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Revisit Intention of Participants of National Fitness Award applying Extended Theory of Planned Behavior

확장된 계획행동이론을 통한 국민체력 100 참여자의 재참여 의도에 관한 연구

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최 원 일

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이 논문을 스포츠 매니지먼트 석사 학위논문으로 제출함

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Abstract

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The average life expectancy of Koreans is increasing due to the development of medical science, improvements in life quality, and a general interest in health (KOSIS, 2018). However, although life expectancy has increased, the concept of health-adjusted life expectation (HALE) should also be considered. This is an indicator that estimates the average years a person can expect to live healthily. Some researchers think that HALE represents the best measurement for estimating the overall level of health for citizens. Consequently, the WHO (World Health Organization) use the concept as an official judgement criterion for yearly reports to provide information about the average level of healthy life for membership states (Lee et al., 2016).

To live healthily and maintain quality of life, it is essential for people to manage physical fitness and participate in exercise. The effects of exercise have been proven by many research studies and the effects of exercise are apparent at all ages.

The Korean government and the Ministry of Culture, Sports, and Tourism started the National Fitness Award (NFA; so-called Public Health

100 in Korea) program to promote sports and extend HALE by providing scientific measurement, exercise prescription, and eight weeks of exercise classes. After measurement, the Korea Sports Promotion Foundation (KSPO) give awards depending on the results. As well as Korea, other developed countries have designed sport programs based on life cycle and ages (Kim, 2014).

The KSPO has operated the program since 2011, when an initial pilot program began with 4 centers and approximately 4,500 participants. Up to 2018, the KSPO and local government expanded the number of branches from 4 to 43, and the number of participants has increased to 267,729. The KSPO aims to add 8 more centers and increase the number of participants to approximately 300,000 (KSPO, 2019).

However, according to the KSPO, only 0.56% of the population participated this program and one third of people who took part revisited the measurement. The NFA needs to expand further to promote healthy living and provide motivation to encourage participation in sport. The Korean government already spends a significant proportion of the budget (more than 10.7 billion won) on this program, which represents sports-related policy and the KSPO.

This study was designed to identify factors that affect people′s intention to visit the scheme by applying the theory of planned behavior

(TPB). This is one of the most well-known theories related to human behavior, and is used to predict exercise behavior, as well as for persuasive communication research, to structuralize attitudes, subjective norms, perceived control, intention, and behavior (Cho, 2012; Kim, Lee & Kim, 2003).

However, some researchers indicate that the three components of TPB lack descriptive power for predicting human behavior (Armitage & Conner, 2001; Rivis & Sheeran, 2003). The need for new explanatory variables to mitigate the limitations of TPB led to the advanced and extended theory of planned behavior to include additional variables (Hagger et al., 2002; Kim, 2017).

In this study, the concepts of spatial and temporal distance - aspects of the construal level theory (CLT) that affect intention and attitudes - are used as additional variables to extend TPB so that decision making in relation to revisiting the NFA scheme can be examined.

Keyword: The theory of planned behavior, Extended theory of Planned behavior, Construal level theory, National Fitness Award, re-visitation intention, KSPO

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Chapter 1. Introduction

1.1. Background and Necessity for the Research

The average age of the Korean people continues to increase due to developments in medical technology, improvement in quality of life, and an increasing interest in health and well-being. In 2018, Korean life expectancy was 79.7 years for males and 85.7 years for females, an average of 82.7 years. This is an increase of 6.7 years from the average life expectancy of 76 years (72.3 years for males, 79.7 years for females) in 2000 (KOSIS, 2018). As life expectancy increased by 4.3 years during the decade from 1990 when the average life expectancy was 71.7years [67.5 years for males, 75.9 years for females), it can be concluded that life expectancy is increasing rapidly.

While such an increase in life expectancy is positive to note, the concept of health adjusted life expectancy (HALE) should also be considered. This is the number of years one lives without any limit on activity due to disease or injury, and is an indicator of how long one lives healthily, rather than just how long one lives. As the focus of a health-related paradigm shifts from deterring death to improving quality of life, HALE is used as an indicator to measure individual health level (Korea Health Promotion Institute, 2018).

