Importance of leisure nostalgia on life satisfaction and leisure participation

Nostalgia plays a crucial role in individuals’ psychological and behavioral responses. To identify the influence of nostalgia on leisure participants’ life, this study examined how individuals’ leisure nostalgia influenced their life satisfaction, thereby reinforcing their leisure participation intention. 417 responses were collected from leisure participants and analyzed in this study. Results showed that leisure nostalgia positively affected life satisfaction and leisure participation intention. In addition, life satisfaction had a significant effect on leisure participation intention. Further analysis revealed that the indirect effects of nostalgia regarding group identity and personal identity on leisure participation intention were significantly stronger than those of nostalgia regarding leisure experience, environment, and socialization. The theoretical and practical implications of this study are discussed.

Keywords: leisure nostalgia; life satisfaction; leisure participation; classification of nostalgia; conceptual model of nostalgia

Introduction

Leisure of itself gives pleasure and happiness and enjoyment of life, which are experienced, not by the busy man, but by those who have leisure. – Aristotle

Service industries are always on the lookout for ways to improve brand reputation, deliver consumer value, and boost future consumer buying intention. In particular, leisure services (e.g., recreational clubs, tour agencies, and resorts) are grounded on the needs of individuals (Wakefield & Blodgett, 2016). Generally, leisure services are required to satisfy and sustain the needs of leisure seeking individuals. A pressing question is how intervention is constructed to encourage individuals to be more involved in leisure, which ultimately promotes life satisfaction. Aristotle, an ancient Greek philosopher, emphasized that, unlike other parts of life such as work, engagement in leisure is a necessity to enhance well-being (Saunders, 1981). Leisure has been
known for its integral role in psychological well-being and life satisfaction. Previous studies have also found that people value and view leisure as an important part of their life because leisure participation contributes to positive mood and well-being (Newman, Tay, & Diener, 2014).

Participating in leisure activities can also help individuals recover faster from negative life experiences (Janke, Nimrod & Kleiber, 2008; Kleiber, Hutchinson, & Williams, 2002). It provides individuals with an outlet to gain control over their life when they are dealing with chronic health conditions (Nimrod & Hutchinson, 2010). In addition, leisure has a positive effect on well-being as it acts as a buffer to stress (Waker, Halpenny & Deng, 2011; Coleman, 1993). Numerous studies have investigated the relationship between leisure and well-being and found that leisure participation has positive effects on well-being (e.g., Kuylendall, Tay, & Ng, 2015; Newman et al., 2014).

After participating in leisure activities, individuals remember their past leisure experience. In this process, individuals can build nostalgic feelings regarding their leisure experience. In a traditional sense, Hofer (1934) defined nostalgia as a sign of a medical condition. However, over the centuries, the concept of nostalgia has changed to an emotional condition, longing for the past associated with a positive experience and memory (Davis, 1979; Schindler & Holbrook, 2003; Sedikides, Wildschut, Arndt, & Routledge, 2008; Wildschut, Sedikides, Arndt, & Routledge, 2006). Sedikides, Wildschut, and Baden (2004) noted that nostalgia is a “disproportionately positive emotion, with bittersweet elements” (p. 204).

Previous research found that emotion plays an integral role in encouraging individuals to participate in leisure (Fullagar, 2008; Kerr, Fujiyamma, & Campano, 2002). For example, in an attempt to demonstrate the role of emotions in behavioral
intentions, Perugini and Bagozzi (2001) developed the Model of Goal-directed Behaviour (MGB). The affective process in the MGB highlights the importance of emotion as an impetus to a decision-making process. In addition, according to the PERMA (positive emotion, engagement, relationships, meaning, and accomplishment) theory of well-being, positive emotion increases individuals’ optimal level of well-being (Seligman, 2011). Given leisure nostalgia is viewed as a positive emotion attached to leisure-related memories, it can promote life satisfaction and leisure participation intention. Further, individuals may desire to satisfy their nostalgic feeling as they anticipate the positive experience they had while participating in leisure activities.

The concept of nostalgia has recently been highlighted to understand its influence on individuals’ behavioral intentions (e.g., Chen, Yeh, & Huan, 2014; Cho, Ramshaw, & Norman, 2014; Kim, Kim, & Patrick, 2017; Leong, Yeh, Hsiao, & Huan, 2015; Verma & Rajendran, 2017). Routledge, Wildschut, Sedikides, and Juhl (2013) also mentioned the necessity of empirical research on the relationship between nostalgia and psychological health. However, to date, little research has been conducted on the relationship between nostalgia and psychological well-being in social science (e.g., Iyer & Jetten, 2011; Wildschut et al., 2006). In the field of leisure, the importance of nostalgia on behavioral intention and well-being has not been well-illuminated. In other words, few studies have empirically examined the concept of nostalgia using qualitative methods (e.g., Cheng, Pegg, & Stebbins, 2016; Gvion, 2009), whereas no previous research examined the multidimensional nature of nostalgia in the context of leisure using quantitative methods.

To fill the deficiency, Cho, Pyun, and Wang (2018) recently developed a Leisure Nostalgia Scale (LNS). Using this scale, this study examined the influence of leisure nostalgia on psychological and behavioral responses. Specifically, this study used life
satisfaction as a psychological outcome because life satisfaction is one key component and the hallmark of well-being (Diener, Emmon, Larsen, & Griffin, 1985). Also, to assess leisure participants’ behavioral response, this study employed future behavioral intention which is useful to understand individuals’ actual behavior (Ajzen & Fishbein, 2000). In addition, while most previous research emphasized the impact of leisure participation on life satisfaction (e.g., Chen, Petrick, & Shahvali, 2016; Chen, Ye, Chen, & Tung, 2010; Paggi, Jopp, & Hertzog, 2016; Ragheb & Griffith, 1982), the influence of life satisfaction on future intention to participate in leisure has received scant attention in the field of leisure. To address the gap, this study also examined the relationship between life satisfaction and leisure participation intention based on theoretical evidence. Findings of this study contribute to a deeper understanding of leisure nostalgia and to a comprehensive view of how life satisfaction affects leisure participation.

