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## Korean DMZ tourists' perceived similarity and shared beliefs in predicting place attachment and support for tourism development

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#### ABSTRACT

Given the growing interest in the Korean Demilitarized Zone (DMZ) as a tourism destination, this study investigated DMZ tourists' place attachment and tourism development support, by identifying the importance of perceived similarity and shared beliefs in symbolic, touristic, and preservation values. Using survey data collected from 378 DMZ tourists, this study revealed that perceived similarity was a significant antecedent of shared beliefs, which further influenced place attachment and support for tourism development. In particular, shared touristic value had a direct impact on place attachment, while symbolic and preservation values influenced tourism development support only. This study adds to the burgeoning research on DMZ tourism and offers a unique approach to evaluate destination values from tourists' sociological perspectives. This study suggests managerial guidance on how the destination can develop the DMZ as a tourism destination, concerning tourists' perspectives and shared beliefs highlighting key values associated with the place.

#### 1. Introduction

The Korean Demilitarized Zone (DMZ) is a symbolic and historical place representing the war and division between South and North Korea. Since it was first designated in 1953 as a result of the Korean War, the DMZ has been closed off from development but has slowly evolved into a unique destination. The DMZ might be one of the world's most heavily militarized areas, but it welcomes more than 1.2 million travelers each year (Tourism Knowledge & Information System, 2018). Of these visitors, about 80% are domestic travelers. As such, the Korea Tourism Organization along with tour operators have created several tour packages to provide tourists with various experiences of the DMZ (Jang, 2018). Accordingly, a number of studies have paid attention to the DMZ in various perspectives such as ecotourism (Lee & Mjelde, 2007), heritage tourism (Kim & Thapa, 2018), and dark tourism (Bigley, Lee, Chon, & Yoon, 2010).

The isolation from development has led the DMZ being considered one of the most well-preserved temperate habitats in the world (Brady, 2008; Kim, 1997; Lee, Yoon, & Lee, 2007). With the DMZ's ecological

and symbolic values, a well-designed tourism development is an emerging topic for the DMZ to be positioned as a destination in the long run. A majority of previous research has discussed tourism development from the perspectives of residents. Kim, Choe, and Lee (2019), for example, investigated whether and how residents living adjacent to the DMZ supported a plan to build a peace park within the DMZ. But recent studies have claimed that it is critical to understand tourists' perspectives and behaviors centered on tourism development as they are important stakeholders who are concerned about environmental and cultural influences of tourism (Cheng & Wu, 2015; Chiu, Lee, & Chen, 2014; Joo, Cho, & Woosnam, 2019; Su & Swanson, 2017).

DMZ tourists are likely to find some similarity with one another based on similar visiting reasons (e.g. political beliefs, history, culture, security, curiosity, nature-based tourism) (Bigley et al., 2010; Joo & Woosnam, 2020). A tourist who perceives some similarity with others in a destination may feel comfortable forging social relationships with others and sharing common thoughts or opinions about the destination, which is referred to as 'shared beliefs' (Woosnam, Norman, & Ying, 2009). Shared beliefs can encourage tourists to appreciate the value of

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the destination and develop positive place attachment. With such positive attitudes, tourists are more likely to support development within the destination (Brown, 2000).

Both concepts of similarity and shared beliefs are grounded in social identity theory to describe an individual's perspectives toward others and perceived group membership in social settings. However, the causal relationship between the two concepts has been inconsistently identified across various studies. Al-Natour, Benbasat, and Cenfetelli (2011), for example, revealed that online users' perceived similarity was a significant antecedent to evaluative beliefs. On the other hand, Bar-Tal (2000), in a sociology study, argued that shared beliefs evoke confidence of the beliefs and further a sense of similarity. However, the relationship has been rarely discussed in a tourism setting. With these controversial finding and the lack of the tourism research, this study attempts to identify the relationship to better describe the mechanism on how tourists support tourism development. Shared beliefs in the DMZ can reside in three dimensions of symbolic, touristic, and preservation values based on its unique values and attractions (Joo & Woosnam, 2020; Woosnam & Norman, 2010). For example, the symbolic value reflects social and historical meanings unique to the DMZ, touristic value represents its capability to entertain and accommodate tourists' needs, and preservation value corresponds to its assets and attractions worthy of protection. These values can be important elements to describe the DMZ as a heritage or dark tourism destination. Furthermore, each dimension of these shared beliefs has a distinct role in impacting place attachment and tourism development support. For instance, symbolic value is likely to have a significant impact on place attachment (Proshansky, Fabian, & Kaminoff, 1983), while touristic and preservation values may have a stronger impact on tourism development support (Kitnuntaviwat & Tang, 2008; Uriely, Israeli, & Reichel, 2003). However, past research examined tourists' perceived value from a general perspective (e.g. Lee, 2007), but it has rarely discussed the DMZ's values from tourists' shared views in such specific ways. Thus, this study offers a significant opportunity to identify the values of the DMZ and the distinctive roles in developing their positive attitudes and support within the heritage tourism context.

Shared beliefs can create social and psychological relationships among DMZ tourists and further connect them to the destination. Their connection or attachment to the DMZ is a strong precursor to conservation efforts and supports for tourism development (Ramkissoon, Weiler, & Smith, 2012; Stylidis, Biran, Sit, & Szivas, 2014). Thus, it can be assumed that place attachment is a significant mediator between shared beliefs and tourism development support. Moreover, concerning the distinct role of each shared belief dimension, it is believed that the mediating role of place attachment between each dimension of shared beliefs and tourism support could be different; however, it has not empirically been examined yet in the DMZ setting.

Responding to these research gaps, the purpose of the study is to investigate whether DMZ tourists' perceived similarity and shared beliefs with one another will influence attachment to the DMZ, which will further lead to their support for tourism development. In particular, this study (1) examines if individuals' similarity is an antecedent of shared beliefs, (2) investigates whether each dimension of shared beliefs symbolic, touristic, and preservation values - has a distinctive role in forming place attachment and determining tourism development support, and (3) identifies whether place attachment mediates the relationship between each shared belief dimension and tourism development. Considering the growing number of tourists to the DMZ, this study recognizes the significance of tourists' perspectives, shared beliefs, and positive attitudes and their collaborative impacts on tourism development in a sequential manner within the heritage tourism setting.