According to Statistics Korea(kosis.kr), the average life expectancy of Koreans was 82.4 years (79.3 years for males, 85.4 years for females) in 2016, and HALE was 64.9 years at that time. In other words, depending on gender, Korean spend between 14 and 20 years in ill-health due to disease or injury (KBS, 2017.12. 5.). In 2010, a survey conducted by the Economist in the U.K. stated there is no significant difference in life expectancy for developed countries such as France, Sweden, Germany, and the U.K., (which exceed $40,000 in GDP). However, Korea ranked 32nd of 40 countries in the world in terms of the ′Death Quality Index′. These statistics indicate that the Korean government and related agencies need a strategic and scientific plan more than ever (Kim, 2014).

Health-related issues among the Korean people arise at all ages. According to reports from both the Ministry of Education and the Ministry of Culture, Sports, and Tourism, the obesity rate is increasing due to a lack of exercise, stress from study, and use of smartphones and computer games. The problem of a lack of physical activity is evident among adolescents and adults alike, and according to the Ministry of Health and Welfare, symptoms of metabolic syndrome have increased significantly for people over the age of 30 years.

Korea is predicted to become an aging society more rapidly than other countries in the Organization for Economic Co-operation and

Development (OECD). An increase in life expectancy without an increase of HALE can affect both economic and governmental policies, potentially leading to a vicious cycle of increasing medical expenditure and fiscal deterioration relating to health insurance (Kim, 2014; MCST, 2013).

Fortunately, the Korean government is aware of these risks. The Ministry of Culture, Sports, and Tourism announced its 2030 Sports Vision in March 2019, identifying sport as an axis for reducing the burden of medical expenses related to an aging society (MCST, 2018a). Lifelong fitness management is essential for reducing the gap between life expectancy and HALE. Most developed countries (so-called welfare-developed countries) operate lifelong periodic sports programs. The United States and Germany have similar programs, offering awards based on the results at different fitness levels. In Germany, award holders receive benefits and advantages from private health insurance companies (Kim, 2014). Countries with small differences in life expectancy and HALE such as Switzerland (10.3) and Japan (8.8) have life-cycle-based sports welfare programs enabling them to maintain a 10-year difference between life expectancy and HALE (WHO, 2016).

Continuous scientific management is needed to improve the health of the people and to close the gap between life expectancy and HALE. However, many Koreans still have not experienced scientific health care. According to the *2018 National Survey on Sports Participation* (MCST,

2018b), fewer than 1 in 10 citizens (9.4%) use scientific exercise and prescription services. In addition, the proportion of those using the private sector for exercise prescription and consulting services is overwhelmingly higher of those using public sectors services, at 70.9% and 29.1%, respectively (MCST, 2018b).

After an initial pilot in 2011, the Ministry of Culture, Sports, and Tourism hosted the National Fitness Award in 2012 in accordance with Article 16, Para. 2 of the National Sports Promotion Act to improve the current situation and to support the public's participation in health maintenance, disease prevention, and voluntary participation in sports activities. The Korea Sports Promotion Foundation (KSPO) was commissioned to undertake the project and has since conducted the National Fitness Awards annually. Since its initial pilot trial in 2011, the National Fitness Award has expanded to include 43 administrative branches and has seen an increase in participants from 4,583 to 267,729 (132,609 males and 135,120 females) (MCST, 2019).

In addition, eight fitness certification centers opened in 2019, and participant numbers are expected to increase. The National Fitness Award has become one of the most representative projects undertaken by the KSPO, and in 2019, the organization expanded scale by spending 10.7 billion won (KSPO, 2019).

Of those who participated in the National Fitness Award (essential

for maintaining the health of the Korean people) and participated in measurement, only 34% participated in measurement again, demonstrating limited impact of the scheme for life-long, continuous, and long-term management. Continuous participation in the National Fitness Award is necessary for systematic health management. If people continue participate in measurement, the KSPO will be able to provide developed and well customized exercise prescription based on an accumulated database (Kim, 2014).