**Literature Review**

**Nostalgia and leisure participation**

The concept of nostalgia can be considered a longing for the past (Davis, 1979). Further, Cho et al. (2014) explained that individuals can easily feel nostalgia by comparing their negative current or future situation with positive past moments. That is, when faced with a negative life event, such as one that induces tremendous stress, and there is dissatisfaction with the current situation, nostalgia can be easily evoked as the individual yearns for experiences from a happier time in the past.

Considering the definition of nostalgia (Cho, 2014; Davis, 1979; Schindler & Holbrook, 2003), the notion of leisure nostalgia can be understood as a longing for a positive past leisure experience. As stated above, nostalgia is an emotion driven by past
experiences (Cho et al., 2014; Connell, 2017), and leisure participation may be induced by nostalgia (Acharya, Paudel, & Hatch, 2009). For example, older rugby players continuously engage in their leisure activity due to “a sense of nostalgia”. In addition, nostalgia helps them maintain a sense of belonging (Cheng et al., 2016). Nostalgia is an impetus for social connectedness (Wildschut, Sedikides, Routledge, Arndt, & Cordaro, 2010), and a sense of belonging is a fundamental condition for individuals to maintain their well-being (Palmieri, 2017).

Furthermore, according to the PERMA model, positive emotions are important in understanding the concept of well-being (Seligman, 2011). Positive emotions refer to hedonic feelings (e.g., pleasure and happiness), which are a predictor of an optimal level of well-being (Kern, Water, Adler, & White, 2014, 2015; Khaw & Kern, 2014; Seligman, 2011). Recently, Coffey, Wray-Lake, Mashek, and Branand (2016) and Kern et al. (2014) found that positive emotions are significantly related with life satisfaction. In addition, by focusing on the positivity, individuals may strengthen their social relationships as well as take on more opportunities which may elicit positive feelings and contribute to flourishing (Forgeard, Jayawickreme, Kern, & Seligman, 2011; Seligman, 2011). That is, leisure nostalgia, as a positive emotion, not only allows one to stay subscribed to a group membership but also encourages physical involvement, providing a holistic approach to maintaining psychological well-being (Sedikides, Wildschut, & Stephan, 2018).

Previous research found that nostalgia influences individuals’ behavioral intention (Chen et al., 2014; Leong et al., 2015; Verma & Rajendran, 2017). In order to understand the features of nostalgia and its influence on behavior, Cho et al. (2014) explored the multidimensional nature of nostalgia and developed a classification that categorized nostalgia into two dimensions: (1) the purpose of nostalgia and (2) the
structure of nostalgia. The purpose of nostalgia centers on what individuals intend to seek and value based on their past experiences. Past experiences that carry positive memories elicit nostalgia. These positive memories include those that boost an individual’s identities; thus, there is identity-based nostalgia and experience-based nostalgia. The second dimension, the structure of nostalgia, reflects the source of nostalgia that can be either object-based or interpersonal relationship-based. Object-based nostalgia is evoked by physical properties, such as memories of a venue, an iconic symbol, or facilities. On the other hand, interpersonal relationship-based nostalgia involves intangible features, such as the memory of a social experience with group members.

The two by two matrix leads to four sub-dimensions: (1) experience, (2) socialization, (3) personal identity, and (4) group identity. Nostalgia as experience refers to the nostalgic feelings evoked by past experiences. It represents a sentimental attachment to the details of past experiences, such as people, places, or facilities. Second, nostalgia as socialization underscores the features of social settings. The positive feelings felt while interacting with people and building new relationships evoke nostalgic feelings. Third, nostalgia as personal identity refers to factors that address an individual’s identity; for example, attending a game to support an individual’s favorite team adds credit to their role as a fan. The pride of being a loyal fan evokes nostalgic feelings as well. Lastly, group identity refers to the sense of belonging to a group as a member. The unique characteristics that set a group apart from another boost group identity. Features like unity within the group members evoke the longing to return to the moment of experience. In addition, Cho et al. (2014) extended the classification of nostalgia by constructing a conceptual model. This conceptual model explained that
individuals have their own memories based on their direct and indirect experiences, and only the memories that have positive emotions attached evoke nostalgia.

Based on the classification of nostalgia, Cho et al. (2018) developed the Leisure Nostalgia Scale (LNS), which consists of five factors: leisure experience, environment, socialization, personal identity, and group identity. Leisure experience and environment stem from nostalgia as experience. Although nostalgia as experience is the umbrella that holds the two factors, these two factors are unique in their nature. Leisure experience includes various elements in an entire experience, while environment refers to the sentimental attachment to the surrounding features, such as facilities.

Leisure participation is a voluntary act with differing interests and purposes across people, culture, and countries. It has been highlighted that leisure activities are vital for physical and mental well-being (Argan, Argan, & Dursun, 2018). In addition, leisure participation has a positive correlation with subjective well-being (Kuykendall, Boemeran & Zhu, 2018; Kuykendall, Tay, & Ng, 2015). To understand individuals’ leisure behavior, previous studies have widely used the Theory of Planned Behavior (TPB) (e.g., Ajzen & Driver, 1992; Esposito, Van Bavel, Baranowski, & Duch-Brown, 2016). However, the most important shortcoming of the TPB was the exclusion of the affective component (Ajzen, 2011).

To fill the missing piece (i.e., affective process), Perugini and Bagozzi (2001) developed the MGB and provided a more in-depth understanding of the role of emotions in behavior. Mohiyeddini, Pauli and Bauer (2009) supported placing more importance on emotion than attitude. In accordance to the MGB, emotions shape intentions to carry out behavior, as well as execute and control it (Zhu & Thagard, 2002). It also helps individuals maintain the behavior in the long term (Carver, 2006; Carver, Sutton, & Scheier, 2000). Previous studies also found that emotion is a catalyst
in promoting leisure participation intention (Janke et al., 2008; Patterson, 1996; Patterson & Carpenter, 1994), and the intention based on emotion is a critical predictor of behavior (Conner, McEachan, Lawton, & Gardner, 2016; Keer, Conner, Putte, & Neijen, 2014). For example, participating in leisure after experiencing a negative life event, such as the loss of a spouse, has been proven to heighten the level of well-being (Utz, Carr, Nesse, & Wortman, 2002). This suggests that an emotional factor plays an integral role in leisure intention and participation.

