



# Behavioral intention of visitors to an Oriental medicine festival: An extended model of goal directed behavior



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## HIGHLIGHTS

- EMGB is used to understand the behavioral intention of Oriental medicine festival visitors.
- Image of Oriental medicine festival site and perception of Oriental medicine affect attitude.
- Attitude, subjective norm, and positive anticipated emotion influence visitors' desire.
- Desire influences visitors' behavioral intention.
- Image and perception have significant relationships with attitude towards the medicine festival.

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## ABSTRACT

Despite the importance of Oriental medicine festivals to Oriental medical tourism, little research has been conducted to understand the behavioral intention of visitors to these festivals. Therefore, this study examines the behavioral intention of visitors to a Korean Oriental medicine festival. This study employs the extended model of goal-directed behavior (EMGB) that incorporates two constructs related to Oriental medicine festivals: the Oriental medicine image of festival site (image) and the perception of Oriental medicine (perception). An on-site survey was conducted with 423 visitors attending the Sancheong Herbal Festival in South Korea. Results reveal that attitude, subjective norm, and positive anticipated emotion influenced visitors' desire to attend the festival, which, in turn, influenced their behavioral intentions. Two constructs of image and perception formed positive and significant relationships with attitude toward attending the festival. Practical implications of the study results are discussed.

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## 1. Introduction

The increased interest in quality of life and health have contributed to the development of medical tourism, a new type of alternative tourism, which incorporates medical (e.g., prevention of diseases, treatment) and tourism (e.g., visiting tourist attractions) activities. Combining medical and tourism activities allows

the tourism industry to be more profitable and to positively influence related industries that cater to tourists' medical needs. Therefore, many countries and regions around the world encourage the development of medical tourism that attracts tourists by fulfilling their needs for medical services (Lee, Han, & Lockyer, 2012).

In Asia, the rapid growth in medical tourism also increased an interest in Oriental medicine, which is the world's oldest codified system of medicine practiced for more than 2,500 years. Oriental medicine is gaining popularity among health conscious individuals because it helps to control and improve the internal conditions of the body and enhance quality of life (Wikipedia, 2013). In particular, there is a growing interest in Oriental medicine festivals that are believed to be an important means of developing the Oriental medicine industry and Oriental medical tourism. A variety of Oriental medicine festivals

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has been recently organized for tourists in South Korea (hereafter Korea) (e.g., Ginseng festival, herbal medicine festival).

One of the most popular Oriental medicine festivals in Korea is the Sancheong Herbal Festival. The festival is held annually in the Gyeongnam Sancheong County known for its unique herbal plantation. The Sancheong County is regarded as a Mecca of Korean Oriental medicine and represents a perfect place for developing medical tourism. Hosting the Sancheong Herbal Festival can exert a positive impact on the development of the Oriental medicine industry in the region. Despite the importance of Oriental medicine festivals to the Oriental medicine industry and medical tourism, little research has been conducted to understand the behavioral intention of visitors to these festivals. Therefore, this study examines the decision-making process of the visitors to Oriental medicine festivals by utilizing a theoretical framework that not only helps to understand and predict Oriental medicine festival visitors' behavior but also can help government agencies, tourism marketers, and festival practitioners to develop effective marketing strategies targeting these visitors.

The frequently used theories that explain individuals' behavioral intentions are the theory of planned behavior (TPB) and the model of goal-directed behavior (MGB). These theories can be further developed by considering other important variables that may directly or indirectly affect behavioral intentions (Leone, Perugini, & Ercolani, 2004). Therefore, this study expands the MGB and develops an extended model of goal-directed behavior (EMGB) incorporating two constructs related to Oriental medicine festivals: the Oriental medicine image of festival site and the perception of Oriental medicine. Specifically, the study tries to identify the effects of the Oriental medicine image of festival site and the perception of Oriental medicine on the behavioral intention of visitors to the Sancheong Herbal Festival in Korea. From the theoretical perspective, the findings of this study enhance the understanding of visitor intention to revisit an Oriental medicine festival by extending the MGB. From the practical perspective, the results of the study provide festival managers with effective marketing strategies to attract and better satisfy Oriental medicine festival visitors.

## 2. Theoretical background

### 2.1. Oriental medicine and Oriental medical tourism

Oriental medicine relies on a diagnosis of a patient's Qi (or chi) energy and claims that the imbalance of Qi is the underlying cause of diseases. It categorizes body patterns and offers individual treatment plans to restore health and balance a patient's Qi through acupuncture, herbal medicine, oriental nutrition and massages, tuina or oriental bodywork, as well as tai chi and qi-gong (mind, breath, and physiological exercises) and other therapies that include electro-acupuncture, cupping, and lifestyle and nutritional counseling. Oriental medicine is practiced in China, Japan, Korea, Singapore, Vietnam, Thailand, Tibet, and India. These countries promote their traditional medicine and therapies to attract international tourists; some countries have even developed Oriental medical tourism strategies, specifically to increase the incidence of tourist visitation.

Since Oriental medicine relies on natural drugs that have fewer side effects than chemical drugs, it is accepted as an important means of providing quality healthcare services around the world. The Oriental medical canon has gained worldwide recognition for effective medical treatments. Currently, Oriental medicine is considered in Western countries as an alternative medicine that helps to improve the immune system and treats and prevents the diseases and illnesses for which Western medicine does not presently have a cure.

Committee on the Use of Complementary and Alternative Medicine by the American Public (2005) defines alternative

medicine, including Oriental medicine, as medical practices that include diet and nutrition, traditional and folk remedies, mind-body techniques, pharmacologic and biologic treatments, manual healing methods, and herbal medicine. It was found that approximately 38% of adults and 12% of children used some form of complementary and alternative medicine in 2007 (National Center for Complementary and Alternative Medicine, 2013).

The growth of interest in Oriental medicine is followed by the increased interest in Oriental medical tourism, which is defined as travel for the purpose of receiving Oriental medical treatment and improving health. Oriental medical tourism combines Oriental medicine resources (e.g., acupuncture, herbal treatment, diet) with tourism resources (e.g., regional culture, heritage, food, wine). Thus, while Oriental medical tourists travel to obtain Oriental healthcare they also enjoy experiencing tourism attractions and services. Many Asian countries and regions promote Oriental medical tourism as a new wave of alternative tourism and a strategically important growth industry.

### 2.2. Korean medical tourism and Oriental medicine festival

Korea is a new destination for medical tourism and one of the fastest rising stars in Oriental medical tourism (Lee, Han, et al., 2012; Lee, Song, Bendle, Kim, & Han, 2012). Yu and Ko (2012) state that the Jeju government, one of the local governments in Korea, has enhanced the Island's stagnant tourism industry by expanding medical and well-being services, including Oriental medicine services. The development of medical tourism in Korea is primarily due to the high medical standards of Korean medical doctors, state-of-the-art medical infrastructure, leading modern medical technology, advanced knowledge of Oriental medicine, and excellent quality healthcare services – a cooperative system that combines both Occidental and Oriental treatments and leads the field globally. Korea is particularly known for being effective in the treatment of cancerous tumors, and thyroid and cosmetic surgeries.