#### 2. Literature review

#### 2.1. Korean Demilitarized Zone (DMZ)

The DMZ is the buffer zone running east-west across the Korean Peninsula, separating South and North Korea. The Joint Security Area, known locally as Panmunjeom, is a meeting point for individuals from the two countries. Since the armistice agreement was signed in 1953 at the place, various events and meetings have been held, including the recent summits for the leaders of South Korea, North Korea, and the US in 2019. The DMZ also encompasses many historical sites such as the 3rd Infiltration Tunnel dug by North Korea, a former Labor Party Building, and a former US Army base. These sites not only represent the inter-Korea conflict but also the peace efforts. To those who have homes and families in North Korea, the DMZ is a symbolic place for the division of the country and separation of the families (Kim, 2014). Those who defected from the North often host ancestral rituals and shamanic performances in Imjingak, a memorial park right adjacent to the DMZ, to commemorate and lament family members left in North Korea (Pilzer, 2003). As such, the DMZ is a symbolic representation of Korean history and emotion, charged with sadness, bitterness, and longing (Kim, 2014).

For the past half century, the DMZ has been devoid of residential development. This isolation has created an undisturbed sanctuary which is now recognized as one of the most well-preserved areas of numerous florae, faunae, and temperate habitats in the world (Brady, 2008; Kim, 1997; Lee et al., 2007). The DMZ is home to about 2700 plant and animal species and 82 of 171 nationally endangered species in South Korea (Choi, 2013). Accordingly, a myriad of studies has acknowledged the rich biodiversity in the DMZ and discussed its economic and ecological values (Kim, 1997; Lee & Mjelde, 2007). The recognition of these values has led to some controversial discussions on seeking an economic use of the DMZ by promoting developmental activities and loosening restrictions. However, a general consensus has been made that the DMZ's natural and preservation values should remain unspoiled with a more careful development approach (Kim, Steiner, & Mueller, 2011).

Due to its symbolic and ecological significance, the DMZ has become a popular destination. Indeed, tourism is the only significant activity in the DMZ outside of military occupation. Given the increased interest in the area, the Korea Tourism Organization has created several tour packages to provide tourists with various experiences within and adjacent to the DMZ (Jang, 2018). More sites within the DMZ have been open for tourists, and new attractions (e.g. museum, observation stations) have been built for tourists' activities. Tourists can participate in various tour programs to recognize and appreciate historical and ecological values of the DMZ.

Researchers have approached the DMZ from various perspectives of ecotourism (e.g. Kim et al., 2011; Lee & Mjelde, 2007), peace tourism (e.g. Kim et al., 2019; Lee, Bendle, Yoon, & Kim, 2012), heritage tourism (Kim & Thapa, 2018), border tourism (Hunter, 2015), or dark tourism (e.g. Bigley et al., 2010). For example, the DMZ tourists' motivations were discussed within the war-tourism or dark tourism perspectives (Bigley et al., 2010). Hunter (2015) looked at the DMZ as an iconic war heritage attraction and a symbolic landscape. In addition, Kim and Thapa (2018) paid attention to the DMZ as a heritage destination and examined the roles of self-congruity, value perception, and travel satisfaction in the development of destination loyalty. These examples show that more recent studies focus on the DMZ as a heritage tourism destination, where its own historical and cultural characteristics are rich and significant to attract potential tourists (Poria, Butler, & Airey, 2003).

Furthermore, the DMZ studies have recently paid attention to tourists' perspectives, including tourists' behaviors (e.g. Park & Lee, 2018), ecological value (e.g. Lee & Mjelde, 2007), and economic value (e.g. Mjelde, Kim, Kim, & Lee, 2017). For example, Lee et al. (2007) demonstrated how DMZ tourists' perceived value influenced their satisfaction and intention to recommend. Lee, Kyle, and Scott (2012)

revealed that tourists' emotional, functional, and economic values were core factors for their satisfaction and loyalty. Park and Lee (2018) also investigated the impact of tourists' experiences (i.e. entertainment, education, esthetic, and escape) on perceived emotional and functional values and satisfaction. Overall, these studies have clearly illustrated that the DMZ is recognized as a unique and popular destination while limited research has discussed its development as a tourism destination from tourists' perspectives.

#### 2.2. Perceived similarity

The concept, 'similarity' refers to the extent to which individuals feel similar to and identify with others who share the same setting and space (Brocato, Voorhees, & Baker, 2012). The term was first introduced by Brocato et al. (2012) who explored how customers' perception on other customers affected their service experience, but the notion and its importance have long been recognized in the literature. For instance, in the social categorization theory (Turner & Oakes, 1986), similarity is the extent of common attributes that individuals share with one another (Brown, 2000) and what makes them develop a sense of belonging to a social group. The self-identity theory posits that individuals are influenced by others who are similar (Platow, Mills, & Morrison, 2000). As such, similarity is an essential element in explaining why individuals favor certain social settings over others.

Based on similarities, individuals' identification with others promotes a collective identity (Ashforth & Mael, 1989) which in turn leads to two systematic characteristics: (a) inconsistent reactions toward in-group and out-group differences and (b) favorable feelings toward similar in-group members. That is, visible differences among the group members become insignificant while the differences from others outside the group sharpen. Thus, within-group differences irrelevant to decision-making situations are often trivialized. In addition, favorable feelings are bestowed on the other in-group members who share similar values, so individuals tend to have a better memory of events related to similar in-group members than dissimilar out-group members (Dovidio, Gaertner, & Saguy, 2008). As such, how individuals see others can greatly influence how experiences are rated or revisit intentions are shaped.

Tourism and hospitality researchers have underscored the integral role of similarity in forging individuals' experiences, attitudes, and behaviors (e.g. Choi & Mattila, 2016; Hwang & Han, 2015; Hyun & Han, 2015). Choi and Mattila (2016), for example, found that restaurant customers' perceived similarity with others had a positive impact on their attitudes (e.g. how they liked the environment or wished to stay longer in the restaurant). Hwang and Han (2015) also discovered that club members at a private country club tended to see the club more favorably when they perceived themselves similar to other members. The same positive relationship between similarity and experience was also underscored by Yin and Poon (2016) who undertook a qualitative investigation of how other tourists affected tourists' group tour experiences; the results showed that noticeable deviations in appearance, behavior, and language were associated with negative tourist experiences.