Research has shown that the NFA program provides fun and improves physical strength and quality of life for participants. It also gives confidence and satisfaction in their daily lives. At the same time, these positive effects contribute to improving physical fitness and the health status of citizens by promoting participation in exercise (Kwon, 2013).

Although participation in sport has been proven effective with regard to the physical, psychological, and social aspects of humans, no effect can be expected without active participation. Therefore, identifying the factors that induce and sustain participation in exercise programs should be preceded prior to demonstrating the effects of exercise.

The theory of planned behavior theory (TPB) is most widely used to measure intentions relating to human behavior, while the extended TPB (ETPB) provides practical prediction. Accordingly, this research utilizes the ETPB to add spatial and temporal concepts to identify factors affecting

people′s intention to revisit the NFA.

The ETPB utilizes an additional variable to understand human behavior better and enhance its explanatory power, and studies using the ETPB have been conducted in many areas (An & Lee, 2017). As Ajzen (1991) argued, this allows additional variables to have more power of explanation; therefore, additional variables began to be applied by scholars in the field of social science research (Kim & Han, 2017; Oh & Hsu, 2001; Ryu & Jang, 2006).

Won, Yang and Kwag (2015) used the ETPB with the addition of team identification and past behavior to examine spectator behavior in the context of university basketball. Research founded that team identification and past behavior have predictive power over viewing intention (Won, Yang & Kwag, 2015).

Phillips (2009) utilized winning, thrill, socialization, escape, enjoyment, and curiosity as additional variables of TPB to predict casino motivation and gaming intention of a group of seniors. It was found that all five factors and basic components (attitude, subjective norm, perceived behavioral control) of TPB had a positive relationship with visiting intention (Phillips, 2009).

However, no research has been done on the intention to revisit the NFA using the ETPB and psychological distance. Many studies using TPB and construal level theory (CLT) focus on indirect participation of events,

which does not include physical activity. However, this study deals with direct participation involving physical activity.

1.2. Purpose of Research

The purpose of this research is to investigate factors influencing participants′ intention to revisit the NFA using the ETPB with spatial and temporal distance added as additional variables.

Unlike general merchandise purchases, users need to visit an actual location to engage in the service; therefore, the distance is one of the most important key factors in decision-making. Accordingly, it is meaningful to add distance as an additional variable to the TPB for this research (Kim et al., 2019).

The information produced by this study can be used as background to additional related research on the activation of the NFA. The findings may also help develop the ETPB and offer strategies for designers and organizers to motivate people′s planned behaviors in both the near and far future.

1.3. Research Hypothesis

Since the TPB was proposed, much research has proven that the three factors of attitude toward behavior, subjective norms, and perceived

behavioral control play an important role in predicting intention of actual behavior (Park et al., 2012).

Research applying the TPB has shown that attitudes toward behavior have a significant effect on behavioral intention (Beck & Ajzen, 1991; Cunningham & Kwon, 2003; Huh et al., 2006; Sparks, 2007). As previously mentioned, the following hypothesis is established for this study.

H1: There will be a positive relationship between attitude towards the NFA and intentions to revisit.

Many studies have found that subjective norms have a strong correlation with behavioral intention (Baker er al., 2007; Kim et al., 2006; Sparks, 2007; Warburton & Terry, 2000). Therefore, the following hypothesis is established based on the preceding research.

H2: There will be positive relationship between subjective norms and intentions to revisit the NFA.

Previous studies have shown that perceived behavioral control has a significant effect on behavioral intention. (Ajzen, 1991; Quintal ert al., 2010; Sparks, 2007). Therefore, the following hypothesis is established based on preceding research.

H3: There will be a positive relationship between perceived behavioral control and intention to revisit the NFA.