It is predicted that Korea will become one of the biggest medical tourism destinations in Asia (Korea Tourism Organization, 2009). In 2012 medical tourism in Korea has more than doubled the number of foreign tourists-patients from 60,201 in 2009 to 155,672 in 2012 (Korea Tourism Organization, 2013). In 2012 over 33% of tourists who visited Korea for medical purposes were from the United States, 20% from China, and 17% from Japan. By 2015, the Korean government aims at welcoming 400,000 medical tourists and by 2020 more than 1 million (Korea Tourism Organization, 2013). In terms of Oriental medical tourism Korea owes its popularity to excellent skin care, plastic surgery, and diet programs. Frequently sought treatments include wrapping bodies in herbal ingredients, acupuncture, and wine fire treatments. All ingredients used during the treatment are medical herbs that help to eliminate toxins, brighten the skin, and help with anti-aging, wrinkles, and skin restoration. The increasing rate of satisfaction from these Oriental medical treatments has triggered a steady rise in the Oriental medical tourism industry. The Korean government fully supports the development of medical and Oriental medical tourism. Significant funds are devoted to promoting Korean Oriental medical tourism as a part of the national green growth strategy that encourages the use of natural resources. Several local governments in Korea (e.g., Jecheon, Sanchung, Daegu, etc.) have recently hosted Oriental medicine festivals to promote the importance of traditional healing and treatment and to encourage the development of the Oriental medical tourism industry. Oriental medicine festivals are recognized as unique festivals that contribute to the development of medical tourism and satisfy visitors' needs for both health and tourism experiences (Song, Moon, Choi, & Lee, 2013).

For this reason, numerous research studies on Oriental medicine festivals have been conducted. For example, Song et al. (2013), in their study of the economic impact of the 2011 Jecheon Oriental Medicine Bio Expo, state that Oriental medicine festivals not only promote the indigenous culture of Oriental medicine but also contribute to the economic development of the region hosting these festivals. Moreover, Shin, Song, and Lee (2012) propose a theoretical model that focuses on the relationships among festival quality, its perceived value, perception of Oriental medicine festival theme, and satisfaction with a festival in the context of the 2010 Jecheon International Oriental Medicine Expo. According to the study, festival quality positively influences the perception of the Oriental medicine festival theme and perceived value. Further, perceived value directly affects satisfaction, whereas perception of festival theme indirectly affects satisfaction. The previous studies of Oriental medicine festivals indicate that Oriental medicine festivals represent an effective tool for promoting the development of Oriental medicine and Oriental medical tourism in a host region (Song et al., 2013). The previous studies also show that the satisfaction and attitude of Oriental medicine festival visitors can be reinforced by the image of festival site and the perception of Oriental medicine (Shin et al., 2012; Song et al., 2013).

### 2.3. MGB and EMGB

Numerous theories have been employed to explain human behavior. Among these theories, the theory of reasoned action (TRA) and the TPB are representative social-psychological theories useful for the understanding of specific human behaviors (Zint, 2002). The TRA is one of the seminal attitude theories suggesting that behavioral intention depends upon the relationships between attitudes toward behavior, subjective norm, and actual behavior (Eagly & Chaiken, 1993; Fishbein & Ajzen, 1975; Perugini & Bagozzi, 2001). Although this theory has been applied in the studies of various human behaviors (Zint, 2002), it did not consider an individual's non-volitional situation in which time, money, resources, and opportunity limit human behavior (Ajzen, 1985, 1991).

To address the limitation of TRA, Ajzen (1985) proposed the TPB by adding the concept of perceived behavioral control (PBC) to the original antecedents introduced in the TRA (i.e., attitude and subjective norm). The concept of PBC reflects an individual's non-volitional situation. The TPB emphasizes that human behaviors are governed not only by personal attitudes and social pressures (subjective norms) but also by a sense of behavioral control (PBC) (Ajzen, 1991; Eagly & Chaiken, 1993). Thus, the TPB is recognized as being more appropriate to understanding complex human behaviors when compared to the TRA (Ajzen & Madden, 1986; Eagly & Chaiken, 1993; Han, Hsu, & Sheu, 2010). However, since the TPB does not consider the influence of past behavior and motivational and affective components of human behavior, Perugini and Bagozzi (2001) proposed the MGB that addresses the limitations of the TPB. They claimed that motivational, affective, and habitual processes should be included in the social psychological model in order to better comprehend human behaviors. Consequently, the MGB incorporates motivational, affective, and habitual processes in addition to the original antecedents introduced in the TPB (i.e., attitude, subjective norm, and perceived behavioral control). In terms of motivational process, desire is suggested to be a critical factor that can explain human decision formation (Perugini & Bagozzi, 2001). In terms of affective process, anticipated emotions are important factors in influencing human decision-making and as such should be considered (Conner & Armitage, 1998). In terms of habitual process, past behavior or habit is a significant determinant that can explain the habitual aspects of human behavior and should be

considered as a significant determinant of human decisions (Aarts, Verplanken, & van Knippenberg, 1998; Bentler & Speckart, 1981).

Thus, in order to better understand specific human behaviors, the MGB incorporates desire, anticipated emotions (i.e., positive and negative), and the concept of past behavior (i.e., frequency and recency of past behavior) (Perugini & Bagozzi, 2001) as well as the original variables of the TPB. By adding the additional concepts of desire, anticipated emotions, and past behavior to the TPB, the predictive ability and explanatory power of MGB have been greatly improved (Bagozzi & Dholakia, 2006; Prestwich, Perugini, & Hurling, 2008; Richetin, Perugini, Adjali, & Hurling, 2008; Taylor, 2007; Taylor, Ishida, & Wallace, 2009).

Therefore, the MGB has often been applied to understand a variety of human behaviors, including brand-related, alcohol consumption, digital piracy, and information search behavior (Bagozzi & Dholakia, 2006; Prestwich et al., 2008; Taylor, 2007; Taylor et al., 2009). Meanwhile, some researchers have emphasized the necessity for a revision of the existing socio-psychological theories to include new constructs that are critical in specific contexts or alter existing paths among latent variables (Ajzen, 1991; Conner & Abraham, 2001; Oh & Hsu, 2001). For example, Ajzen (1991) suggested incorporating additional variables that affect decision-making and behavior, and that are conceptually independent from the existing factors in the theory, and potentially appropriate for a specific behavior. According to Perugini and Bagozzi (2001), the incorporation of these additional variables is necessary to broaden and deepen a theory, which can improve the predictive power of human behaviors in specific contexts. Consequently, many researchers have extended the MGB by including new constructs (Han et al., 2010; Lee & Back, 2007; Lee, Song, et al., 2012; Perugini & Bagozzi, 2001).

The MGB can also be applied to understand tourist behavior, such as destination choice or travel information search behavior, and can be used to identify different groups of tourists and distinguish among them, depending on their behavior. Lam and Hsu (2004, 2006) argued that intention to visit a destination gives a clue to understanding tourists' decision-making process. Tourists form behavioral intentions that play an important role in leading to actual visiting behavior. A number of studies tried to explain tourist behavior by using the MGB. For example, Lee, Song, et al. (2012) used the MGB to explain international traveler behavior during the influenza pandemic.

Song, Lee, Kang, and Boo (2012) used the MGB to explain the behavioral intention of visitors to the Boryeong Mud Festival, and Song, Lee, Norman, and Han (2012) used the MGB to understand behavioral intention of casino visitors. Because it can be assumed that the behavior of Oriental medicine festival visitors is likely to result mainly from motivational, emotional, and habitual factors, including cognitive factors, it seems that the MGB could be a valuable new theoretical framework for explaining the behavioral intention of these visitors. The MGB could also be applied to help researchers and managers better understand the factors determining the behavior of Oriental medicine festival visitors.

### 2.4. Hypothesized relationships

#### 2.4.1. Relationships among Oriental medicine image of festival site, perception of Oriental medicine, and attitude

In order to use the original MGB and expand its applicability to behaviors of Oriental medicine festival visitors, the current study introduced two new constructs. The objective was to build strong predictive power of the model in order to understand the decision-making process of the visitors to Oriental medicine festivals. The two new constructs introduced are Oriental medicine image of festival site (OMIFS) and perception of Oriental medicine (POM).