The evidence of previous studies shows nostalgia is significantly related not only to individuals’ life satisfaction but also to behavioral intention. Therefore, this study proposes the following hypotheses:

H1: Leisure nostalgia has a positive effect on leisure participation intention.
H2: Leisure nostalgia has a positive effect on life satisfaction.

**Life satisfaction**

Life satisfaction can be defined as an emotional assessment of various aspects of individuals’ lives (Woo, Kim, & Uysal, 2016; Sirgy, Widgery, Lee, & Grace, 2010) and is closely linked to positive well-being (Grant, Wardle, & Steptoe, 2009; Lyubormirsky, King, & Diener, 2005; Pressman, & Cohen, 2005). In addition, previous research found that the concept of life satisfaction is strongly related to leisure (Lin, Chen, & Kuo, 2014). For example, Chen and colleagues (2014) examined the effect of leisure tourism on life satisfaction and found that there are positive effects of a leisure trip on life satisfaction. In addition, not only does a leisure trip combat work stress, but it was also found that the longer a leisure trip was taken, the higher the level of life satisfaction experienced. The positive influence of leisure participation on life satisfaction is also consistent among older age groups, such as elderly tourists and retirees (Woo et al.,
This demonstrates that individuals who have good coping skills and invest a healthy amount of time in leisure can generally enjoy a high level of life satisfaction.

Further, the notion of life satisfaction is closely associated with the experience of positive emotions (Bastian, Kuppen, De Roover, & Diener, 2014; Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). Individuals are dependent on their emotional experiences when evaluating their level of life satisfaction. That is, the level of positive and negative emotions alters the level of life satisfaction (Iyer & Jetten, 2011; Kuppens, Realo, & Diener, 2008). For instance, more stress inducing situations cause high levels of negative emotions and a decrease in positive emotions. This, in turn, negatively affects the level of life satisfaction. That is, leisure nostalgia, which is a positive emotion (Sedikides et al., 2004), can play an important role in achieving high levels of life satisfaction. In addition, it has been found that environment, such as culture, can help set up conditions that promote the emotions that participants value. If positive emotions have a causal influence on life satisfaction and leisure participation possesses the capability to increase positive affect, leisure service providers should aim to maximize nostalgic features in their events.

Next, intention reflects the willingness to execute the behavior. That is, leisure participation intention can be considered the willingness of an individual to take part in any form of leisure. Understanding leisure participants’ willingness to participate in leisure activities is important, as the level of willingness is a strong predictor of an individual actually carrying out a behavior (Ajzen, 1991). The relationship between life satisfaction and behavioral intentions has been studied in various fields. For example, life satisfaction is positively related to the use of social networking services (Oliveira & Huertas, 2015), intention to marry (Luhmann, Hofmann, Eid, & Lucas, 2012), physical
exercise (Grant et al., 2009), and staying in college (Frisch et al., 2005), whereas it has a negative relationship with suicidal ideation (Chang & Sanna, 2001) and intention to quit (Rode, Rehg, Near, Underhill, 2007). That is, life satisfaction predicts individuals’ future behavior (Diener, Inglehart, & Tay, 2013).

An extensive body of studies has identified a connection between emotions, life satisfaction, and leisure participation (e.g., Agyar, 2014; Mathieu, 2008; Mitas, Yarnal, Adams, & Ram, 2012; Sirgy et al., 2010; Spiers & Walker, 2008). Given that nostalgia is an emotional factor and plays a significant role in psychological health (Routledge et al., 2013) and human behavior (Kim et al., 2017; Leong et al., 2015), this study proposes the following hypotheses:

H3: Life satisfaction has a positive effect on leisure participation intention.

H4: Life satisfaction positively mediates the relationship between leisure nostalgia and leisure participation.

H4-1: Each subfactor of leisure nostalgia has a significant relationship with leisure participation intention through life satisfaction.

Method

Study sites and data collection

Using a convenience sample method, this study collected data from leisure participants at one of the popular leisure events in Singapore, DBS Marina Regatta 2018. This event provides diverse programs and activities in which all people can participate, such as yoga and fitness classes, dragon boat competition, music festival, sailing, and obstacle race. This study, therefore, expected to collect data from various types of event participants. Research team members collected data near the event site through face-to-
face contact. Specifically, research assistants briefly introduced the purpose of this research to leisure participants and asked them to participate in the survey. Finally, this study collected 450 responses, and the response rate was 92.98%.

**Survey instrument**

This study measured leisure event participants’ leisure nostalgia, leisure participation intention, and life satisfaction. The three constructs were measured using a 7-point Likert scale, ranging from 1- strongly disagree to 7-strongly agree. First, Cho et al.’s (2018) scale was employed to measure leisure nostalgia. The scale features 33 items across five factors of leisure experience (five items), environment (seven items), socialization (six items), personal identity (seven items), and group identity (eight items). For example, each subscale of the leisure nostalgia scale included questions, such as “Remembering my leisure activity that I enjoyed evokes my nostalgic feelings” (leisure experience), “The appearance of my favorite leisure place evokes my nostalgic feelings” (environment), “Friends participating in leisure activity with me evoke my nostalgic feelings” (socialization), “Pride in being a lover of my favorite leisure activity evokes my nostalgic feelings” (personal identity), and “Unique characteristics of my leisure social group evoke my nostalgic feelings” (group identity).

To measure the intention to participate in leisure, this study borrowed from a behavioral intentions scale developed by Carroll (2009). There are three items included in this scale, such as “I intend to participate in my leisure”, “I plan to participate in my leisure”, and “The probability that I will participate in my leisure is high”.

This study employed Diener et al.’s (1985) satisfaction with life scale to measure leisure participants’ life satisfaction. The scale has five items, including “In most ways, my life is close to my ideal”, “The conditions of my life are excellent”, “I
am satisfied with my life”, “So far I have gotten the important things I want in life”, and “If I could live my life over, I would change almost nothing”.