According to CLT, the further the perception of temporal or spatial distance, the higher the level of construal thinking, the more likely it will

affect the formation of attitude that focuses its core value (An & Lee, 2017; Fujita et al., 2008; Trope et al., 2007). The higher the level of construal thinking, the more predictable the behavior, because an individual has a core-based attitude (Eyal et al., 2009; Trope et al., 2007, Trope & Liberman, 2010). Furthermore, distant behavior will produce greater desirability than feasibility (Lutchyn & Yzer, 2011). Therefore, the following hypotheses is established based on preceding research.

H4: There will be a positive relationship between temporal distance and attitude toward behavior.

H5: There will be a positive relationship between spatial distance and attitude toward behavior.

H6: There will be a positive relationship between temporal distance and intention to revisit the NFA.

H7: There will be a positive relationship between spatial distance and intention to revisit the NFA.

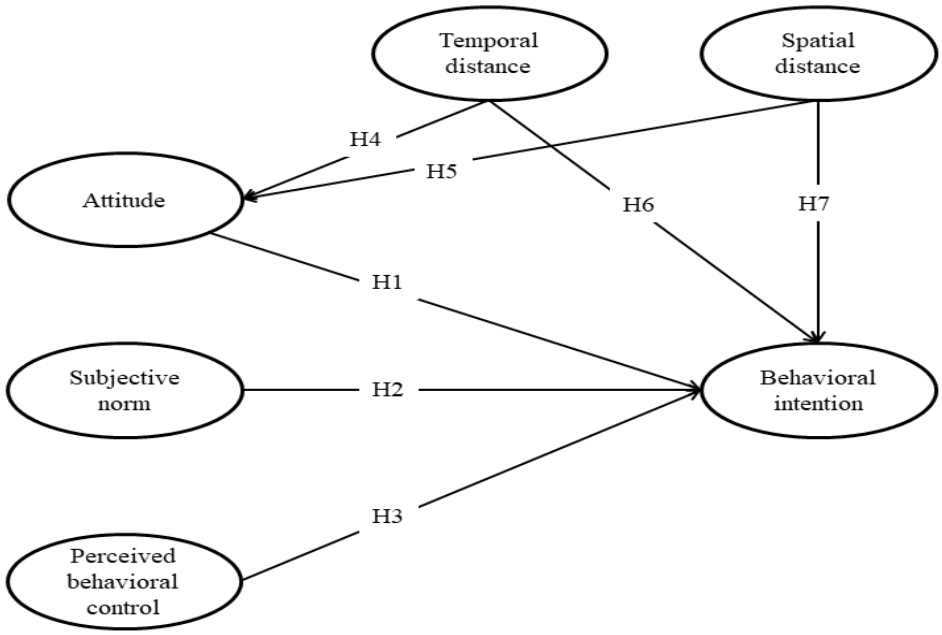


Figure 1. Proposed hypothetical model.

Chapter 2. Theoretical Background

The TPB provides a theoretical framework for considering attitude toward behavior, subjective norms, perceived behavioral control, and intention related with human action. The theory is an expanded version of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

The validity of the theory has been verified and the theory applied to various academic studies to predict human behavior in the field of persuasion communication, for example public campaigns or advertisements (Kim, 2013). Since the theory was proposed, active research has also been conducted in various sporting contexts, relating to physical activity and

attending sporting events. These studies have demonstrated that three factors (attitude, subjective norm, and perceived behavioral control) play an important role in predicting intention (Kim & Han, 2012).

To predict human behavior, researchers need to consider the attitude of belief toward the action. In particular, health-related behavior is usually determined by individual will, belief, and attitudes (Kim et al., 2001). In this respect, the TPB is both relevant and provides a strong theoretical background for this study (Kim et al., 2012).

2.1. The Theory of Reasoned Action

The Theory of Reasoned Action was developed by Martin Fishbein and Icek Ajzen in 1967 and has been used to predict behavioral intention and behavior (Ajzen, 2005). The basic concept of this theory focuses on the fact that human behavior is affected by intention, which is determined by attitude and subjective norms. The effectiveness of this theory has been proven by meta-analysis research (Sheppard, 1988).