#### 2.3. Shared beliefs

The notion of 'shared beliefs' has been presented across many fields in various terms, such as 'sacred beliefs' (Durkheim, 1912), 'collective beliefs' (Gilbert, 1987), or 'group beliefs' (Tuomela, 1992). In tourism research, the term, shared beliefs was first used by Woosnam et al. (2009) to describe common convictions or opinions about a particular destination that individuals (i.e. tourists, residents) have as a group. The concept represents how a group of residents or tourists think of a destination (e.g. perceived values) in different aspects. When tourists recognize that they share a common understanding of the destination with other tourists, they may develop a sense of group membership,

which is a fundamental element to determine social identity (Brown, 2000).

Since every destination has a unique set of attractions and appeals, shared beliefs about a destination are often specific to the particular destination. Thus, shared beliefs can be described in various ways, depending on different tourism settings. For instance, a coastal tourism study developed a scale for shared beliefs and viewed the concept in two dimensions: preservation and amenities (Woosnam & Norman, 2010). Preservation included items pertaining to the maintenance of the natural and historic integrity of the destination, while amenities described entertainment and dining options available in the destination. A religious tourism study recently identified the concept of shared belief in three factors: devotion, concerns, and entertainment (Joo & Woosnam, 2020). Devotion represented the symbolic value (e.g. religious value) attributed to a certain type of destinations (e.g. religious destination); concerns referred to risks associated with traveling to far-away destinations; and entertainment addressed evaluation of destinations' recreational and touristic value (e.g. dining or shopping opportunities). These findings have shown that while the way of describing shared beliefs can deviate across different contexts, its overall themes may

Considering the DMZ's historical, emotional, touristic, and ecological attributes, DMZ tourists' shared beliefs can be discussed in three aspects of symbolic (e.g. history, emotion), touristic (e.g. amenities, tour activities), and preservation (e.g. natural resources) which are aligned with previous studies. That is, symbolic value implies the DMZ's historical and emotional importance, which is similar to the factor of devotion (Joo & Woosnam, 2020); touristic value describes recreational and entertainment features such as facilities, amenities, and dining options available in a destination, which corresponds to amenities (Woosnam & Norman, 2010) or entertainment (Joo & Woosnam, 2020); and preservation value represents the maintenance of the natural and historic resources of the destination for sustainable tourism development, which is aligned with preservation (Woosnam & Norman, 2010).

#### 2.4. Place attachment

Individuals can develop an affective bond or link toward a place, which is called 'place attachment' (Hidalgo & Hernandez, 2001). Place attachment is an attitudinal, emotional response and perceived proximity to a place (Hummon, 1992; Low, 1992). It can be formed by functional, tangible factors and/or through social relationships (Hidalgo & Hernandez, 2001; Lewicka, 2011). That is, esthetic and psychological attributes (e.g. wilderness) can connect individuals to a place, helping them to feel attached the place (Beckley, Stedman, Wallace, & Ambard, 2007; Bow & Buys, 2003; Landon, Woosnam, Kyle, & Keith, 2020). Also, the social dimension has been recognized as an essential and effective source of developing place attachment (Hidalgo & Hernandez, 2001; Lewicka, 2011; Low & Altman, 1992; Milligan, 1988).

Williams and Vaske (2003) proposed a scale to measure place attachment through two dimensions: place identity and place dependence. Place identity represents the symbolic importance of a place as a backdrop to individuals' emotional or social relationships (Williams & Vaske, 2003). This dimension particularly emerges from beliefs, emotions, thoughts, attitudes, and economic, historical, or cultural sources associated with the place (Proshansky et al., 1983). Place dependence, on the other hand, addresses functional or physical bonding to a place and reflects how important the place is in pursuing desired goals or activities (Williams & Vaske, 2003). Furthermore, with the importance of emotional and social bonding to a place, place affect and social bonding have also been recognized as additional place attachment dimensions within a tourism context (Jorgensen & Stedman, 2006; Kyle, Mowen, & Tarrant, 2004).

Place attachment has been proven effective in explaining tourists' behaviors, such as repeat visitation (Hwang, Lee, & Chen, 2005), place satisfaction (Lee, Kyle, & Scott, 2012; Ramkissoon, Smith, & Weiler,

2013; Yuksel, Yuksel, & Bilim, 2010) and destination loyalty (Prayag & Ryan, 2012; Yuksel et al., 2010). In addition, destination image (Lee, Busser, & Yang, 2015; Prayag & Ryan, 2012), personal involvement (Mowen, Graefe, & Virden, 1998), and leisure commitment (Bricker & Kerstetter, 2000; Moore & Scott, 2003) have been identified as important predictors of place attachment. Furthermore, environmental psychology studies have demonstrated a significant relationship between place attachment and socio-demographic characteristics (Hidalgo & Hernandez, 2001), social capital (Scopelliti & Tiberio, 2010), and perceived safety (Lewicka, 2010).

Place attachment generally increases as individuals spend more time in a place (Gu & Ryan, 2008; Hidalgo & Hernandez, 2001), are more committed to the activities in the place (Bricker & Kerstetter, 2000; Moore & Scott, 2003; Mowen et al., 1998; Scopelliti & Tiberio, 2010), and benefit more from chosen activities (Gu & Ryan, 2008). Since residents generally stay longer or do more at a place than tourists, residents are likely to demonstrate stronger place attachment (Stedman, 2006). However, recent studies further investigated tourists' place attachment in various settings (e.g. nature-based tourism, pop culture tourism) and revealed that tourist involvement and satisfaction can lead tourists to developing attachment to the place, which further influences positive attitudes and loyalty toward the place ((Chen, Dwyer, & Firth, 2018); Gu & Ryan, 2008; Lee, Kyle, & Scott, 2012).

#### 2.5. Tourism development support

Early studies on tourism development focused on residents' perceptions of the benefits and costs of tourism (e.g. Haralambopoulos & Pizam, 1996; Liu & Var, 1986; Milman & Pizam, 1988; Um & Crompton, 1987). Following these works, researchers began to focus specifically on how residents viewed tourism impacts and how their perceptions contributed to support for tourism development (e.g. Joo, Woosnam, Strzelecka, & Boley, 2020; McCool & Martin, 1994; Perdue, Long, & Allen, 1990; Sirakaya, Teye, & Sönmez, 2002). Such research demonstrated that residents were generally more supportive of tourism development when they appreciated social impacts (e.g. greater recreational opportunities, better quality of life), cultural improvements (e.g. enhanced cultural activities), and economic benefits from tourism development (Jurowski, Uysal, & Williams, 1997; King, Pizam, & Milman, 1993; McCool & Martin, 1994; Perdue et al., 1990; Snaith & Haley, 1999).