These two constructs seem to be the key elements in evaluating the decision-making process of the Oriental medicine festival visitors.

An image is generally defined as a set of beliefs or impressions of a specific object (Kotler, 1980; Lee, Lee, & Lee, 2005). Image also represents an individual's complex ideas about the object (Jenkins, 1999). In the field of tourism tourists show a tendency to observe or experience surrounding environments and develop perceptions of the objects and phenomena through cumulative observations and experiences before, during, and after their travel. According to Beerli and Martin (2004), tourists develop an image of the perceived objects and phenomena while performing tourism behaviors. Lee et al. (2005) argue that destination image is closely related to tourist behavior.

Others claim that destination image determines tourists' decision-making process by triggering their choices and preferences (Chen & Gursoy, 2001; Fakeye & Crompton, 1991). Many studies have been done on tourism destination image and how particular destinations are viewed by tourists (Beerli & Martin, 2004). Image is closely related to attitudes; these two constructs represent psychological reactions to a stimulus (Peter & Olson, 1999). Milman and Pizam (1995) emphasize the close relationship between destination image and attitudes. Watson and Hill (1993) report that image influences attitudes, emotions, values, and feelings. Baloglu and McCleary (1999) state that destination image influences tourist attitudes toward a visiting destination. In the light of the above, it seems that image of the Oriental medicine festival site, which can be considered as a type of a destination, can influence visitor attitudes toward attending the festival. Therefore, this study posits the following hypothesis.

*Hypothesis 1 (H1): Oriental medicine image of festival site has a positive relationship with attitude toward attending the Oriental medicine festival.*

Perception refers to an individual's knowledge, information, and experiences, which are responsive to cognition of objects, behaviors, and events (Anderson, 2004). Therefore, as an inherent cognitive process, perception of objects, actions, and events is closely related to human behaviors and the decision-making process (Lee, Han, et al., 2012; Lee, Song, et al., 2012). Fiske and Taylor (1991) claim that perception influences attitude, which in turn affects behavior. This assertion indicates that behavior and attitude can be the result of an individual's perception (Lindsay & Norman, 1977).

Oliver (1997) states that people are likely to develop their attitudes, interests, and opinions through perceptions obtained in their day-to-day lives. Song, Lee, Kang, et al. (2012) report on the usefulness of the perception concept; perception of certain activities affects the attitudes and decision-making process of a perceiver. For example, the perception of a festival theme can be a major factor that attracts visitors to the festival. Therefore, the distinctiveness and uniqueness of the festival theme affect visitor interest in and positive attitude toward the festival (Shin et al., 2012).

When festival programs and facilities match the festival theme, visitor perception of the festival is more strongly formed and helps to develop more positive attitudes toward the festival. Specifically, in the study, if visitors to the Oriental medicine festival develop perceptions of Oriental medicine through knowledge, information, and experiences with the festival, it can be assumed that visitor perceptions of the festival will affect attitudes toward attending the festival and decision-making process. Therefore, this study proposes the following hypothesis.

*Hypothesis 2 (H2): Perception of Oriental medicine has a positive relationship with attitude toward attending the Oriental medicine festival.*

#### 2.4.2. Relationship between attitude and desire

An individual tends to assess the possible benefits or losses derived from a specific behavior to determine whether or not to engage in the specific behavior (Baker, Al-Gahtani, & Hubona, 2007; Cheng, Lam, & Hsu, 2006). Accordingly, it can be assumed that an individual has a strong desire to engage in the behavior when the expected outcomes of that behavior are positively evaluated. An attitude toward a certain behavior reflects an overall evaluation of the specific behavior and influences an individual's desire to engage in that behavior (Song, Lee, Kang, et al., 2012). The influence of attitude on desire has been demonstrated in several MGB studies (Lee, Han, et al., 2012; Lee, Song, et al., 2012). Based on the previous studies, it can be assumed that if a visitor develops a positive attitude toward attending an Oriental medicine festival, this attitude will strengthen the desire for attending the festival. Therefore, it is hypothesized that:

*Hypothesis 3 (H3): Attitude toward attending the Oriental medicine festival has a positive relationship with desire to attend the Oriental medicine festival.*

#### 2.4.3. Relationship between subjective norm and desire

Fishbein and Ajzen (1975) define the concept of subjective norm as a perceived social pressure in the situation whether or not to perform a specific behavior. An individual is likely to consider and comply with other people's opinions to perform a specific behavior. This means that an individual's decision and behavior are highly influenced by salient referents (Bearden & Etzel, 1991; Cheng et al., 2006). Salient referents are individuals or groups that the person believes will approve or disapprove of his or her performing the behavior. The important salient referents often include the person's parents, spouses, close friends, co-workers, and, in some cases, people such as doctors, accountants, and so on. According to Ajzen (1988), "people who believe that most referents with whom they are motivated to comply think they should perform the behavior will perceive social pressure to do so" (p. 121).

Various MGB studies reveal that subjective norm is a significant factor in the desire formation (Song, Lee, Norman, et al., 2012). Desire can be strengthened as subjective norm changes to be stronger in the situation where the level of other factors affecting behavioral intention is unchanged (Lee, Han, et al., 2012; Lee, Song, et al., 2012). Therefore, it can be assumed that if an individual perceives that other people evaluate the Oriental medicine festival as a positive or valuable activity, the individual's desire to visit the Oriental medicine festival will be increased. Therefore, the following hypothesis is proposed.

*Hypothesis 4 (H4): Subjective norm has a positive relationship with desire to attend the Oriental medicine festival.*

#### 2.4.4. Relationship between positive anticipated emotion and desire

One of the limitations of the TPB is that it does not consider emotional aspects of behavioral intention (Perugini & Bagozzi, 2001). People may have forward-looking emotions toward uncertain future behaviors (Triandis, 1977). In particular, expecting psychological benefits by performing a specific behavior causes positive anticipated emotions, whereas expecting psychological damages by failing to perform the behavior leads to negative anticipated emotions (Bagozzi, Baumgartner, & Pieters, 1998). This means that anticipated affective pre-responses to the performance of a behavior can be important determinants of behavioral intention (Song, Lee, Kang, et al., 2012; Van der Pligt & De Vries, 1998).

In the MGB, positive and negative anticipated emotions predict desire with the original variables of the TPB; these emotions lead to the dynamic self-regulatory process implied by the appraisal of success or failure for performing a behavior (Carver & Scheier, 1998). Gleicher et al. (1995) note that these anticipated emotions affect both behavioral intention and actual behavior. However, the hypothetical relationship between negative anticipated emotion and desire is not considered in this study since the influence of negative anticipated emotion on desire was found to be statistically insignificant (Song, Lee, Kang, et al., 2012) or weak (Lee, Han, et al., 2012; Lee, Song, et al., 2012) in relation to tourist behaviors. Therefore, in this study, only positive anticipated emotions are assumed to predict desire, along with the original variables of the TPB. Therefore, it is hypothesized that:

Hypothesis 5 (H5): *Positive anticipated emotion has a positive relationship with desire to attend the Oriental medicine festival.*

#### 2.4.5. Relationships among perceived behavioral control, desire, and behavioral intention

If necessary resources or opportunities to perform a specific behavior are fully prepared an individual's desire and behavioral intention for the behavior are reinforced (Perugini & Bagozzi, 2001). However, if an individual is in the situation where the resources or opportunities are not enough, his/her desire and behavioral intention for the behavior will decrease. This characteristic of human behavior can be explained with the concept of perceived behavioral control. Perceived behavioral control refers to the perceived ease or difficulty of performing the behavior. The greater a person's perceived behavioral control, the stronger should be the intention to perform the behavior.

