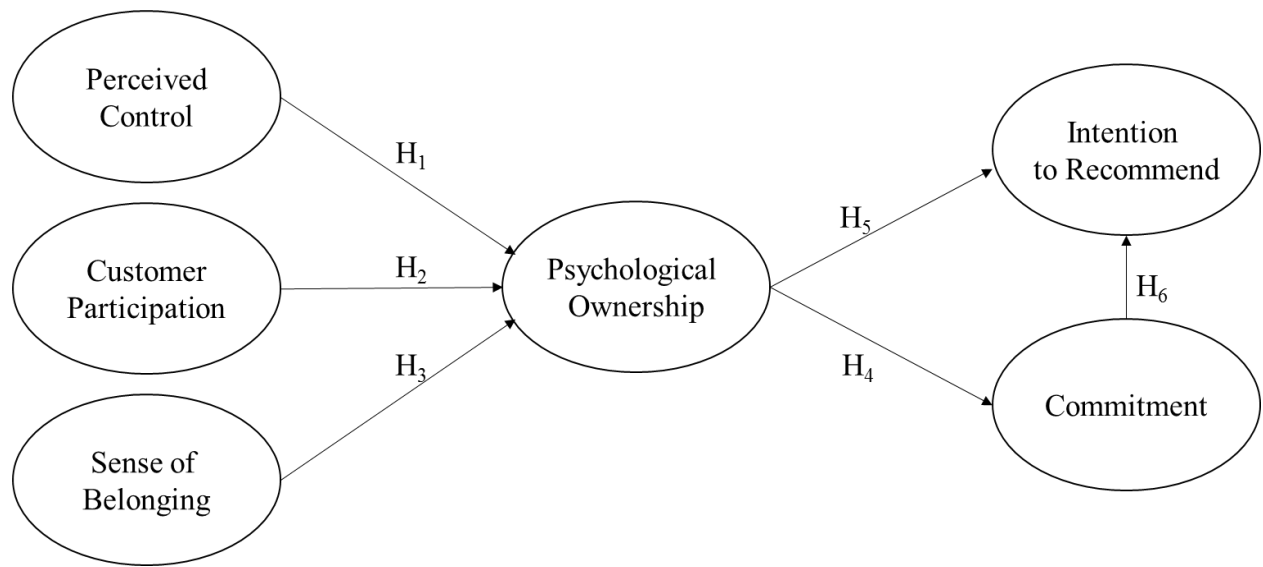
Figure 2. Proposed Research Model

Table 1. Respondent Profile

Characteristics		n = 377	Percentage
Gender	Female	209	55.4%
	Male	160	42.4%
Age	18 – 20 years old	15	5.0%
	21 – 30 years old	115	30.50%
	31 – 40 years old	91	24.14%
	41 – 50 years old	93	24.67%
	51 – 60 years old	44	11.67%
	Older than 60 years old	6	1.59%
Marriage	Married	169	44.8%
	Single	203	53.8%
	Others	2	0.5%
Employment	Employed	191	50.7%
	Self-Employed	36	9.5%
	Unemployed	33	8.8%
	Student	67	17.8%
	Others	45	11.9%
Education Level	Less than secondary	4	1.1%
	High School	48	12.7%
	Associate	64	17.0%
	Bachelor	188	49.9%
	Post-Graduate	67	17.8%
Income Level	Less than $10,000	54	14.3%
	$10,000 - $20,000	35	9.3%
	$20,001 - $30,000	66	17.5%
	$30,001 - $40,000	60	15.9%
	$40,001 - $50,000	49	13.0%
	$50,001 - $60,000	29	7.7%
	$60,001 - $70,000	15	4.0%
	More than $70,000	18	4.8%

Table 2. Descriptive Statistics of Constructs

Construct/Item	Factor Loading	Mean	Std	α	CR	AVE
Perceived Control				0.806	0.812	0.592
I can influence the service quality of Jeju Olle trail.	0.733	3.620	0.810			
I can control the overall experience at Jeju Olle trail.	0.848	3.700	0.840			
I have a lot of influence on how I experience at Jeju Olle trail.	0.714	3.730	0.810			
Participation				0.910	0.913	0.725
I tend to be cooperative using Jeju Olle trail.	0.858	3.420	0.900			
I would provide feedback on managing Olle trail.	0.898	3.530	0.840			
I would assist Jeju Olle trail management in facilitating service of Olle trail.	0.872	3.310	0.840			
I would offer feedback on improving the quality of Jeju Olle trail.	0.763	3.720	0.800			
Sense of Belonging				0.793	0.797	0.568
I feel at home at Jeju Olle trail.	0.775	3.210	0.890			
I feel I belong to Jeju Olle trail.	0.704	3.290	0.860			
I feel more attached to Jeju Olle trail compared to other trails.	0.777	3.530	0.890			
Psychological Ownership				0.888	0.889	0.620
I sense Jeju Olle trail is mine.	0.875	3.510	0.960			
I feel personal ownership toward Jeju Olle trail.	0.915	3.310	0.980			
I feel personally connected to Jeju Olle trail.	0.798	3.150	0.980			
It is hard for me to think about Jeju Olle Trail as mine. (R)	0.674	3.410	0.960			
Jeju Olle Trail does not make me feel it is mine. (R)	0.626	3.800	0.950			
Intention to Recommend				0.892	0.893	0.735
I will recommend Jeju Olle trail to others.	0.909	4.050	0.800			
I will share my experience at Jeju Olle trail with others.	0.822	3.870	0.850			
I will encourage others to visit Jeju Olle trail.	0.843	4.040	0.820			
Commitment				0.768	0.781	0.553
I am not interested in marketing offers for other trails. (R)	0.498	2.730	1.020			
I will choose Jeju Olle trail even when the price is higher than that of other trails.	0.827	3.040	0.950			
I will choose Jeju Olle trail even if there are other trails with better conditions.	0.875	3.100	0.960			

Note. Measured on a 5-point Likert scale

Table 3. Convergent and Discriminant Validity

	PC	PA	SofB	PO	INT	CM
PC	0.769					
PA	0.411	0.851				
SofB	0.454	0.348	0.754			
PO	0.439	0.443	0.701	0.787		
INT	0.447	0.359	0.634	0.584	0.857	
CM	0.371	0.377	0.536	0.472	0.420	0.744

Note: Perceived Control (PC), Participation (PA), Sense of Belonging (SofB), Psychological Ownership (PO), Intention to Recommend(INT), Commitment (CM)

Table 4. Standardized Structural Estimate and Hypotheses Tests

Hypothesis/Path	β	SE	z	p	Results
H_1: Perceived Control → Psychological Ownership	0.151	0.086	1.767	0.077	Not Supported
H_2: Participation → Psychological Ownership	0.312	0.077	4.061	0.000	Supported
H_3: Sense of Belonging → Psychological Ownership	0.944	0.122	8.449	0.000	Supported
H_4: Psychological Ownership → Commitment	0.371	0.046	7.986	0.000	Supported
H_5: Psychological Ownership → Intention to Recommend	0.455	0.055	8.127	0.000	Supported
H_6: Commitment → Intention to Recommend	0.168	0.066	2.55	0.011	Supported

Note. CFI: .944; TLI: .935; RMSEA: .062; SRMR: .066