A number of studies have further recognized tourists as important destination stakeholders in tourism development (Cheng & Wu, 2015; Chiu et al., 2014; Joo et al., 2019; Su & Swanson, 2017). Lo, Chin, and Law (2019), for example, investigated tourism development support as a moderator in understanding tourists' perspectives on rural destination competitiveness. The study highlighted that tourists' positive attitudes are crucial for community support to enhance accommodation quality and destination competitiveness. In addition, Joo et al. (2019) found that tourists' emotional connection to residents had a positive impact on their perceptions of tourism impact in an urban tourism context. This finding suggests that tourists' social relationships can be a strong factor in support of tourism development.

Overall, recent research shows that tourism development should be considered from the perspectives of not only residents but also tourists. Tourists are ultimately those who visit destinations, appreciate resources and assets in the destinations, and experience tourism products and services. With positive experiences, such tourists have been noted to put forth efforts that minimize their negative impacts while maximizing positive consequences, thereby supporting tourism development so as to enjoy tourism benefits in the long-run (Cheng & Wu, 2015; Chiu et al., 2014). Thus, it is critical to understand tourists' perspectives of tourism development.

#### 2.6. Conceptual framework

Based on the previous research, a proposed model was developed (Fig. 1). The model represents a conceptual framework involving similarity, shared beliefs, place attachment, and support for tourism development.

The two concepts of similarity and shared beliefs are intricately related, equally discussing commonness among individuals. Both concepts explain individuals' perspectives toward others and perceived group membership in social settings. Grounded in social identity theory, Tajfel (1972) claimed that individuals are likely to develop positive attitudes toward others when they find that they are similar to one other. When an individual perceives greater similarity to another, the former is more likely to share thoughts and opinions with the latter.

Past research has broadly discussed the two concepts in various fields such as business, education, and organizational behaviors. For example, an education study found that students with greater similarity with one another were also more likely to share similar beliefs about their academic competence and motivations (Altermatt & Pomerantz, 2003). According to Makela, Kalla, and Piekkari (2007), perceived similarity in social status would enhance homophily which leads to a higher tendency for interaction and knowledge sharing. In addition, perceived similarities in nationality, ethnicity, and gender were strongly associated with team expectations, process, and beliefs (Dahlin, Weingart, & Hinds, 2005; Mannix & Neale, 2005). However, Bar-Tal (2000), in a social psychological work, suggested the possibility of an iterative relationship where shared beliefs evoke confidence of the beliefs and further the sense of similarity.

While controversial findings exist in the literature, more studies tend to support the claim that similarity is an antecedent of shared beliefs. Thus, this study conceived of similarity as an antecedent of shared beliefs and assumed that given a strong degree of perceived similarity with other tourists to the DMZ, such tourists are most likely to possess a common set of beliefs as demonstrated through symbolic (e.g. warrelated history), touristic (e.g. tour programs and facilities), and preservation (e.g. biodiversity) values (Bigley et al., 2010; Kim, 2014; Woosnam et al., 2009). Thus, the following hypothesis with three sub-hypotheses was posited:

**H1.** Tourists' perceived similarity with one another will significantly influence their shared beliefs with others concerning symbolic  $(H_{1-1})$ , touristic  $(H_{1-2})$ , and preservation values  $(H_{1-3})$  within the DMZ.

Shared beliefs encompass both social - 'shared'- and functional - 'beliefs'- components of a destination. Tourists' social relationships and functional recognition regarding a destination influence their appreciation of the destination values and their attitudes toward the destination (i.e. place attachment) (Jacobs, 2009). In particular, place identity, a form of place attachment can develop through individuals exchanging information on beliefs, thoughts, attitudes, and cultural sources about the place (Proshansky et al., 1983). Thus, a place becomes meaningful for individuals when it serves as a context where they share and develop social and psychological relationships (Low & Altman, 1992; Milligan, 1998). Specifically, the symbolic value of a destination represents the physical or emblematic attributes of the place (i.e. place identity)

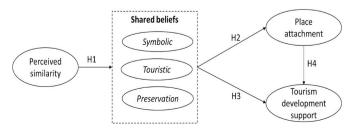


Fig. 1. Proposed research model.

(Bigley et al., 2010). Touristic value also has the potential to influence place dependence as individuals utilize physical resources (e.g. amenities, facilities, etc) (Proshansky et al., 1983). Preservation value describes the environmental benefits, which provides opportunities to appreciate the destination and connect tourists (Kim, 1997). Thus, the relationship between a tourist and a destination is formed when the destination's values (e.g. symbolic meanings, preservation importance) are transformed to experiences and truly appreciated (Low & Altman, 1992; Rollero & De Piccoli, 2010). Based on the DMZ attributes (e.g. history, attractions, and natural resources), therefore, tourists' shared beliefs will provide a chance to appreciate the values in terms of symbolic, touristic, and preservation views, which connect individuals to the destination. Forged from extant research, the following hypothesis with three sub-hypotheses was posited:

**H2.** Tourists' shared beliefs with others concerning symbolic  $(H_{2\cdot 1})$ , touristic  $(H_{2\cdot 2})$ , and preservation values  $(H_{2\cdot 3})$  will significantly influence individuals' attachment to the DMZ.

Shared beliefs can further influence tourists' experiences and attitudes toward the place as a destination. When tourists share their perspectives and develop positive attitudes about the destination, they are more likely to appreciate the values and meanings of destination conservation, and ultimately more likely to be supportive of developing the destination in a sustainable way (Brown, 2000). Shared beliefs reflect particular attributes and values of the destination, thus distinctive values will dictate how tourism development is condoned in the destination. Kitnuntaviwat and Tang (2008), for instance, revealed that a common understanding of the preservation value in a destination had a positive impact on their support for tourism development. Uriely et al. (2003) found that when religious and cultural heritage (i.e. symbolic value) is positively portrayed in the destination, residents were more supportive of further tourism development. Kim et al. (2019) particularly found that DMZ's symbolic meaning was an important factor in residents' supporting the development of a touristic place (e.g. Peace Park). Therefore, with respect to the DMZ's symbolic, touristic, and preservation values, tourists' shared beliefs will have a positive impact on their attitudinal support for various tourism development options within the DMZ. Thus, this study established the following hypothesis with sub-hypotheses:

**H3.** Tourists' shared beliefs with one another in terms of symbolic ( $H_{3-1}$ ), touristic ( $H_{3-2}$ ), and preservation values ( $H_{3-3}$ ) will significantly predict their degree of support for tourism development options within the DMZ.