For example, if a person considers that s/he has the necessary resources (e.g., time, means of transportation) to go on a vacation, s/he is more likely to form an intention to perform the behavior. As a non-volitional dimension, perceived behavioral control is also considered as an imperative factor of desire in the MGB. Some scholars demonstrate that an individual's decision-making can be strongly influenced by perceived behavioral control, which indicates individual confidence, or ability to carry out a specific behavior in the MGB (Lee, Song, et al., 2012; Song, Lee, Kang, et al., 2012). In other words, desire and behavioral intention for a specific behavior tend to be strengthened when necessary resources or opportunities to perform the behavior are fully prepared (Perugini & Bagozzi, 2001).

If an individual has enough resources or opportunities to visit the Oriental medicine festival, this can strengthen an individual's desire and behavioral intention for the festival visit. Perugini and Bagozzi (2001) state that perceived behavioral control reinforces an individual's desire, behavioral intention, and actual behavior. However, the hypothetical relationship between perceived behavioral control and actual behavior is not considered in this study since the final variable of the current study is a behavioral intention, not an actual behavior. In other words, in this study perceived behavioral control is hypothesized to influence desire and behavioral intention to attend the Oriental medicine festival. Therefore, it is hypothesized that

Hypothesis 6 (H6): *Perceived behavioral control has a positive relationship with desire to attend the Oriental medicine festival.*

Hypothesis 7 (H7): *Perceived behavioral control has a positive relationship with behavioral intention to attend the Oriental medicine festival.*

#### 2.4.6. Relationships among frequency of past behavior, desire, and behavioral intention

If an individual performs a particular behavior repeatedly, s/he reinforces desire and behavioral intention to perform the behavior (Song, Lee, Kang, et al., 2012). This feature of human behavior can be explained with the concept of past behavior. Past behavior can contribute to diminishing perceived risks associated with a particular behavior through repetitive and habitual behavior execution (Ouellette & Wood, 1998; Sönmez & Graefe, 1998). Past behavior is identified as a significant predictor of future behaviors because it is regarded as a proxy of habit (Conner & Armitage, 1998; Leone et al., 2004). In the MGB, it is hypothesized that the recency of past behavior predicts only actual behavior but the frequency of past behavior is further assumed to be a predictor of desire, intentions, and actual behavior (Bagozzi & Dholakia, 2006).

Frequency indicates the performance of behavior within a relatively long lapse of time, typically one year. Recency represents the performance of a behavior over relatively short period of time, typically a few weeks or months. However, the influence of the recency of past behavior is not considered at this time because the final dependent variable in this study is not actual behavior but behavioral intention. Therefore, the hypothetical relationships with past behavior are proposed as follows:

Hypothesis 8 (H8): *Frequency of past behavior has a positive relationship with desire to attend the Oriental medicine festival.*

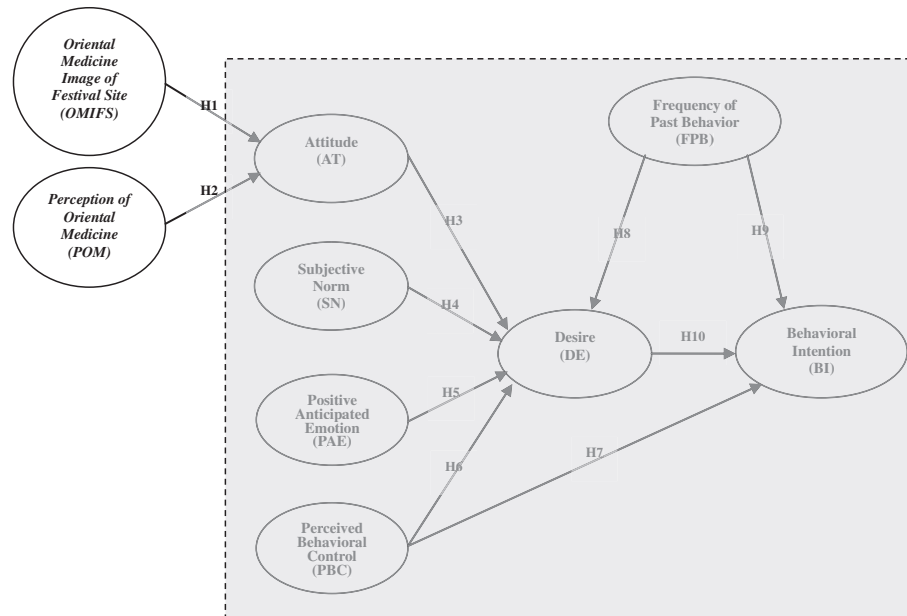
Hypothesis 9 (H9): *Frequency of past behavior has a positive relationship with behavioral intention to attend the Oriental medicine festival.*

#### 2.4.7. Relationship between desire and behavioral intention

Many extant studies indicate that desire is the omitted variable in the past decision-making process theory bridging the gap between cognitive and conative processes (Bagozzi, 1992; Lee, Han, et al., 2012; Lee, Song, et al., 2012; Perugini & Bagozzi, 2001; Song, Lee, Norman, et al., 2012). If an individual has a desire for particular activities, the individual will have an impetus to perform the relevant behavior due to strong thoughts or feelings toward these activities. However, although an individual has enough belief to perform a specific behavior, the actual behavior may not be performed without desire as a motivational commitment for that behavior. Perugini and Bagozzi (2004) consider desire as a state of mind whereby an individual has a personal stimulus to perform an action or to achieve a goal. Perugini and Bagozzi (2004) also assert that the concepts of desire and intention are to be considered respectively because desire is less performable, less connected to action, and enacted over longer time frames than intention. In the MGB, desire mediates the original three antecedents of TPB and behavioral intention by capturing a greater proportion of the total variance in behavioral intention (Perugini & Bagozzi, 2001). Song, Lee, Kang, et al. (2012) confirm that desire, the most important determinant of intention, predicts mud festival visitors' intention in the investigation of perceptions of three environmentally related constructs. Therefore, the following hypothesis is proposed.

Hypothesis 10 (H10): *Desire has a positive relationship with behavioral intention to attend the Oriental medicine festival.*

Based on the aforementioned hypotheses, a research model is proposed as shown in Fig. 1.



Note: Shadow area indicates the original MGB components; the two circles in italics outside shadow area are the newly added constructs in this study.

Fig. 1. A proposed research model.

### 3. Methods

#### 3.1. Measurement

All constructs in this study, except the frequency of past behavior, were measured with multiple items as recommended by Churchill (1979) and Kline (2005). A preliminary list of measuring items was generated after an extensive review of the literature pertaining to the theories of human behavior, including TPB and MGB, and the concept of Oriental medicine. Three tourism scholars who do research in the area of festival management assessed the content validity of the measuring items. Furthermore, the selected measuring items were pre-tested on a sample of 20 festival visitors and 10 graduate students majoring in Tourism Management at Kyung Hee University in Seoul, Korea. As a result of the pre-test some ambiguous items were reworded for clarity. The uniqueness of the Oriental medicine image of festival site (OMIFS) was examined with five items adopted from a brochure promoting the Sancheong Oriental medicine festival (Sancheong County Office, 2012) and a previous study by Yu and Lee (2010) (e.g., “Sancheong makes a good impression as an Oriental medicine site”). Festival managers and academics were asked to evaluate the appropriateness of the image measuring items.