The Theory of Reasoned Action is founded on the assumption that human beings are sensible and have a methodical mind in relation to information. The researchers who developed this theory stated that human behavior is not controlled by subconscious motivations or instinctive desires. They believed human behavior cannot be decided thoughtlessly or unconsciously. Rather, they claimed that people contemplate their actions and develop a reason before they decide to act (Ajzen & Fishbein, 1980).

Ajzen & Fishbein assumed that human behavior occurred under volitional control; based on this belief, the intention of someone to act is instant factor of determination. Thus, behavioral intention is a primary factor of human behavior.

The TRA is used to anticipate and account for the intention of performing behavior. According to the theory, people′s attitudes and subjective norms are core determinants of behavioral intention. By inspecting attitudes and subjective norms, researchers can understand more clearly whether intended behavior is performed (Fishbein, & Ajzen, 1977). The following is a description of the different components of the Theory of Reasoned Action.

In this theory, attitude is the main factor determining behavioral intention, which indicates how a person feels towards the action (Fishbein, & Ajzen, 2011). The concept includes cognitive judgement on a particular subject and feelings that are either good or bad. At the same time, attitude indicates a favorable or unfavorable assessment of a subject (Kim, 2013). If a person judges that a certain action will lead to a preferable result, then that person tends to maintain a positive attitude toward that behavior. Conversely, if a specific action is thought to lead to an unpleasant situation, this will engender a negative attitude.

Attitudes are affected by two determinants: strength of belief and evaluation of the expected outcomes (Fishbein, & Ajzen, 1977). Attitudes toward a specific action could be neutral, positive, or negative (Fishbein, 1967).

Behavioral belief makes it possible to comprehend the motivation for a person′s behavior in terms of the result of the action. These beliefs underlie a person′s attitude toward behavior. This idea specifies that human beings tend to associate the performance of an action with the results or features (Ajzen, & Albarracín, 2007). For example, if a behavior is performed and the result is expected to be positive, a person has a positive attitude toward the action.

The evaluation of the consequence mentions how people recognize and evaluate the expected outcome of a particular enacted behavior. For example, a person will evaluate the outcome of doing exercise as being positive if they believe that exercising improves physical fitness. Conversely, a person will evaluate the expected outcome of doing exercise as negative if the behavioral belief is that exercise causes injury.

Subjective norms are a crucial aspect of behavioral intention and lead to the belief that certain individuals or groups should or should not perform certain behaviors. Subjective norms indicate the perceptions of relevant people or individuals (such as family members, friends, and peers) and how they affect attitudes toward behavior (Fishbein, 1967). Ajzen explained that subjective norms are described as social influence or perceived social pressure to not perform the behavior. These pressures control a person′s perception of the behavior and affects their intention to perform (Fishbein & Ajzen, 1975). For example, if someone thinks that

taking anabolic steroids is acceptable within a social group, they are more likely to engage in that behavior. However, if the behavior is prohibited in society or in their social group, they will be less likely to take anabolic steroids.

Normative beliefs refer to whether relevant people approve of the behavior, and there is a correlation between this belief and the behavior. Usually, the more likely the related groups allow the behavior, the higher the chance of completing the action. Conversely, the possibility of acting will reduce if the reference group is against the behavior (Glanz et al., 2008)

The motivation to comply refers to compliance with the social norms of people relevant to the action. A person is less motivated to accept norms that are considered neutral.

The TRA is a useful tool for predicting human behavior; however, it has limitations like any other theory. For example, one limitation is the inability to clearly explain the relationship between subjective norms and attitudes. In other words, attitude and behavior (the two factors that influence behavior) are not mutually exclusive concepts, but are capable of constructing one another. Furthermore, when an intention is formed, the theory identifies a direct link to an action without considering the influence of other factors. The basic assumption of the theory is that intention and behavior do not always correspond. In early persuasion model, attitudes toward behavior and human actions were always considered consistent. However, there are multiple variables that create uncertainty in the relationship between intention and behavior; for example,

situational constraint, opportunities, conditions, and resources (Kim, 2013). It is uncertain that components of the theory are sufficient to anticipate the action (Glanz et al., 2008).