Place attachment has been shown to be a strong predictor of support for conservation efforts (Ramkissoon et al., 2012; Scannell & Gifford, 2010). Tourists with a high degree of place attachment would recognize that tourism development provides benefits to the place. Place attachment is not only associated with past memories connected to a place, but also future experiences that individuals anticipate having in the destination (Milligan, 1998). Thus, individuals who build a connection to a destination are likely to have a positive view toward tourism impacts, thereby further supporting tourism development (Stylidis et al., 2014). That is, it is proposed that DMZ tourists will be more likely to support various tourism development options when they are more attached to the place. Thus, the following hypothesis was formulated:

**H4.** Tourists' degree of attachment to the DMZ will significantly predict their degree of support for tourism development options within the DMZ.

Finally, based on the H3 and H4, this study hypothesizes that place attachment will act as a mediator between the three dimensions of shared beliefs and support for tourism development options in the DMZ. Numerous studies have found that place attachment serves as a mediator that connects past experiences and future intentions (George & George, 2004), perceived benefits and visit intentions (Kil, Holland, Stein, & Ko,

2012), or emotions and intentions to recommend (Hosany, Prayag, Van Der Veen, Huang, & Deesilatham, 2017). In particular, Cheng, Wu, and Huang (2013) found that place attachment was a significant mediator between destination attractiveness and environmentally responsible behavior. As such, the following hypothesis was developed.

**H5.** Tourists' degree of attachment to the DMZ will significantly mediate the relationship between tourists' shared beliefs concerning symbolic ( $H_{5-1}$ ), touristic ( $H_{5-2}$ ), and preservation values ( $H_{5-3}$ ) and their level of support for tourism development options within the DMZ.

#### 3. Method

#### 3.1. Measures

The survey instrument consisted of scales for four constructs: (1) similarity with other tourists (Brocato et al., 2012), (2) shared beliefs with other tourists as measured through symbolic, touristic, and preservation values (Joo & Woosnam, 2020; Woosnam & Norman, 2010), (3) place attachment in terms of place dependence, place identity, place affect, and social bonding (Kyle et al., 2004), and 4) support for tourism development options within the DMZ (Lankford & Howard, 1994; Wang & Pfister, 2008).

All items were measured on a five-point Likert scale, ranging from  $1=\operatorname{strongly}$  disagree to  $5=\operatorname{strongly}$  agree. The survey instrument was first developed in English and then translated into Korean by two researchers who are fluent in both languages. To ensure the accuracy of the translation, the Korean version was back translated into English by another researcher who is also bilingual and an expert in scale development. Minor discrepancies were clarified after reviewing the two versions by the researchers. Furthermore, a pre-test with 26 undergraduate students in a tourism research method class was conducted, using the questionnaire in Korean. The pre-test showed no major concern or issue, thereby confirming face and content validity of the survey instrument.

#### 3.2. Data collection

The population of this study included South Korean tourists who visited the DMZ in the past. An online survey was conducted on October 2018 by Embrain, a research company in South Korea to recruit 500 responses. This firm has a large panel with qualified members to participate in surveys. It uses systematic and rigorous procedures to verify the quality of data by cross-checking respondents' legal names and membership IDs, time to complete a survey, and response patterns. An email about the survey was sent to 14,670 panelists and 3124 individuals initially accessed the survey. However, only 419 completed the questionnaire during the survey period while the remaining respondents were non-visitors or did not fully complete the questionnaire. A follow-up data screening process further identified 41 cases as outliers or bias responses. Thus, only 378 responses were validated for data analysis. The average completion time of the survey was about 10 min .

#### 3.3. Data analysis

Structural equation modeling was employed to examine the proposed model. A second-order factor model approach was used for the multidimensional construct of place attachment, while similarity, shared beliefs dimensions, and support for tourism development were considered as first-order factor constructs. Confirmatory factor analysis (CFA) was conducted to test the goodness of fit as well as convergent and discriminatory validity of the measurement model. The structural model was then estimated for examining the relationships among the constructs in the proposed model. Goodness of fit was measured using Chisquare ( $\chi$ 2) statistics, Comparative Fit Index (CFI), Tucker-Lewis index (TLI), and Root-Mean-Square Error of Approximation (RMSEA).

#### 4. Results

#### 4.1. Respondent demographics

The sample included 53.4% females (n = 202) and 46.6% males (n = 176). On average, the sample was 38.20 years old (SD = 12.96), evenly representing across six age categories from a low of 18 years of age to over 65 years of age. Nearly nine out of 10 (87.6%) respondents held some college degree or higher, and the average monthly household income was about 4.5 million KRW or US\$3750. Respondents traveled to the DMZ with their family (53.3%), friends (21.3%), tour groups (23.2%), or others (2.2%) (e.g. relatives, colleagues, etc.). About 15% of respondents had a family member from North Korea, and 8.1% had a family or relatives who still live in North Korea.

#### 4.2. Measurement model

As shown in Table 1, the measurement model specified six factors: similarity, symbolic value, touristic value, preservation value, place attachment, and support for tourism development as first-order constructs. Note that place attachment was measured with 12 items in four dimensions, but an aggregated value of the corresponding items of each dimension (i.e. place dependence, place identity, place affect, and social bonding) was used as each indicator of place attachment. Overall, the measurement model showed a good fit to the data: S-B $\chi^2$ (155) = 285.040,  $\chi^2$ /df = 1.839, CFI = .956, TLI = .946, and RMSEA = .047 (CI: .038–.056). Table 1 presents the results of descriptive analysis.

As shown in Table 2, Cronbach's alpha values ranged from 0.755 to 0.903, exceeding a cut-off of 0.70 and demonstrating sound reliability (Hair, Black, Babin, Anderson, & Tatham, 2006). In addition, Composite Reliability (CR) values for all constructs ranged from 0.766 to 0.904, exceeding a recommended threshold level of 0.70, indicating good construct reliability (Fornell & Larcker, 1981).