Perception of Oriental medicine (POM) was measured with four items (e.g., “Oriental medicine allows for personalized treatment”) taken from related literature (Wikipedia, 2013; Yoo, Lee, Kim, Lee, & Lixing, in press). Attitude toward attending the Oriental medicine festival, subjective norm, perceived behavioral control, positive anticipated emotion, desire, and behavioral intention were operationalized with 20 items as suggested by previous studies (Ajzen, 1991; Carrus, Passafaro, & Bonnes, 2008; Lam & Hsu, 2006; Lee, Han, et al., 2012; Lee, Song, et al., 2012; Oh & Hsu, 2001; Perugini & Bagozzi, 2001; Reisinger & Mavondo, 2005; Sancheong County Office, 2012; Song, Lee, Kang, et al., 2012).

Attitude (AT) was measured with four items (e.g., “visiting the Oriental medicine herbal festival is a good thing to do”), subjective norm (SN) was measured with four items (e.g., “people who are important to me agree I should visit the Oriental medicine herbal festival”), perceived behavioral control (PBC) was measured with four items (e.g., “I am capable of attending the Oriental medicine herbal festival”), positive anticipated emotion (PAE) was measured with four items (e.g., “if I revisit the Oriental medicine herbal festival, I will be excited”), desire (DE) was measured with four items (e.g., “I would like to revisit the Oriental medicine herbal festival”), and behavioral intention (BI) was measured with four items (e.g., “I will make an effort to revisit the Oriental medicine herbal festival”). All items, except the frequency of past behavior, were assessed on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The frequency of past behavior was coded as a continuum variable (Lee, Song, et al., 2012).

#### 3.2. Data collection

There were approximately 850,000 visitors to the 2012 Sancheong Oriental medicine festival (Sancheong County Office, 2012). The majority of the festival visitors came from outside of the local area. The local population of the Sancheong area (35,651) accounted for only 4.2% of the total number of visitors (Sancheong County Office, 2013). An on-site intercept survey was conducted among Koreans, who represented the majority of the festival visitors. The survey was conducted by four field researchers between May 3 and May 9, 2012 in the booth provided by the Sancheong County Office. Only visitors who had experienced at least three activities or programs at the festival were invited to participate in the survey. A self-administered questionnaire was distributed only to those who agreed to respond to the survey. Sanitary water tissues were provided as an incentive. Out of 474 questionnaires distributed 51 were incomplete and thus eliminated from the study. As a result, 423

questionnaires were accepted for the purpose of final analysis, representing a response rate of 89%.

### 3.3. Analysis

In order to test research hypotheses in the proposed model (see Fig. 1), a structural equation modeling (SEM) was run using SPSS (2001) and EQS (Bentler & Wu, 1995). In this study, the two-stage testing procedure was adopted, as recommended by Anderson and Gerbing (1988). In the first stage, confirmatory factor analysis (CFA) estimated the measurement model for the EMGB variables. In the second stage, hypothetical relationships among the EMGB constructs were identified in the structure model (Anderson & Gerbing, 1992). In terms of model fit, the value of chi-square and Root Mean Square Error of Approximation (RMSEA) as absolute fit indices were used to provide the indication of how well the research model fits the data without comparisons with other models. Normed Fit Index (NFI), Non-normed Fit Index (NNFI), and Comparative Fit Index (CFI) as incremental fit indices were also used to identify how well the research model fits the data by comparing the research model to null model which hypothesizes that all variables are uncorrelated.

## 4. Results

### 4.1. Respondents' demographic characteristics

Table 1 presents demographic characteristics of the respondents. There were more females (52.7%) than males (47.3%) in the sample. Most of the respondents fell into age groups of 50–59 years (32.7%) and 40–49 years (24.4%) indicating that the Oriental medicine festival attracted more mature respondents concerned about their health. More than one-third (44.1%) of the respondents had university degrees and 17.3% had two-year college degrees. Middle income earners (KRW 2 to 2.9 million: US\$1 is equivalent to KRW 1134) and high income earners (over KRW 5million) represented 26.1% and 23.2% of the sample, respectively. There were more married (85.5%) than single (14.5%) respondents. The sample contained a variety of occupational groups, including 17.8% housewives, 17.6% office workers, 16.1% businessmen/self-employed, 8.8% civil workers, and 7.6% students.

**Table 1**  
Demographic characteristics of the respondents.

Characteristic	N (%)	Characteristic	N (%)
<i>Gender</i>		<i>Marital status</i>	
Male	194 (47.3)	Single	59 (14.5)
Female	216 (52.7)	Married	349 (85.5)
<i>Education level</i>		<i>Monthly income level<sup>a</sup></i>	
Less than middle school	15 (3.7)	Less than KRW1 million	71 (17.3)
High school	143 (34.9)	KRW1 – 1.9 million	69 (16.8)
Two-year college	71 (17.3)	KRW2 – 2.9 million	107 (26.1)
More than university	181 (44.1)	KRW3 – 3.9 million	68 (16.6)
		Over KRW5 million	95 (23.2)
<i>Age</i>		<i>Occupation</i>	
20–29	46 (11.2)	Office workers	72 (17.6)
30–39	51 (12.4)	Businessmen/Self-employed	66 (16.1)
40–49	100 (24.4)	Civil workers	36 (8.8)
50–59	134 (32.7)	Students	31 (7.6)
Over 60	79 (19.3)	Housewives	73 (17.8)
		Technicians	17 (4.1)
		Experts/professionals	25 (6.1)
		Retired	30 (7.3)
		Others	60 (14.6)

<sup>a</sup> US\$1 is equivalent to KRW1,134.

### 4.2. Measurement model

SEM technique usually employs the Maximum Likelihood (ML) Estimation method under the assumption that the collected data have a multivariate normal distribution. However, most of data in the social sciences do not appear to have multivariate normal distributions (Chou, Bentler, & Satorra, 1991). In order to test whether the data in the study met the assumption of multivariate normality, Mardia's standardized coefficient was employed. The data appeared to have a multivariate non-normal distribution as Mardia's standardized coefficient for the measurement model (75.676) exceeded the criterion of 5 (Byrne, 2006). Therefore, in this study, a Robust Maximum Likelihood method was used to estimate the structural equation modeling instead of Maximum Likelihood Estimation. If the collected data have a multivariate non-normal distribution, the Robust Maximum Likelihood method can provide more stable and accurate robust standardized errors and other fit indices based on the Satorra–Bentler (S–B)  $\chi^2$  (Bentler & Wu, 1995; Byrne, 2006). These robust statistics (i.e., Satorra–Bentler scaled statistic (S–B  $\chi^2$ )) and robust standardized errors perform better than uncorrected statistics, where the assumption of multivariate normality assumption is not supported (Hu, Bentler, & Kano, 1992).

The measurement model derived from the CFA showed satisfactory levels of all fit indices (see Table 2) indicating the proposed measurement model fits the data well:  $\chi^2 = 696.758$ ; S–B  $\chi^2 = 529.253$ ;  $df = 465$ ; Normed Fit Index (NFI) = 0.922; Non-normed Fit Index (NNFI) = 0.988; Comparative Fit Index (CFI) = 0.990, and Root Mean Square Error of Approximation (RMSEA) = 0.018. The results indicate that the covariance matrix of the collected data was similar to the covariance matrix of the proposed model. All Cronbach's alpha values exceeded the minimum standard for reliability of 0.7 recommended by Nunnally and Bernstein (1994). Oriental Medicine Image of Festival Site (OMIFS) = 0.879, Perception of Oriental Medicine (POM) = 0.861, Subjective Norm (SN) = 0.843, Perceived Behavioral Control (PBC) = 0.844, Positive Anticipated Emotion (PAE) = 0.910, Attitude (AT) = 0.829, Desire (DE) = 0.877, and Behavioral Intention (BI) = 0.919 (see Table 2).