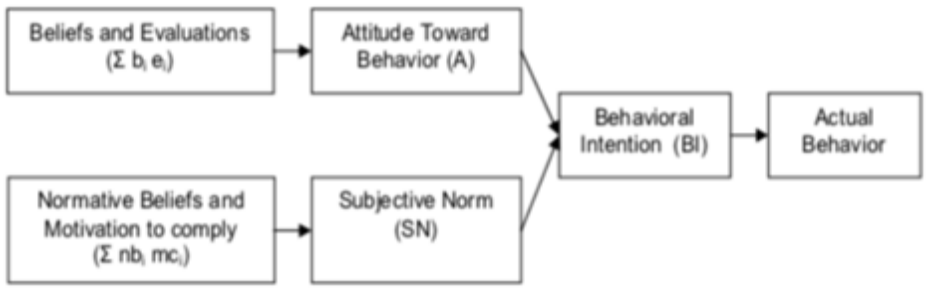


Figure 2. Theory of Reasoned Action, Ajzen and Fishbein (1980)

2.2. The Theory of Planned Behavior

The TPB modifies and supplements the limitations of the TRA, such that behavioral intention cannot be predicted entirely. A key factor in the TPB is the person′s intention toward the behavior, because their intention reflects how hard they are willing to try (how much effort) to perform the behavior (Ajzen, 1991). Ajzen (1985) added the variable perceived control of action to the existing rational theory to explain behavioral intentions with behavior and subjective norms in order to predict attitudes and behaviors more accurately. According to the TPB, the behavioral intention of predicting action is a function composed of the attitude and subjective norm toward the action and of the perceived control of the action that implies the subjective perception, whether or not one can actually perform or control the action.

The theory is well supported by practical evidence (Ajzen, 1991).

While people have many kinds of beliefs toward a given behavior, only some beliefs can hold for a given situation (see Miller, 1956). According to the TPB, three types of belief have a significant role in terms of intention toward behavior: behavioral, normative, and control. Behavioral belief relates to the likely results of the action and assessment of the outcomes. Normative belief relates to the social expectations and motivations of people connected to the action. Finally, control belief concerns any delay in executing the behavior and the perceived ability of these factors. These three types of belief are noticeable in relation to the behavior (Ajzen, 1991, 2002).

Much current social psychology research uses the cognitive approach developed by Fishbein and Ajzen (1975) to determine access to attitude formation. People form beliefs by gathering information and attributes. Through this process, normative beliefs build a likeable or unlikeable attitude toward a behavior (Ajzen, 1991).

As previously mentioned, normative beliefs relate to the likelihood of agreement or disagreement about performing a particular behavior, which creates a perceived social pressure or subjective norm. The more pressure a person feels from the relevant group, the stronger its impact.

Finally, control beliefs deal with the presence or absence of needed resources and opportunity. These beliefs could be based on experience, but

may also be influenced by second-hand knowledge about the behavior, by the experiences of related people, and by other factors that increase or reduce the perceived difficulty of performing the behavior in question. Thus, control belief has an impact on behavioral control (Ajzen, 1991).

The key feature of the TPB can identified as the perceived control of action. This has a core role in the theory and differentiates the TPB from the Theory of Reasoned Action. The perceived control of action is a subjective assessment of how well a person can perform and control a targeted action to overcome a problem in which situational constraints have limit behavioral intention for fully explaining the action. Opportunities or resources to actualize the intention to action also have a significant impact, and these factors affect the individual's control over the action. Thus, for action to take place, this requires both motivation and the ability to perform the action.