Factor loadings ranged from .573 to .883 (Table 1) and Average Variance Extracted (AVE) estimates ranged from .527 to .703 (Table 2), indicating good convergent validity (Hair et al., 2006). The highest correlation value among constructs was .644 between touristic value and preservation value. AVE values were greater than the squared correlations of corresponding constructs, which suggested satisfactory discriminant validity (Byrne, 2006). Overall, the results confirmed a good measurement model for further analysis.

#### 4.3. Structural equation model

The structural model showed a good fit to the data:  $S-B\chi^2(160) =$ 371.096,  $\chi^2/df = 2.319$ , CFI = .929, TLI = .915, and RMSEA = .059 (CI: .051-.067) (Fig. 2). The findings revealed that similarity had statistically significant effects on all of the three dimensions of shared beliefs: symbolic ( $\beta = .443, p < .001, R^2 = 19.7\%$ ), touristic ( $\beta = .487, p < .001$ ,  $R^2 = 23.7\%$ ), and preservation ( $\beta = .441, p < .001, R^2 = 19.4\%$ ), which supported H1. However, each dimension of shared beliefs had a different impact on place attachment and support for tourism development. First, touristic value only had a significant, direct impact on place attachment ( $\beta = .565, p < .001$ ), which supported H<sub>2-2</sub> only. On the other hand, two other dimensions of shared beliefs - symbolic ( $\beta = .305, p < .001$ ) and preservation values ( $\beta = .252, p < .05$ ) - had significant impacts on support for tourism development, which also supported H<sub>3-1</sub> and H<sub>3-3</sub> only. Furthermore, place attachment had a significant impact on support for tourism development ( $\beta = .252$ , p < .001), supporting H4. Lastly, touristic value only had an indirect impact on support for tourism development, mediated by place attachment ( $\beta = .130, p < .05$ ), supporting H<sub>5-2</sub> only. In addition, bias corrected bootstrap test with 1000 samples confirmed the significant mediating effect of place attachment between touristic value and tourism development support (Cheung & Lau, 2008) because the confidence interval for the mediating effect ranged from .03 to .29, which did not include 0 (Table 3). Overall, the

**Table 1**Results of descriptive analysis and factor loadings.

Constructs	λ	Mean	S.D.	Skew	Kurt
Similarity					
I can identify with others visiting DMZ.	.736	3.370	.837	512	.108
I am similar to others visiting DMZ	.844	3.471	.821	658	.382
Others visiting DMZ are like me.	.573	3.532	.785	652	.376
Shared beliefs - Symbolic value					
Like other DMZ visitors, I believe that there is nowhere else like DMZ.	.614	3.870	.775	527	.155
Like other DMZ visitors, I believe that DMZ is a symbolic place.	.849	4.040	.733	509	.426
Like other DMZ visitors, I believe that DMZ is a historical place.	.772	4.146	.653	558	1.267
Shared beliefs - Touristic value					
Like other DMZ visitors, I believe that there is a wide variety of amenities in DMZ.	.694	3.151	.890	141	079
Like other DMZ visitors, I believe that there is a wide variety of things to see in DMZ.	.792	3.341	.796	278	.375
Like other DMZ visitors, I believe that there is a wide variety of things to	.832	3.079	.867	.140	.064
enjoy in DMZ.  Shared beliefs - Preservation value					
Like other DMZ visitors, I respect the nature of DMZ.	.632	3.770	.789	608	.667
Like other DMZ visitors, I believe that preserving the natural value of DMZ	.815	4.111	.734	379	449
is important. Like other DMZ visitors, I believe that	.807	4.058	.782	771	1.089
preserving the historical value of DMZ is important.					
Place attachment					
Place dependence	.802	2.959	.776	052	.086
I enjoyed visiting the DMZ more than any other place.		3.209	.841	384	.255
The DMZ was the best in terms of setting and facilities.		3.021	.904	.002	230
I couldn't imagine a better place to travel than the DMZ.		2.646	.994	.269	348
Place identity	.883	3.179	.781	223	.079
I felt my personal values were reflected in the DMZ.		3.061	.935	082	253
The DMZ was very special to me.		3.513	.856	615	.735
I identified strongly with the DMZ.		2.963	.938	023	165
Place affection	.840	3.154	.849	236	.091
The DMZ meant a lot to me.		3.437	.891	544	.331
I was very attached to DMZ.		3.042	.971	067	160
I felt a strong sense of belonging to the DMZ.		2.984	1.001	.000	274
Social bonding	.827	3.221	.723	471	1.121
The DMZ allowed me to spend time with my family and friends.		3.561	.835	647	.812
Many of my family and friends prefer visiting the DMZ over others.		2.804	.935	012	100
I have a lot of fond memories with family and friends in the DMZ.		3.299	.826	349	.648
Support for tourism development I support developing the DMZ into a	.678	3.815	.848	844	1.298
place for exchange.  I support developing the DMZ into an international destination.	.892	3.807	.878	628	.488
I support developing the DMZ into a sustainable destination.	.907	3.804	.873	642	.432
I support developing the DMZ into a place for peace education.	.755	3.907	.804	815	1.357

 $\lambda$  = Factor loadings; S.D. = Standardized Deviation; Skew = Skewness; Kurt = Kurtosis

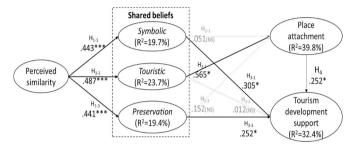
three shared beliefs dimensions model explained about 40% of the variance in place attachment and 32% of the variance in support for tourism development.

This study additionally tested two alternative models to check if the proposed model is superior. Alternative model 1 tested if shared belief is

Table 2 Results of measurement model.

Construct	SIM	SV	TV	PV	PA	SUP
Similarity (SIM)	.527	.437	.369	.339	.420	.297
Symbolic value (SV)	.191	.565	.245	.385	.611	.318
Touristic value (TV)	.136	.060	.600	.644*	.259	.503
Preservation value (PV)	.115	.148	.415	.572	.364	.501
Place attachment (PA)	.176	.373	.067	.132	.703	.414
Support for tourism	.088	.101	.253	.251	.171	.663
development (SUP)						
Cronbach alpha	.755	.778	.812	.788	.903	.882
Composite Reliability (CR)	.766	.793	.818	.798	.904	.885

<sup>\* =</sup> Highest correlation between pairs of constructs; Values of AVE are bold, along the diagonal; Correlations among latent constructs are above the diagonal; Squared correlations among latent constructs are below the diagonal.