Table 3 presents convergent and discriminant validity statistics. All average variance extracted (AVE) and composite reliability values for the multi-item scales were greater than the minimum levels of 0.5 and 0.7, respectively (Hair, Black, Babin, Anderson, & Tatham, 2006), indicating a sufficient level of convergent validity for the measurement model. In order to check discriminant validity of the constructs three methods were used. The first method, AVE, confirmed the discriminant validity of the constructs; the AVE of each construct was greater than the squared correlation coefficients for corresponding inter-constructs (Fornell & Larcker, 1981).

The other two methods, confidence intervals and constrained models, also supported the discriminant validity of the constructs. Specifically, the confidence interval of squared correlation between desire (DE) and behavioral intention (BI) as the highest squared correlation among constructs (0.928–0.656) did not include the criterion of 1.0 based on a confidence interval method outlined by Anderson and Gerbing (1992). A constrained model was also confirmatory because the S–B Chi-square difference test statistic (Byrne, 2006) for the relationship between DE and BI exceeded the criterion of 3.84 ( $p < 0.001$ ) (Bagozzi & Phillips, 1982; Steenkamp & Trijp, 1991).

### 4.3. Hypothesis testing

Fig. 2 summarizes the estimated results of the proposed research model. The results confirm that the proposed structural

model fits the data well:  $\chi^2 = 892.821$ ;  $S-B \chi^2 = 691.912$ ;  $df = 474$ ; Normed Fit Index (NFI) = 0.897; Non-normed Fit Index (NNFI) = 0.961; Comparative Fit Index (CFI) = 0.965, and Root Mean Square Error of Approximation (RMSEA) = 0.034. The explained variance in endogenous constructs was 35.4% for attitude, 64.7% for desire, and 66.5% for behavioral intention. Hypotheses 1 and 2 posited that Oriental medicine image of festival site (OMIFS) and Perception of Oriental medicine (POM) have positive effects on attitude (AT). The results indicated that both predictor variables of OMIFS and POM ( $\beta_{OMIFS \rightarrow AT} = 0.540, t = 8.108, p < 0.001$ ;  $\beta_{POM \rightarrow AT} = 0.137, t = 2.113, p < 0.05$ ) exerted positive influence on attitude (AT). Thus, H<sub>1</sub> and H<sub>2</sub> were supported by the study results. Also, all predictor variables, except perceived behavioral control (PBC), were statistically significant in predicting desire (DE): attitude (AT) ( $\beta_{AT \rightarrow DE} = 0.119, t = 2.369, p < 0.05$ ), subjective norm (SN) ( $\beta_{SN \rightarrow DE} = 0.258, t = 4.195, p < 0.001$ ), positive anticipated emotion (PAE) ( $\beta_{PAE \rightarrow DE} = 0.553, t = 7.997, p < 0.001$ ), and frequency of past

behavior (FPB) ( $\beta_{FPB \rightarrow DE} = 0.101, t = 2.944, p < 0.01$ ); H<sub>3</sub>, H<sub>4</sub>, H<sub>5</sub>, and H<sub>8</sub> were supported by the study results. However, perceived behavioral control (PBC) ( $\beta_{PBC \rightarrow DE} = 0.080, t = 1.330$ ) was not statistically significant in predicting desire (DE) to revisit the festival; thus, H<sub>6</sub> was not supported.

Other hypotheses related to behavioral intention (BI) were also tested. The relationships between perceived behavioral control (PBC) and behavioral intention (BI) ( $\beta_{PBC \rightarrow BI} = 0.148, t = 1.995, p < 0.05$ ) and between desire (DE) and behavioral intention (BI) ( $\beta_{DE \rightarrow BI} = 0.740, t = 11.943, p < 0.001$ ) were positive and significant when predicting behavioral intention to revisit the festival, thus H<sub>7</sub> and H<sub>10</sub> were supported. However, the frequency of past behavior (FPB) ( $\beta_{FPB \rightarrow BI} = -0.009, t = -0.031$ ) was not statistically significant and thus H<sub>9</sub> was rejected. Overall, four constructs of attitude (AT), subjective norm, (SN), positive anticipated emotion (PAE), and frequency of past behavior (FPB) played an essential role in explaining the formation of the festival visitors' desire (DE) to

**Table 2**  
Results of the confirmatory factor analysis (CFA) and fit indices for measurement model.

Constructs	Factor loading	t-value	Cronbach's alpha					
<i>F1: Oriental Medicine Image of Festival Site (OMIFS)</i>			0.879					
Sancheong makes a good impression as an Oriental medicine site	0.813	17.287						
Sancheong is a reliable region as an Oriental medicine site	0.860	21.992						
Sancheong is a promising region as an Oriental medicine site	0.790	16.427						
Sancheong is a friendly region as an Oriental medicine site	0.759	15.054						
Sancheong is a clean and healthy region as an Oriental medicine site	0.668	12.976						
<i>F2: Perception of Oriental Medicine (POM)</i>			0.861					
Oriental medicine allows for personalized treatment	0.746	15.518						
Oriental medicine cures by enhancing an immune system	0.821	17.332						
Oriental medicine cures diseases by balancing a physical system	0.841	20.610						
Oriental medicine sometimes can treat and heal without a surgery	0.697	13.989						
<i>F3: Subjective Norm(SN)</i>			0.843					
People important to me agree I should visit the Oriental medicine herbal festival	0.712	12.244						
People important to me support my decision to visit the Oriental medicine herbal festival	0.775	15.338						
People important to me understand the significance of visiting the Oriental medicine herbal festival	0.795	15.649						
People important to me recommend visiting the Oriental medicine herbal festival	0.750	14.921						
<i>F4: Perceived Behavioral Control (PBC)</i>			0.844					
If I want I can visit the Oriental medicine herbal festival	0.592	10.446						
I am capable of attending the Oriental medicine herbal festival	0.889	21.407						
I have enough financial means to visit the Oriental medicine herbal festival	0.752	13.919						
I have enough time to visit the Oriental medicine herbal festival	0.826	16.920						
<i>F5: Positive Anticipated Emotion(PAE)</i>			0.910					
If I revisit the Oriental medicine herbal festival, I will be excited	0.789	17.440						
If I revisit the Oriental medicine herbal festival, I will be glad	0.864	20.753						
If I revisit the Oriental medicine herbal festival, I will be satisfied	0.886	20.723						
If I revisit the Oriental medicine herbal festival, I will be happy	0.869	20.760						
<i>F6: Attitude(AT)</i>			0.829					
Visiting the Oriental medicine herbal festival is a good thing to do	0.729	13.625						
Visiting the Oriental medicine herbal festival is valuable for me	0.817	18.053						
Visiting the Oriental medicine herbal festival is beneficial for me	0.764	15.796						
Visiting the Oriental medicine herbal festival is a necessary thing to do	0.723	14.642						
<i>Factor 7:Desire (DE)</i>			0.877					
I would like to revisit the Oriental medicine herbal festival	0.869	18.460						
I want to have fun when revisiting the Oriental medicine herbal festival	0.782	16.402						
I hope to revisit the Oriental medicine herbal festival	0.904	20.823						
I want to have an unforgettable memory when revisiting the Oriental medicine herbal festival	0.698	14.806						
<i>Factor 8:Behavioral Intention (BI)</i>			0.919					
I will make an effort to revisit the Oriental medicine herbal festival	0.880	22.459						
I intend to revisit the Oriental medicine herbal festival	0.922	20.774						
I am willing to revisit the Oriental medicine herbal festival	0.913	19.385						
I intend to save time and money to revisit the Oriental medicine herbal festival	0.780	14.969						
Measurement model	$\chi^2$	$S-B \chi^2$	$df$	Normed $S-B \chi^2$	NFI	NNFI	CFI	RMSEA
Suggested value <sup>a</sup>	696.758	529.253	465	1.138	0.922	0.988	0.990	0.018
				$\leq 3$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	$\leq 0.08$

Notes: Mardia's standardized coefficient for the measurement model = 75.676. All standardized factor loadings are significant at  $p < 0.001$ .