Data analysis

This research first conducted data screening, using the expectation maximization (EM) algorithm for missing values and z-scores and Mahalanobis distance for univariate and multivariate outliers (Hair, Black, Babin, Anderson, & Tatham, 2010). In addition, Mardia’s (1985) multivariate kurtosis coefficient was employed to identify the normality of the data. In case of non-normality, this study used Satorra-Bentler scaled chi-square (Satorra & Bentler, 1994) and robust standard errors (Bentler & Dijkstra, 1985).

Next, this study conducted confirmatory factor analysis (CFA) to evaluate the reliability and validity of the three constructs by examining model fit indices, including root mean square error of approximation (RMSEA), standardized root mean squared residual (SRMR), comparative fit index (CFI), and non-normed fit indices (NNFI). Then, this study examined the reliability by testing Rho coefficients. In addition, convergent validity was evaluated by measuring Average Variance Extracted (AVE) values, and discriminant validity was assessed by comparing all correlations with square root of AVEs (Fornell & Larcker, 1981).

Lastly, this study conducted structural equation modeling (SEM) to test model fit indices and the five hypotheses (H1-H5). In the structural model of this study, leisure participation intention played a mediating role in the relationship between leisure nostalgia and life satisfaction. To assess the indirect effect, this study employed a Monte Carlo simulation approach (Preacher & Selig, 2012). SPSS 23.0 and EQS 6.3 programs were used for the data analyses.
Results

Respondents’ demographic characteristics

This study deleted outliers as they can affect the result of analysis and cause problems (Rousseeuw & Hubert, 2011). Specifically, out of the 450 responses collected, 25 responses were deleted from the results of the z-scores test (i.e., $-3.29 < z \text{-score} < 3.29$, Larson & Farber, 2007), and based on Mahalanobis distance, eight multivariate outliers were deleted (Hair et al., 2010). In total, 417 responses were utilized for further data analyses. As for age groups, 21 to 29 (70.7%) showed the highest percentage, followed by 30 to 39 (19.4%), 40 to 49 (2.9%), 50 to 59 (5.0%), and over 60 (1.7%), and the average age was 28.15. Males comprised 59.0% and females 41.0% of the sample. As for the education level, 44.3% of the respondents with a junior college degree reported the highest portion followed by 41.5% of respondents with a university degree, 7.5% of respondents with a master’s or doctorate, and 6.7% of respondents with high school degree, showing most respondents were well-educated. Most of the respondents were single (85.9%), followed by married (13.2%), divorced (0.7%), and widowed (0.2%) (Table 1).

Measurement model

This study verified the structure of the three constructs. The Mardia’s standardized coefficient was 81.30. Thus, Satorra and Bentler’s (S-B’s) method (Satorra & Bentler, 1994) and robust standard errors (Bentler & Dijkstra, 1985) were used to analyze multivariate non-normally distributed data (Byrne, 2006). From the result of CFA, the measurement model fit indices were good: $S-B \chi^2(\text{df}) = 1508.85(755)$, comparative fit
Next, this study tested internal consistency, convergent validity, and discriminant validity of the measurement model. First, the Rho coefficient of the total measurement model was 0.954, and Rho coefficients of each factor were 0.832 for leisure experience, 0.879 for environment, 0.925 for socialization, 0.922 for personal identity, 0.936 for group identity, 0.930 for leisure participation intention, and 0.899 for life satisfaction, indicating good internal consistency (Table 2). To test convergent validity, this study examined the average variance extracted (AVE) values of seven factors. The results showed the AVE values ranged from 0.504 for leisure experience to 0.816 for leisure participation intention. That is, the AVE values of the seven factors were greater than 0.5, indicating acceptable convergent validity. Lastly, this study assessed discriminant validity for the measurement model by comparing the square root of AVE values of each construct and correlations. This study found the correlations between constructs were less than the square root of AVE values of corresponding constructs in the model, indicating good discriminant validity (Table 3).

[Insert Table 2 about here]

[Insert Table 3 about here]

**Structural model**

In the structural model, this study measured the relationship among leisure participants’ nostalgia, life satisfaction, and intention to participate in leisure activities, by using the maximum likelihood method. Given the LNS has a multidimensional structure with the large number of items (i.e., 33 items, Cho et al., 2018), this study employed item
parceling as it can be used to understand the relationship between constructs (Little, Cunningham, Shahar, & Widaman, 2002) and conforms to the assumption of multivariate normality (Bridgeman & Rock, 1993). According to the result of SEM, the model fit indices were acceptable: S-B $\chi^2$(df) = 153.145(62), CFI = 0.969, NNFI = 0.960, RMSEA = 0.059, and SRMR = 0.040 (90% CI of RMSEA: .048 – .071). Next, this study performed an examination of z statistic to test the hypotheses. First, leisure nostalgia had a positive effect on life satisfaction. The standardized path coefficient from leisure nostalgia to leisure participation intention was significant ($\beta = 0.534$, SE = 0.062, $z = 7.29$, $p < 0.001$), supporting H1. Second, there was also a significant positive effect of leisure nostalgia on life satisfaction ($\beta = 0.360$, SE = 0.052, $z = 6.52$, $p < 0.001$), supporting H2. Third, life satisfaction significantly affected leisure participation intention ($\beta = 0.210$, SE = 0.053, $z = 3.57$, $p < .001$), supporting H3. The results of indirect effects of the mediation model showed that leisure nostalgia has an indirect effect on leisure participation intention ($\beta = 0.076$, SE = 0.019, Monte Carlo confidence intervals = [0.03, 0.106], $p < .01$), and the direct path coefficient from leisure nostalgia to life satisfaction was also significant ($\beta = 0.458$, SE = 0.050, $z = 7.74$, $p < .001$), indicating partial mediation and supporting H4 (Table 4).