**Fig. 2.** The final model with estimated path coefficients.\*\*\*: significant at p <.001; \*: significant at p < .05; Dotted lines and NS indicate insignificant relationships.

an antecedent of similarity instead. The structural model showed a marginal fit to the data:  $S-B\chi^2_{(162)} = 406.218$ ,  $\chi^2/df = 2.508$ , CFI = .918, TLI = .903, and RMSEA = .063 (CI: .056–.071). Therefore, this finding confirms H1 that perceived similarity is an antecedent of shared belief. Furthermore, alternative model 2 was conducted to evaluate if perceived similarity and the three shared belief sub-dimensions simultaneously impact place attachment and tourism development support. The structural model showed a marginally better fit to the data: S- $B\chi^2(155) = 285.040, \chi^2/df = 1.839, CFI = .938, PLI = .926, and RMSEA$ = .055 (CI: .047–.063). However, the perceived similarity had no impact on place attachment or tourism development support. This finding implies that the perceived similarity should be an antecedent of shared belief, indirectly influencing place attachment and tourism development support through shared belief. Therefore, the results offer stronger evidence for the proposed model, confirming perceived similarity as an antecedent of shared beliefs.

#### 5. Discussion

This research found that similarity, shared beliefs, and place attachment each in turn directly or indirectly influenced domestic tourists' support for development options in the DMZ. The findings reflect the importance of tourists' perspectives in developing the DMZ as a sustainable destination, particularly, concerning psychological and social relationships. By measuring the DMZ tourists' shared beliefs in three perspectives (symbolic, touristic, and preservation), this study

identifies important attributes of the DMZ within the heritage tourism context.

Given the continuous debate in the relationship between similarity and shared beliefs, this study attempted to identify the antecedentconsequence relationship in a tourism setting. By testing the proposed model, this study revealed that tourists' perceived similarity was an antecedent of shared beliefs. And two alternative models confirmed the sequential relationship between the two constructs, supporting past studies (Altermatt & Pomerantz, 2003; Dahlin et al., 2005; Makela et al., 2007; Mannix & Neale, 2005). The finding implies that when the DMZ tourists perceives greater similarity to another, they are more likely to develop positive attitudes toward others and share thoughts and opinions about the destination during their trips. This finding verifies that the recognition of tourists' perceived similarity is a pre-requisite step that promotes their willingness to share their beliefs and perspectives.

This study revealed the multi-dimensional nature of shared beliefs as confirmed through the discriminant analysis. This indicates that tourists recognize the DMZ as a destination with symbolic value rooted in Korean history and heritage, rich in attractions, amenities, and with vital cultural and natural resources worthy of preservation. Such value are essential components in planning for tourism development. Given the fact that all three dimensions of shared beliefs were significantly influenced by perceived similarity and discriminant validity was established for the constructs in the study, this work successfully differentiated similarity from shared beliefs.

Moreover, each dimension of shared beliefs had a distinctive role in explaining place attachment and support for various forms of tourism development. Touristic value was the only significant factor that influenced place attachment while the other two did not. This implies that DMZ's touristic value such as attractions, amenities, and resources provide tourists with a chance to appreciate the DMZ as a destination, which led them to enjoying the setting, finding their personal values, and/or having good memory with friends and family. This finding is supported by previous studies indicating that place attachment was formed through destination attractions and appeals in various settings: a costal destination (Loureiro, 2014), sport tourism (Kaplanidou, Jordan, Funk, & Rindinger, 2012), and heritage tourism (Hou, Lin, & Morais, 2005).

However, neither symbolic nor preservation value significantly influenced place attachment. Hou et al. (2005) suggested that symbolic value alone may not be sufficient to make tourists feel attached to a place. Given the fact that it has been 60 years since the Korean War and the majority of visitors (77%) had no family and relatives related to the North, the respondents may have little understanding of the war-related history of the DMZ. Therefore, symbolic and preservation values may not be significant factors contributing to DMZ tourists' feeling attached to the destination. However, touristic value that represents what the destination 'currently' has/offers will be appreciated by spending memorable times with friends and family, even though individuals may have little knowledge about the historical importance of the DMZ. This finding is supported by previous studies that individuals' affective bond toward a place can be formed by functional and tangible factors (Hidalgo & Hernandez, 2001; Lewicka, 2011). Thus, when DMZ tourists share their thoughts, beliefs, and appreciation about the physical attributes, they may find their leisure involvement (Mowen et al., 1998) and commitment (Bricker & Kerstetter, 2000; Moore & Scott, 2003) through touristic values. With these psychological attributes, they find how

Table 3 Confidence interval for indirect effects.

Construct	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
Symbolic value	03	02	01	.01	.05	.06	.08
Touristic value	.03	.06	.07	.13	.23	.25	.29
Preservation value	02	.00	.01	.04	.09	.10	.12

important the place is in pursuing their visiting purposes and tourism activities, thereby developing their emotional connections to the DMZ (Williams & Vaske, 2003). Furthermore, this finding suggests the potential differences in place attachment between residents and tourists as DMZ tourists exhibited place attachment only when touristic value was shared among them. Therefore, this finding highlights the importance of touristic value in creating and developing tourists' place attachment, which is unique and different from residents' views.

This study, on the other hand, revealed an interesting, contrast finding that symbolic and preservation values significantly influenced support for various tourism development options while touristic value did not. That is, when the DMZ is recognized as a place that possesses symbolic, historical, and natural values, tourists believe that those resources and assets are worthy of protecting, thereby highlighting the need for tourism development and planning. This finding is supported by Chiu et al. (2014) that found tourists who are aware of environmental values are more likely to act responsibly and support tourism development. Thus, this finding suggests that it is crucial to appreciate destinations' inherent meanings and resources in order to support tourism development.

Furthermore, while touristic value had no direct impact on support for tourism development options, it had an indirect impact on support, mediated by place attachment. This finding highlights the important role of place attachment in contributing to degree of support for tourism development. First, this finding confirms that place attachment was a significant antecedent of support for tourism development, which is consistent with previous studies (e.g. McCool & Martin, 1994; Stylidis, 2018). More importantly, place attachment was a significant mediator in linking touristic value to support for tourism development. This finding illustrates a hierarchical transitional process from touristic value, place attachment to support for tourism development. Those who only appreciated the DMZ's touristic value might not support tourism development immediately but may do so when they are emotionally connected to the place, formed by touristic values.