<sup>a</sup> Suggested values are based on Hair et al. (2006) and Bearden, Sharma, and Teel (1982).



**Table 3**  
Reliability and validity of the measurement model.

Constructs	OMIFS	POM	SN	PBC	PAE	AT	DE	BI
OMIFS	1.000							
POM	0.305 (0.093)	1.000						
SN	0.540 (0.292)	0.289 (0.084)	1.000					
PBC	0.268 (0.072)	0.094 (0.009)	0.369 (0.136)	1.000				
PAE	0.461 (0.213)	0.157 (0.025)	0.546 (0.298)	0.452 (0.204)	1.000			
AT	0.539 (0.291)	0.294 (0.086)	0.739 (0.546)	0.387 (0.150)	0.528 (0.279)	1.000		
DE	0.586 (0.343)	0.201 (0.040)	0.605 (0.366)	0.468 (0.219)	0.735 (0.540)	0.544 (0.296)	1.000	
BI	0.599 (0.359)	0.271 (0.073)	0.616 (0.379)	0.485 (0.235)	0.679 (0.461)	0.530 (0.281)	0.792 <sup>a</sup> (0.627)	1.000
CR	0.906	0.859	0.844	0.853	0.914	0.844	0.888	0.924
AVE	0.659	0.606	0.576	0.597	0.727	0.576	0.668	0.711

Notes: Numbers in the parenthesis indicate squared correlation among latent constructs. Correlation coefficients are estimated from EQS. CR = composite reliability; AVE = average variance extracted; OMIFS = Oriental Medicine Image of Festival Site; POM = Perception of Oriental Medicine; SN = Subjective Norm; PBC = Perceived Behavioral Control; PAE = Positive Anticipated Emotion; AT = Attitude; DE = Desire, and BI = Behavioral Intention.

<sup>a</sup> Pairs of constructs having highest correlations.

attend the Oriental medicine festival, and two constructs of perceived behavioral control (PBC) and desire (DE) served as important antecedents in predicting the visitors' behavioral intention (BI) to revisit the festival. Additionally, the Oriental medicine image of festival site (OMIFS) and perception of Oriental medicine (POM) were significant and direct predictors of attitude (AT), which in turn indirectly influenced desire (DE). The findings imply that Oriental medicine image of festival site (OMIFS) and perception of Oriental medicine (POM) play an important role in influencing visitors' attitude toward attending the festival which influences their desire to attend the festival.

#### 4.4. Direct, indirect and total effects

Bollen (1989) and Kline (2005) state that estimating total effect, the sum of direct and indirect effects among constructs, is an important procedure to interpret all changes, including mediating effects, from an independent variable to a dependent variable. Table 4 presents total effects of the analyzed constructs. Specifically, desire was the most powerful antecedent in predicting behavioral intention, with the largest total impact (0.740), followed by positive anticipated emotion (0.394), perceived behavioral control (0.207), subjective norm (0.191), attitude (0.088), frequency of past behavior (0.066), and Oriental medicine image of festival site (0.047). In assessing the effect of predicting desire, positive anticipated emotion was the most powerful, with the largest total effect (0.533), followed by subjective norm (0.258), attitude (0.119), frequency of past behavior (FPB) (0.101), and Oriental medicine image of festival site (0.064). In assessing attitude, Oriental medicine image of festival site (0.540) was more significant than perception of Oriental medicine (0.137).

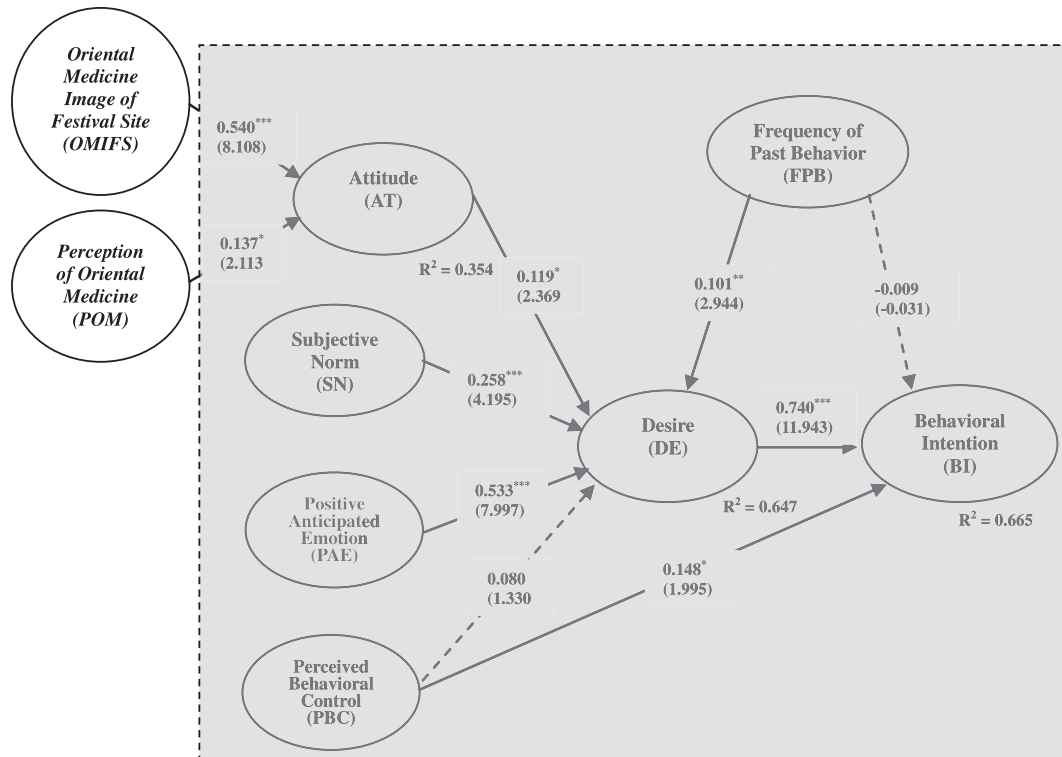
## 5. Conclusions

Oriental medical tourism has begun to receive attention around the world as a new type of medical tourism. As the demand for medical services increases Oriental medical tourism presents a huge potential for international tourism. For example, numerous Asian countries promote their regions as viable tourism destinations associated with Oriental medicine. It is believed that hosting a successful Oriental medicine festival contributes to the

development of the Oriental medicine industry and the increased number of Oriental medical tourists. This indicates that hosting Oriental medicine festivals plays an important role in developing Oriental medical tourism. Oriental medicine festivals can enhance the image of the host region as an Oriental medical tourism destination and draw the attention of tourists interested in Oriental medical services.

Little research to date has been conducted to understand the decision-making process of visitors to Oriental medicine festivals. To address this gap, this study employed MGB, a theoretically more advanced model than TPB. By using MGB this study identified the behavioral intention of Oriental medicine festival visitors. The study revealed that positive anticipated emotion, subjective norm, attitude, and the frequency of past behavior had significant effects on desire to attend the Oriental medicine festival; the effect of perceived behavioral control on desire was insignificant. Particularly, positive anticipated emotion was the most significant predictor of desire, which was the most significant factor in predicting visitor behavioral intention. These findings are consistent with previous studies (e.g., Lee, Han, et al., 2012; Lee, Song, et al., 2012; Song, Lee, Kang, et al., 2012; Song, Lee, Norman, et al., 2012).