This study further tested the relationships between each sub-factor of leisure nostalgia and leisure participation intention. Leisure experience ($\beta = 0.054$, SE = 0.013, $z = 3.07$), environment ($\beta = 0.052$, SE = 0.015, $z = 3.06$), socialization ($\beta = 0.053$, SE = 0.013, $z = 3.07$), personal identity ($\beta = 0.064$, SE = 0.016, $z = 3.10$), and group identity ($\beta = 0.057$, SE = 0.016, $z = 3.08$) had significant effects on leisure participation intention, exceeding the cutoff criterion ($z$-value > 1.96). Therefore, H4-1 was accepted,
and it can be said that there were significant relationships between five sub-factors of leisure nostalgia and leisure participation intention mediated by life satisfaction (Tables 5).

In addition, this study compared each path through the constraints test. That is, the paths from the five subfactors of nostalgia to the latent variable of nostalgia were equally constrained to compare the effect of each subfactor. This study found that the indirect effect of personal identity on leisure participation intention was significantly greater than the effects of leisure experience, environment, and socialization (i.e., personal identity > leisure experience, environment, and socialization); the indirect effect of group identity on leisure participation intention was significantly greater than the effects of leisure experience and socialization on leisure participation intention (i.e., group identity > leisure experience, environment, and socialization) (p<0.05).

[Insert Table 5 about here]

Discussion

In the field of leisure, research on nostalgia is limited. In addition, the extent of literature has not provided sufficient empirical findings on the relationships among nostalgia, psychological well-being, and behavior. To address this gap, this study examined the influence of leisure nostalgia on life satisfaction and leisure participation intention. Furthermore, based on the theoretical considerations, the relationship between life satisfaction and leisure participation intention was examined. The results obtained from this study demonstrated the important role of nostalgia in leisure participants’ life and behavior. Particularly, the proposed research model identified the direct relationships between: (1) leisure nostalgia and leisure participation intention; (2) leisure nostalgia and life satisfaction; (3) life satisfaction and leisure participation.
intention. In addition, this study examined (4) a mediating effect of life satisfaction between leisure nostalgia and leisure participation intention and (5) compared the differences between the subfactors of nostalgia in the structural model. This study found that leisure nostalgia is a significant predictor of leisure participation intention both directly and indirectly.

Specifically, recognizing the necessity of research on nostalgia in the context of leisure, the current study identified the role of leisure nostalgia in promoting leisure participants’ life satisfaction and behavioral intention. Based on the MGB (Perugini & Bagozzi, 2001) and the PERMA model (Seligman, 2011), leisure nostalgia, which is an emotional factor, was considered as an antecedent of life satisfaction and leisure participation intention. First, the result of this study revealed that leisure nostalgia has a positive effect on leisure participation intention (hypothesis 1). Consistent with the findings of this study, the impact of nostalgia on behavioral intention has also been proven in previous research (e.g., Chen et al., 2014; Kim et al., 2017; Leong et al., 2015; Verma & Rajendran, 2017). This finding supports the theoretical premise of the MGB (Perugini & Bagozzi, 2001) that underscored the integral role of emotion in decision-making. Moreover, positive emotion has a significant effect on social behavior (Fredrickson, 2001; Isen, 2002). Gammon and Ramshaw (2012) noted that nostalgia is an emotional variable, which is evoked by past experiences and memories and can eventually influence individuals’ future behavior (Cho et al., 2014). That is, it indicates that leisure participation experience is important, as it acts as a vehicle to bridge past, present and future experiences of leisure activities (Sedikides et al., 2008).

Fredrickson and Joiner (2002) noted that positive emotion increases emotional well-being. According to the PERMA model, positive emotion is an integral indicator of well-being (Coffey, Warren, & Gottfried, 2015; Cohn & Fredrickson, 2009) and
plays an integral role in flourishing (Kern et al., 2015; Khaw & Kern, 2014; Seligman, 2011). In addition, positive emotions are positively associated with life satisfaction (Coffey et al., 2016; Kern et al., 2014). Given nostalgia is a positive emotion (Sedikides et al., 2004), it can be inferred that nostalgia has a positive effect on life satisfaction. Therefore, based on previous studies, this study established the second hypothesis and examined the relationship between nostalgia and life satisfaction. The results showed that leisure nostalgia had a positive effect on life satisfaction. Sedikides et al. (2004) defined nostalgia as a “disproportionately positive emotion, with bittersweet elements” (p. 204). In other words, while nostalgia is mostly a positive emotion, it is related to a negative emotion as people cannot return to the past to have the exact same experience as they did previously. However, similar to Sedikides et al. (2004), Stephan and colleagues (2014) illustrated that the concept of nostalgia is a predominantly positive emotion that positively influences individuals’ motivation. In addition, previous studies found that nostalgia maintains physiological equanimity (Stephan et al., 2014) and physiological comfort (Zhou, Wildschut, Sedikides, Chen, & Vingerhoets, 2012) and positively influences meaning in life and intention to pursue individuals’ most important goals (Sedikides, Cheung, Wildschut, Hepper, Baldursson, & Pedersen, 2018). Further, nostalgia can alleviate negative emotions and enhance psychological well-being (Routledge et al., 2013). That is, consistent with prior research, this study found nostalgia plays a significant role in psychological responses.

This study identified a positive relationship between life satisfaction and leisure participation intention. Apparently, leisure has various benefits, including physical (e.g., Hannan, Moffitt, Neumann & Thomas, 2015; Paggi et al., 2016) and mental health (e.g., Chang, Wray, & Lin, 2014; Schüz et al., 2015). Therefore, traditionally, prior studies have tested and found a positive influence of leisure participation on life satisfaction.
(e.g., Chen et al., 2014; Chen et al., 2010; Ragheb & Griffith, 1982). However, the study on the impact of leisure participants' life satisfaction on their future behavioral intention is limited, although Diener et al. (2013) noted life satisfaction can be an antecedent of individuals’ behavioral intentions. Further, Lin et al. (2014) noted that individuals’ life satisfaction is related to leisure. Based on previous studies, this study examined the relationship between life satisfaction and leisure participation and found there is a positive relationship between them. In other words, if individuals are satisfied with their life, they are more likely to have strong intention to participate in leisure activities. In addition, strong intention to participate in leisure can lead to actual participation, and eventually, people can enjoy diverse benefits of leisure and build positive experiences and memories. Therefore, life satisfaction is critical for leisure participants to maintain their leisure activities and to live a better life.