#### 6. Conclusions

#### 6.1. Conceptual contribution

The findings of this study make several significant contributions to the literature on heritage tourism and tourism development. First, given the recent increased interest in the DMZ due to politics and foreign relations of North Korea, the study provides significant insight on support for tourism development from the perspectives of DMZ tourists within the heritage tourism context. While previous tourism development research has predominantly focused on residents' views, this study paid attention to tourists, particularly domestic tourists that represent 80% of all DMZ visitors. By focusing on tourists, this study revealed that domestic tourists' own identity serves an essential role in explaining *why* and *how* they support tourism development. Filling in this research gap, therefore, this study provides an important addition to research on the DMZ in heritage tourism and further expands research on tourism development from tourists' perspectives.

More importantly, this research offers a conceptual view on understanding tourists who interact with other tourists in a tourism destination. While most research on tourists has described their situational behaviors (e.g. experience, satisfaction, etc) at a destination, this research focused on tourists' inherent traits – identification that leads to perceived similarity, which further influences their attitudes at the destination. Grounded in social identity theory, perceived similarity was identified as an important internal component that led to shared beliefs externally. Thus, this finding clarified the inconsistent findings of the relationship between these two constructs in past studies, expanding the literature in a tourism context. Furthermore, this approach explained a hierarchical process - how tourists' perceived similarity leads to shared values with others, which further forms place attachment and support

for various tourism development options. Therefore, with the conceptual approach, this study enhances our understanding of tourists and their relationships with others in a social context, which makes an important contribution to the literature.

By recognizing the concept of shared beliefs as a salient component in understanding tourists' support for tourism development, this study highlights its important role in describing social, psychological relationships among tourists and their attachment to the destination (Jacobs, 2009). Furthermore, by identifying the concept in the three forms of symbolic, touristic, and preservation, results revealed that the destination presented different values to tourists and each value exhibited unique patterns in explaining place attachment and support for tourism development options. That is, touristic value had a direct impact on place attachment and an indirect impact on support for tourism development options through place attachment, while symbolic and preservation values influenced tourism development support only. Therefore, the findings offer a unique approach to evaluate destination values and their impacts on the destination in a specific way from tourists' sociological perspectives, thereby expanding the literature on the role of shared belief in explaining support for tourism development.

Lastly, this study highlights the important role of place attachment in mediating the relationship between touristic value and support for various forms of tourism development. The significant impact of touristic value on place attachment offers a unique view in understanding tourists' place attachment, different from residents' perspectives. Furthermore, touristic value itself was not strong enough to explain support for tourism development, but indirectly influenced the construct when place attachment was formulated. The transitional process represents tourists' progressive phases of perceptions and memories to indicate high levels of support for tourism development, highlighting the crucial mediating role of place attachment. Thus, this study makes a unique contribution to adding support for place attachment as a significant mediator and enriching our understanding of its role for destinations from the tourists' perspectives.

#### 6.2. Practical implications

The findings of the study provide central and local governments with useful implications in further developing and promoting the DMZ. First, considering the significant impact of similarity on shared beliefs, destination management organizations (DMOs) should provide opportunities for tourists to locate others with similar interests who hold the same sets of values for the DMZ. Group-based tours and programs, for example, could provide opportunities for tourists to meet and talk to others, thereby potentially fostering greater comfort in sharing common perspectives about the DMZ.

In addition, tourists' shared beliefs were found to be a crucial factor that builds a strong connection to the DMZ and supports its development. This suggests that DMOs should highlight the symbolic nature of the DMZ, the various things to see and enjoy, as well as the natural and historical resources worthy of preservation. In particular, the DMZ's touristic value (e.g. attractions, amenities) was important in forging place attachment, which further led to strong support for tourism development. Thus, DMOs are encouraged to promote opportunities to appreciate a wide variety of tourism attractions and facilities at the destination, which have the potential to foster a greater attachment to the place. Their strong attachment to the DMZ will then hopefully lead to support for the DMZ's development as a tourism destination.

Furthermore, symbolic and preservation values had significant impacts on supporting tourism development. Thus, tourism policymakers and planners should promote the natural, symbolic, and historical values of the DMZ to develop it as an attractive tourism destination. As such, the DMZ will be positioned as a destination that not only provides attractive, convenient features, but also offers social and historical meanings and natural attractions and resources unique to the destination. Overall, DMOs should recognize the importance of tourists'

identified similarity and shared beliefs in developing the DMZ as a place where tourists appreciate key values which lend themselves well to sustainable development.

#### 6.3. Future research

Participants within this study included those traveling with family or friends as well as those with tour groups. Future research is suggested to further identify group differences on similarity and shared beliefs between individual tourists and group-based tourists. Findings may further emphasize the importance of shared beliefs, depending on different travel settings.

Further, this study included only domestic travelers. Given the recent increased interest in North Korean policy, more and more foreigners visit the DMZ every year. Thus, it is critical to understand international tourists' experiences and perspectives as well. Therefore, future research is suggested to select international travelers and replicate this study to understand how their shared similarity and shared beliefs are different from domestic travelers and also how this leads to place attachment and level of support for tourism development. Such work may further shed light on the global importance of the DMZ to tourists.

This study used a second-order factor approach to evaluate place attachment because it mainly focused on identifying the distinct role of each dimension of shared beliefs. Future research is suggested to identify if each of the four dimensions (e.g. place dependence, place identity, place affect, social bonding) has a distinctive relationship with the three values of shared beliefs and support for tourism development. This approach will illustrate the relationships in a more concrete way and provide more specific suggestions to build a strong connection between tourists and the destination.

In conclusion, the present study makes both conceptual contributions to the academic research and practical implications for DMOs. With the growing interest in the DMZ, this study enhances an understanding on the importance of tourists' perspectives of tourism development. Employing the two concepts of similarity and shared beliefs, this study offers a conceptual framework to understand tourists' social relationship and their impacts on place attachment and destination management. The results offer managerial guidance on how DMOs can develop the DMZ as an attractive tourism destination in the long run, concerning its symbolic, touristic, and preservation values.

#### Author statement

Dr. Sojung Lee, Conceptualization, Methodology, Formal analysis, and Writing - original draft. Dr. Dongoh Joo, Ideas, Methodology, Data Curation, and Validation. Dr. Choong-Ki Lee, Project administration, Investigation, and Validation. Dr. Kyle Maurice Woosnam, Supervision and Writing - review & editing

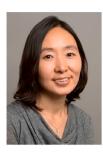
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