Also, considering that little research has been done on the impact of image and perceptions on behavioral intentions in the context of an Oriental medicine festival this study examined the influence of image and perceptions on the visitor decision-making process by developing the extended MGB. The validity of the two antecedents was not evaluated in the previous studies. This study revealed that Oriental medicine image of festival site (OMIFS) and perception of Oriental medicine (POM) formed positive and significant relationships with attitude toward attending the Oriental medicine festival. This finding implies that OMIFS and POM can indirectly stimulate visits to the Oriental medicine festival and encourage tourists to purchase and consume the related products and services by evoking their desire and behavioral intention. The above finding confirms that the inclusion of important variables to develop or extend the theory of behavioral intention (i.e., MGB) is reliable and valid in the festival tourism context. In the Oriental medicine festival setting, the image of the festival site and perception of Oriental medicine influence visitors' attitudes toward attending the Oriental medicine festival.



$\chi^2 = 892.821$ , S-B  $\chi^2 = 691.912$ ,  $df = 474$ ,  $p < 0.000$ , S-B  $\chi^2/df = 1.460$ , NFI = 0.897, NNFI = 0.961, CFI = 0.965, RMSEA = 0.034

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Two-tailed test  
Standardized coefficient (t-value)  
Solid line: significant path  
Dotted line: non-significant path

Fig. 2. Results of the extended model of goal-directed behavior.

6. Implications

6.1. Theoretical implications

The study results have several important theoretical implications. Utilization of the EMGB enhances the understanding of intricate mechanisms that form the behavioral intention to visit Oriental

medicine festivals by considering the influences of the festival site image and visitor perceptions of Oriental medicine. Therefore, the EMGB seems to be an appropriate framework for predicting Oriental medicine festival visitors' behavior. The significant effects of desire, positive anticipated emotion, and the frequency of past behavior on Oriental medicine festival visitors' decision-making process reveal that the behavior of Oriental medicine festival visitors likely results

Table 4  
Decomposition of effects with standardized values.

	Direct effect			Indirect effect			Total effect		
	AT	DE	BI	AT	DE	BI	AT	DE	BI
OMIFS	0.540**	—	—	—	0.064*	0.047*	0.540**	0.064*	0.047*
POM	0.137*	—	—	—	0.016	0.012	0.137*	0.016	0.012
SN	—	0.258**	—	—	—	0.191**	—	0.258**	0.191**
PBC	—	0.080	0.148*	—	—	0.059	—	0.080	0.207**
PAE	—	0.533**	—	—	—	0.394**	—	0.533**	0.394**
AT	—	0.119*	—	—	—	0.088*	—	0.119*	0.088*
DE	—	—	0.740**	—	—	—	—	—	0.740**
FPB	—	0.101**	-0.009	—	—	0.075**	—	0.101**	0.066*

\* $p < 0.05$ ; \*\* $p < 0.01$ .

Notes: OMIFS = Oriental Medicine Image of Festival Site; POM = Perception of Oriental Medicine; SN = Subjective Norm; PBC = Perceived Behavioral Control; PAE = Positive Anticipated Emotion; AT = Attitude; DE = Desire, FPB = Frequency of Past Behavior, and BI = Behavioral Intention.

from motivational, emotional, and habitual factors, including cognitive factors in the TPB.

It seems that the influence of emotional factors on the behavioral intention of Oriental medicine festival visitors is powerful. Emotional factors apparently exert a powerful influence on Oriental medicine festival visitors. These visitors are more likely to attend Oriental medicine festivals due to emotional factors rather than cognitive factors. It appears the Oriental medicine festival visitors' decision-making process is mainly emotional rather than rational. This finding would not have been discovered if our study had employed the TPB only. Therefore, a more advanced model like the EMGB is necessary to consider these factors in order to help researchers and managers better understand the behavior of Oriental medicine festival visitors. The insignificant relationship between perceived behavioral control and desire, and the significant relationship between perceived behavioral control and behavioral intention, imply that Oriental medicine festival visitors tend to consider their resources or opportunities for attending an Oriental medicine festival at the stage of forming an intention, not at the stage of forming a desire. Furthermore, the significant relationship between the frequency of past behavior and desire, and the insignificant relationship between the frequency of past behavior and behavioral intention, indicate that the frequency of past behavior does not directly predict behavioral intention, although it does predict desire. This finding is consistent with the reports of other studies (e.g., Kaplanidou & Gibson, 2010; Lee, Song, et al., 2012; Song, Lee, Kang, et al., 2012; Song, Lee, Norman, et al., 2012). They state that past behavior/experience with a festival is not necessarily a predictor of revisit intention because visitors with previous experiential festival activities are more likely to develop desire to seek out a similar experience than those without an experience.

## 6.2. Practical implications

The results of this study have several practical implications shedding light on how successfully to manage Oriental medicine festivals. First, as desire to attend the festival strongly influences the behavioral intention of visitors and positive anticipated emotion is the most important factor of desire, management may need to inspire the passion and emotion of visitors. In order to do this, Oriental medicine festival managers need to offer experiential, educational, and entertaining programs. These can include well-being, anti-aging, weight loss, and preventive health care programs as well as medical treatments, such as acupuncture, cupping, acupressure, and tasting herbal medicine. Oriental medicine educational courses (e.g. teaching about various herbs and herbal treatments) as well as live talk shows and presentations about Oriental medicine aimed at providing visitors with knowledge and fun can also be organized. Since subjective norm is another important factor determining desire to visit the festival, management may need to promote Oriental medicine festivals as attractive tourism products. For example, festival tour packages (individual or group) can be organized to provide visitors with unforgettable memories and experiences and satisfy their unique medical-related needs. Small souvenirs made from Oriental medicine products may be offered to visitors. Moreover, recruiting and funding the supporters of the Oriental medicine festival can further increase visitor subjective norm to attend the festival.

Second, informing visitors that Oriental medicine festivals are special tourism products and that the festival areas are unique destinations is important. It was found that visitors' perceptions of Oriental medicine strengthen their attitude and hence behavior toward the festivals. For example, developing tourism products that emphasize the superiority of the Oriental medical

experience and Korean traditional healthcare style is necessary to increase potential visitors' desire to visit the festival and its region. Examples of attendance-inspiring tourism products could be Oriental medicine health examination and counseling, herbal tea preparation and tasting, or the Oriental diagnosis of human constitution. Managers of the Sancheong herbal festival would also do well to launch promotional campaigns and introduce educational programs that address the superiority of Korean Oriental medicine and enhance the image of the Sancheong County as a Korean Oriental medicine region. The Donguibogam book, the classics of Oriental medicine that is on UNESCO's Memory of the World Programme, should be advertised when promoting the festival. These marketing efforts would enhance the value of Oriental medical tourism and increase tourism demand for visiting the Sancheong herbal festival.

## 7. Study limitations and future research

The study has several limitations that need to be addressed in the future. The presence of females, married and educated respondents, and those older than 40 years of age could reflect on their responses. Demographic characteristics such as gender, education, marital status and age—specifically the proportion of women, married and educated respondents, and those older than 40 years of age in the present sample—could impact the responses. Future research should identify the variations in visitors' responses arising from their demographic profiles. The results of the study may not be generalizable to Oriental medicine festivals in other countries or regions. Thus, similar studies should be performed in other geographical locations where Oriental medicine festivals represent a popular emerging tourism attraction. Cross-cultural studies would also be useful and future research could use the EMGB in the context of Korean versus non-Korean Oriental medicine festivals. Further research could also identify additional important variables for explaining the Oriental medicine festival visitors' intention formation process.

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