A number of similar studies have examined perceived behavioral control. Rotter (1966) suggested the concept of ″locus of control,″ which refers to the degree of belief a person has control over the result of events. The locus is divided into internal and external belief. Ajzen argued the concept of locus of control is different, because it consists of perceived behavioral control in terms of stability. Perceived behavioral control can vary across circumstances and actions; however, locus of control refers to generalized expectancy, which remains stable across conditions.

The present viewpoint on perceived behavioral control is congruous with Bandura′s self-efficacy, which is ″concerned with judgements of how well one can execute courses of action required to deal with prospective situations″ (Bandura, 1982). Bandura and his colleagues studied the role of perceived control, and proved that people′s behavior is heavily influenced by their confidence level about their ability to perform (Bandura et al., 1977; Bandura et al., 1980). Self-efficacy can also affect choice of activities, readiness for performance, endeavor during the process, ways of thinking, and emotional reaction (see Bandura, 1982, 1991). The TPB locates the perceived behavioral control of self-efficacy within a more universal frame of the relations among factors; namely, belief, attitudes, intention and behavior (Ajzen, 1991). According to the theory, PBC can be used with behavioral intention to anticipate behavioral accomplishment. This gives us two hypotheses: First, the effort expended to bring a course of behavior to a successful conclusion is likely to increase with perceived behavioral control. Second, perceived behavioral control can be used to measure of actual control (Ajzen, 1985).

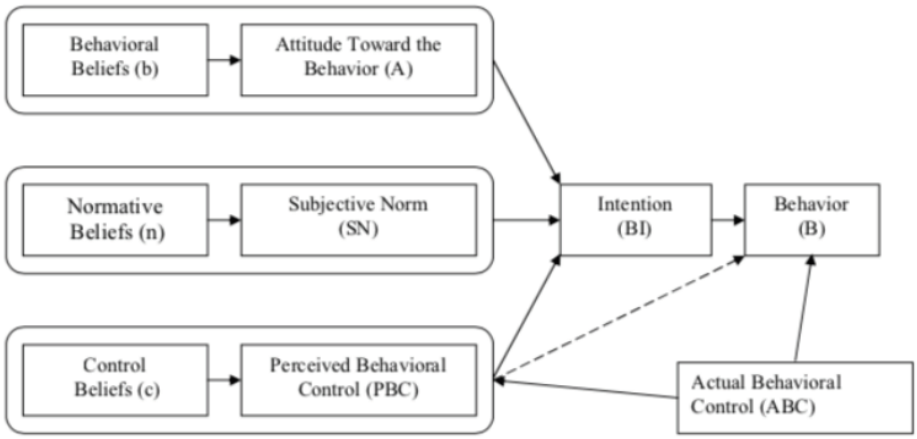


Figure 3. Theory of Planned Behavior (TPB), Ajzen (1991)

2.3. The Extended Theory of Planned Behavior

The TPB is considered superior to previous theories in predicting behavioral intention or actual behavior (Lam & Hsu, 2006). However, there are precedent studies that indicate that the explanatory power of the variables is not as strong as it was initially thought to be. Questions remain whether the variables of the theory are sufficient to predict behavioral intentions and behaviors (Lam & Hsu, 2004; Lee & Park, 2008; Perugini & Bagozzi, 2001; Quintal et al., 2010).

Ajzen (1991), who introduced the TPB, also raised the possibility of including other factors to increase the explanatory power of the theoretical model. Accordingly, some studies have added other explanatory variables besides the three original factors to enhance the explanatory power of the research model (Lee et al., 2010; Oh & Hsu, 2001; Quellette & Wood, 1998;

Ryu & Jang, 2006). Based on the validity of this theory (verified through numerous studies), it is possible to deduce richer implications by incorporating variables that are tailored and more specific to the research context or situation.