This study found that leisure nostalgia directly and indirectly influenced leisure participation intention, indicating partial mediation. That is, even with the inclusion of life satisfaction in the model, there was still a significant relationship between nostalgia and leisure participation intention. Thus, this indicates that nostalgia is a strong predictor of leisure participation intention. In addition, life satisfaction played a mediating role in the relationship between leisure nostalgia and leisure participation intention. In other words, life satisfaction, which was influenced by nostalgia, positively affected the intention to participate in leisure. In accordance to this, Stephan et al. (2014) affirmed that the trigger of nostalgia is a key domain in inculcating and enhancing many positive psychological components. Additionally, in stress-inducing situations, nostalgia acts as a counteractive variable by encouraging individuals to boost their psychological well-being. This suggests that nostalgia serves a restorative function to psychological well-being (Sedikides et al., 2004; Sedikides et al., 2008; Sedikides et
In addition, nostalgia evoked by past leisure experiences promotes positive effects that, in turn, increase life satisfaction. This would encourage continuous behavior by increasing future intention (Diener et al., 2013). To elaborate, the experience of positive emotions while carrying out behavior instils an appetite for future behavioral intention (Carver et al., 2000). That is, the positive feelings experienced in past leisure participation not only play a role in life satisfaction but also encourage individuals to set their mind on the intention to participate in the future, and this produces a loop of continuous psychological benefits.

Lastly, although the result from this study showed that nostalgia significantly influenced leisure participation intention, further analyses were conducted to compare the indirect effects of the five subfactors of nostalgia on leisure participation intention. This study found that, while all subfactors of nostalgia significantly influenced leisure participation intention, nostalgia regarding personal identity and group identity had relatively stronger indirect effects on leisure participation intention. Specifically, both personal identity and group identity showed a higher effect on leisure participation intention than leisure experience, environment, and socialization. This is particularly interesting, as it stressed the importance of identity in leisure participation. Through leisure, individuals can have positive self-regard and a sense of belonging (Cheng et al., 2016) and form personal and collective identities that, in turn, evoke nostalgia (Gvion, 2009). Further, nostalgia elicits features of positive self-concept and social connectedness in particular. These features often connect the past and the present and play an important role in daily life (Sedikides et al., 2016; Wildschut, et al., 2010).

**Theoretical and practical implications**

This study identified the underpinnings of leisure participation and demonstrated the
impact of nostalgia on psychological well-being and behavioral intention. Nostalgia is generated from sentimental attachment to positive past experiences. Contributing to the growing body of literature, Routledge et al. (2013) stressed the benefits of nostalgia on psychological well-being. They encouraged that future research should focus on understanding and providing empirical evidence on nostalgia as a positive emotion and its influence in diverse fields. Further, Cho et al. (2018) suggested seeking further understanding of nostalgia in the context of leisure.

Extending the existing body of literature, this study identified that high nostalgia directly influences intention to participate in leisure. This suggested that individuals set their intention for leisure participation when there is a high urge to relive the positive feelings from a leisure time in the past. In addition, past studies highlighted the experience of nostalgia as a stabilizing factor in strengthening identity (Sedikides, Wildschut, Routledge, & Arndt, 2015). Consistent with this, the findings of this study provided substantial evidence within the context of leisure that underscores higher indirect effects of identity-based nostalgia on leisure participation intention than other subfactors of nostalgia.

Life satisfaction has been used as a dependent variable in many previous studies. However, this study examined the role of life satisfaction in leisure participation based on theoretical evidence (Lin et al., 2014; Woo et al., 2016; Nimrod, 2007). Participating in leisure provides individuals with a platform that induces positive emotions and memories that play a big role in determining life satisfaction (Grant et al., 2009). For this reason, life satisfaction has been found to be closely linked to leisure. When participation in leisure proves to contribute significantly to a happier self and a rise in life satisfaction, individuals are more likely to continue taking part in it. In other words, leisure nostalgia positively affects life satisfaction, which affects the likelihood of
leisure participation. Further, previous studies built the groundwork in establishing life satisfaction as a good predictor of behavioral intention (Diener et al., 2013; Luhmann et al., 2012; Oliveira & Huertas, 2015; Grant, et al., 2009; Chang & Sanna, 2001; Rode et al. 2007). Taking these findings into account, this study took a step further in understanding the role of life satisfaction on leisure participation intention. It identified life satisfaction to have an effect on leisure participation intention.

Another finding of this study was the integration of an affective component in the structural model. There was a parallel line between this study and the MGB. The MGB successfully included the emotional aspects in a decision-making process (Perugini & Bagozzi, 2001). Specifically, the most essential determinants of the intention in the MGB are the emotional factors. Consistent with this, this study identified leisure nostalgia as a positive emotion that steered leisure participation intention. However, by possessing the elements of both positive and negative emotions, nostalgia has been proven to be a much more complex emotion than others (Cho et al., 2014). Therefore, future research needs to examine how negative emotion in nostalgia influences individuals’ psychological and behavioral outcomes and to identify its role.

The practical implications of this study are diverse and applicable in many industries. Nostalgia boosts psychological well-being and produces positive outcomes, such as increasing individuals’ self-esteem, social belonging, and psychological growth (Routledge et al., 2013). In particular, this study found that nostalgia increases individuals’ life satisfaction. Therefore, practitioners and leisure service providers can use nostalgia as a tool to increase individuals’ well-being. For example, they can use nostalgia evoking features in a campaign to retain and restore customers’ life satisfaction, as nostalgia helps people remind that their life is worth living and has meaning. In addition, drawn from the findings of this study, leisure service providers
may design events that create platforms for individuals to form teams, socialize, and build relationships. Besides the benefits to the field of leisure, this is also applicable in empowering local communities. The identity evoking nostalgia features can be used as strong tools in strengthening identity continuity that is a part of psychological well-being and contributes to life satisfaction. Other ways to increase leisure participation is the preservation of environmental features, which may evoke nostalgic feelings. In other words, new leisure facilities do not always increase leisure participation as the underlying nostalgic feelings are associated with old leisure facilities used in the past. This indicates that selective improvement is necessary. The findings from this study allow public organizations or industries that are trying to improve individuals’ leisure participation and boost their psychological well-being to construct comprehensive events with the intent of instilling nostalgia into the consumers.

**Limitations and future research**

This study has several limitations. First, this study employed a cross-sectional observation. The limitation of using a cross-sectional observation is that it provides findings based on a particular moment. However, the levels of nostalgia, life satisfaction, and leisure participation intention may change across different periods. Therefore, future research may extend this model by conducting a longitudinal study to validate the results of this study. Further, it can provide better insight into the role of nostalgia and its influence and determine the reliability of the leisure nostalgia scale. Another limitation of this study is the lack of control variables that may influence leisure participation. For example, the levels of income and education can play a part in limiting or increasing the choices of leisure activities presented to individuals (Bauman et al., 2011). Thus, this study calls for future research to control the moderating effects
of the socioeconomic variables. Third, this study initially expected to collect data from various types of event participants. However, the results showed that the majority of the respondents were in their 20s and single. Future research needs to collect data from different age groups. Lastly, this study followed the definition of nostalgia suggested by Sedikides et al. (2004), meaning that it mainly focused on the positive aspect of nostalgia and successfully proved nostalgia to be a predominantly positive emotion. However, it overlooked the element of negativity carried in nostalgia. With reference to it being considered a bittersweet feeling, its sweet aspect comes from remembering the positive feelings experienced. However, the bitter aspect of nostalgia implies that, though it is possible to replicate the experience, it is impossible to turn back time. This also suggests that the present situation of nostalgia experienced may be less satisfying for the individuals. As such, it is important to study the negative aspect of nostalgia and its influence on behavioral intention and behaviors. Thus, future studies should provide a holistic approach on nostalgia that includes the negative aspect and its consequences.

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Isen, A. M. (2002). A role for neuropsychology in understanding the facilitating influence of positive affect on social behavior and cognitive processes. C. R. Snyder & S. J. Lopez (Eds.) *Handbook of positive psychology* (pp. 528-540), NY: Oxford University Press.


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<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (year; n = 416, M = 28.15, SD = 9.74)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-29</td>
<td>295</td>
<td>70.7</td>
</tr>
<tr>
<td>30-39</td>
<td>81</td>
<td>19.4</td>
</tr>
<tr>
<td>40-49</td>
<td>12</td>
<td>2.9</td>
</tr>
<tr>
<td>50-59</td>
<td>21</td>
<td>5.0</td>
</tr>
<tr>
<td>60 and over</td>
<td>7</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Gender (n = 417)</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
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<td>59.0</td>
</tr>
<tr>
<td>Female</td>
<td>171</td>
<td>41.0</td>
</tr>
<tr>
<td><strong>Education (n = 417)</strong></td>
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<td></td>
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</tr>
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<td>Junior college</td>
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<td>44.3</td>
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<tr>
<td>University</td>
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<td>41.5</td>
</tr>
<tr>
<td>Graduate school</td>
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<td>7.5</td>
</tr>
<tr>
<td><strong>Marital status (n = 417)</strong></td>
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<td>Single</td>
<td>358</td>
<td>85.9</td>
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<tr>
<td>Married</td>
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<td>13.2</td>
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<tr>
<td>Divorced</td>
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<td>.7</td>
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<tr>
<td>Widowed</td>
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<td>.2</td>
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Table 2. Factor loading ($\lambda$), Rho, and AVE of the measurement model

<table>
<thead>
<tr>
<th>Factors and items</th>
<th>$\lambda$</th>
<th>SE</th>
<th>Rho</th>
<th>Cronbach’s Alpha</th>
<th>AVE</th>
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<tr>
<td><strong>Leisure nostalgia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>evoke(s) my nostalgic feelings.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure experience (M = 5.52)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remembering my leisure activity that I enjoyed</td>
<td>.815</td>
<td>.038</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My exciting leisure experience in the past</td>
<td>.810</td>
<td>.039</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Remembering the freedom I experienced during my favorite leisure activity</td>
<td>.717</td>
<td>.046</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free time I had during my favorite leisure activity</td>
<td>.626</td>
<td>.053</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recharging myself through leisure activity</td>
<td>.541</td>
<td>.052</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Environment (M = 4.88)</td>
<td>.879</td>
<td>.882</td>
<td>.516</td>
<td></td>
<td></td>
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<tr>
<td>The food I ate during my favorite leisure time period</td>
<td>.557</td>
<td>.072</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The appearance of my favorite leisure place</td>
<td>.636</td>
<td>.063</td>
<td></td>
<td></td>
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<tr>
<td>Memorable weather during my favorite leisure time</td>
<td>.719</td>
<td>.062</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The practical design of my favorite leisure place</td>
<td>.879</td>
<td>.053</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The architectural design of my favorite leisure place</td>
<td>.847</td>
<td>.056</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The leisure activity equipment I used</td>
<td>.600</td>
<td>.065</td>
<td></td>
<td></td>
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<tr>
<td>The size of my favorite leisure place</td>
<td>.730</td>
<td>.063</td>
<td></td>
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<tr>
<td>Socialization (M = 5.70)</td>
<td>.925</td>
<td>.924</td>
<td>.676</td>
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<td></td>
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<tr>
<td>Friends participating in leisure activity with me</td>
<td>.820</td>
<td>.045</td>
<td></td>
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<tr>
<td>Positive memories shared with others during my favorite leisure activity</td>
<td>.888</td>
<td>.035</td>
<td></td>
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<tr>
<td>Memories of building friendships with others during my favorite leisure activity</td>
<td>.905</td>
<td>.035</td>
<td></td>
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<tr>
<td>Memories of socializing with others during my favorite leisure activity</td>
<td>.860</td>
<td>.036</td>
<td></td>
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<tr>
<td>Memories of making new friends during my favorite leisure activity</td>
<td>.796</td>
<td>.041</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Entertainments enjoyed with others during my leisure activity</td>
<td>.636</td>
<td>.043</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Personal identity (M = 5.47)</td>
<td>.922</td>
<td>.931</td>
<td>.629</td>
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<tr>
<td>Identifying myself as a lover of my favorite leisure activity</td>
<td>.774</td>
<td>.046</td>
<td></td>
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<tr>
<td>Pride in being a lover of my favorite leisure activity</td>
<td>.840</td>
<td>.038</td>
<td></td>
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<tr>
<td>A feeling of satisfaction as a loyal leisure participant of my favorite leisure activity</td>
<td>.896</td>
<td>.036</td>
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<td>Positive feelings about myself as a lover of my favorite leisure activity</td>
<td>.864</td>
<td>.039</td>
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<tr>
<td>My value as a leisure participant</td>
<td>.725</td>
<td>.048</td>
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<tr>
<td>Sense of accomplishment as a leisure participant</td>
<td>.707</td>
<td>.045</td>
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<tr>
<td>Being loyal to my favorite leisure activity</td>
<td>.725</td>
<td>.052</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Group identity (M = 5.16)
- Unique characteristics of my leisure social group: 0.709, 0.053
- The traditions of my leisure group: 0.687, 0.062
- Group rituals at the leisure place: 0.691, 0.059
- Shared memories which affected my group identity at the leisure place: 0.890, 0.045
- History of my group that shared a lot in common with my group members: 0.879, 0.050
- Pride of being a part of my group at the leisure place: 0.878, 0.042
- Experiences of group bonding during my leisure activity: 0.856, 0.046
- How important I was to the members of my leisure group: 0.818, 0.049

### Leisure participation intention (M = 5.91)
- I intend to participate in my leisure: 0.899, 0.033
- I plan to participate in my leisure: 0.920, 0.031
- The probability that I will participate in my leisure is high: 0.890, 0.036

### Life satisfaction (M = 4.91)
- In most ways, my life is close to my ideal: 0.848, 0.046
- The condition of My life are excellent: 0.860, 0.048
- I am satisfied with my life: 0.897, 0.050
- So far I have gotten the important things I want in life: 0.754, 0.056
- If I could live my life over, I would change almost nothing: 0.624, 0.073

### Table 3. Correlations among all factors

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Leisure experience</td>
<td>.710&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(2) Environment</td>
<td>.564</td>
<td>.718&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Socialization</td>
<td>.616</td>
<td>.356</td>
<td>.822&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(4) Personal identity</td>
<td>.651</td>
<td>.610</td>
<td>.581</td>
<td>.793&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>(5) Group identity</td>
<td>.525</td>
<td>.472</td>
<td>.661</td>
<td>.649</td>
<td>.806&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>(6) Leisure participation intention</td>
<td>.504</td>
<td>.297</td>
<td>.395</td>
<td>.463</td>
<td>.355</td>
<td>.903&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>(7) Life satisfaction</td>
<td>.313</td>
<td>.297</td>
<td>.224</td>
<td>.301</td>
<td>.236</td>
<td>.375</td>
<td>.802&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>1</sup>Square root of AVE
**Table 4.** Results of regression and mediation analyses in the structural model

<table>
<thead>
<tr>
<th>Path</th>
<th>Regression Coefficient</th>
<th>Unstd.</th>
<th>Std.</th>
<th>SE</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path 1 (H1): Leisure nostalgia (IV) → Leisure participation intention (DV)</td>
<td>.452</td>
<td>.534</td>
<td>.062</td>
<td>7.29</td>
<td>** ***</td>
</tr>
<tr>
<td>Path 2 (H2): Leisure nostalgia (IV) → Life satisfaction (MV)</td>
<td>.338</td>
<td>.360</td>
<td>.052</td>
<td>6.52</td>
<td>** ***</td>
</tr>
<tr>
<td>Path 3 (H3): Life satisfaction (MV) → Leisure participation intention (DV)</td>
<td>.189</td>
<td>.210</td>
<td>.053</td>
<td>3.57</td>
<td>** ***</td>
</tr>
<tr>
<td>Path 4 (H4): Leisure nostalgia (IV) → Life satisfaction (MV) → Leisure participation intention (DV)</td>
<td>.064</td>
<td>.076</td>
<td>.019</td>
<td>2.98</td>
<td>**</td>
</tr>
<tr>
<td>(H4-1): Leisure nostalgia (IV) → Leisure Participation Intention (DV)</td>
<td>.388</td>
<td>.458</td>
<td>.050</td>
<td>7.74</td>
<td>** ***</td>
</tr>
</tbody>
</table>

Note. IV: Independent variable; DV: Dependent variable; MV: Mediating variable

**Significant at an alpha = .01; ***Significant at an alpha = .001 level (2-tailed).**

**Table 5.** Results of three-path relation in the structural model

<table>
<thead>
<tr>
<th>Path</th>
<th>Regression Coefficient</th>
<th>Unstd.</th>
<th>Std.</th>
<th>SE</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path 1: Leisure experience – Nostalgia – Life satisfaction – Leisure participation intention</td>
<td>.039</td>
<td>.054</td>
<td>.013</td>
<td>3.07</td>
<td>**</td>
</tr>
<tr>
<td>Path 2: Environment – Nostalgia – Life satisfaction – Leisure participation intention</td>
<td>.045</td>
<td>.052</td>
<td>.015</td>
<td>3.06</td>
<td>**</td>
</tr>
<tr>
<td>Path 3: Socialization – Nostalgia – Life satisfaction – Leisure participation intention</td>
<td>.039</td>
<td>.053</td>
<td>.013</td>
<td>3.07</td>
<td>**</td>
</tr>
<tr>
<td>Path 4: Personal identity – Nostalgia – Life satisfaction – Leisure participation intention</td>
<td>.051</td>
<td>.064</td>
<td>.016</td>
<td>3.10</td>
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</tr>
<tr>
<td>Path 5: Group identity – Nostalgia – Life satisfaction – Leisure participation intention</td>
<td>.050</td>
<td>.057</td>
<td>.016</td>
<td>3.08</td>
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</table>

Note. **Significant at an alpha = .01**