As an additional variable to the TPB, Park was able to use motivation to identify that the motivation of visitors to Muju Taekwondo Park had a positive effect on the intention of visit (Park et al., 2012). Ryu′s research demonstrated that experience has a positive impact on intention toward the behavior of overseas golf travelers by adding experience as an additional independent variable (Ryu, 2014). Kim (2015) conducted a study that analyzed the intention of the participants of the kumdo (kendo) using the ETPB, with prior knowledge and honor as additional variables. The study showed that the three original variables of the TPB and knowledge influenced the intention to participate, but honor does not affect intention to participate (Kim, 2015). Lam and Hsu (2006) added past behavior as a variable to the TPB, and analysis showed that past behavior has a positive effect on the intention of Taiwanese tourists to visit Hong Kong (Lam & Hsu, 2006). Kim & Moon (2015) added the emotional and practical value of campers to the TPB to examine the impact of outdoor recreation participants' value on decision-making processes. The analysis showed that emotional and practical values have a significant effect on attitudes, and attitudes and perceived behavioral control have a positive effect on behavior

(Kim & Moon, 2015).

As shown, the ETPB has been used to enhance understanding associated with the TPB by improving its predictive power by adding extra variables. This study uses the three factors of TPB together with spatial and temporal distance to examine the impact of intention to revisit the NFA.

2.4. Construal Level Theory and Psychological Distance

Trope and Liberman proposed CLT, which is a psychological theory that states when a specific stimulus is triggered, the level of interpretation is determined by the psychological distance, which then affects behavior. Because psychological distance is relative and can be perceived differently by each individual (regardless of the social, hypothetical, temporal, and spatial distance), any evaluation and decision made regarding the situation may vary according to the cognitive composition of the individual.

In general, the construal level will be higher with a greater psychological distance, and lower with a smaller psychological distance (see Table 1). If the temporal and spatial distances between the decision-maker and the objects or events are greater, it is considered to be a high-level construal that is abstract, purpose-orientated, and focuses on the core attributes of the object or event. Conversely, if the psychological distance is smaller, it is considered to be a low-level construal that emphasizes the concrete, process-oriented, and secondary traits.

The reason for different evaluations and interpretations due to the perceived distance for the same object or situation is because of varying importance and weight. For small spatial and temporal distances, the value of the high-level construal associated with purpose will decrease, while the low-level construal associated will increase. Conversely, for considerable spatial and temporal distances, the value of the high-level construal associated with the activity′s main purpose will increase, rather than the low-level construal associated with the means of the activity.

Table 1. Distinguishing Level of Construal (Trope and Liberman, 2003)

High-level Construals	Low-level Construals
Abstract	Concrete
Simple	Complex
Decontextualized	Contextualized
Structure, Coherent	Unstructure, Incoherent
Primary, Core	Secondary, Surface
Superordinate	Subordinate
Desirability	Feasiblity

The psychological distance for CLT consists of four dimensions: temporal, spatial, social, and hypothetical distance, and this distance has a different level of interpretation for each individual through psychological processes (Trope & Liberman, 2010).

It should be noted that the spatial and temporal distances referred to in this study are those indicated in CLT, which do not refer to objectively

measured distance, but those that are subjectively perceived by the individual. The same distance is perceived differently based on knowledge, experience, and situation (Lin & Morais, 2008; Trope & Liberman, 2010; Williams & Bargh, 2008).

2.4.1. Temporal Distance

Temporal distance is the subjective perception of how far of a future situation remains from the current time. The temporal distance concept considers ″time″ an analogical measure to explain people′s psychological process in decision-making (Liberman et al., 2002; Trope & Liberman, 2003). Research claims that the temporal distance of attitude objects systematically differs from how the object is psychologically accepted, thus affecting the impact of specific persuasive access (Fujita et al., 2008).

The high-level construal is abstract and associated more with the core attributes of a behavior, matching the ″why″ question. Conversely, the lower-level construal is feasible and more related to the subordinate factors of a behavior, corresponding to the ″how″ question (Trope & Liberman, 2010). According to Suh and Hsieh (2016), we can use different approaches to nudge behavior more effectively, based on the temporal distance.

A number of studies claim that temporal distance affects consumers′

behavior along with various other factors (Kim et al., 2009; Park & Choi, 2000). Kim at el. investigated how temporal distance affects purchase intention between purchase and consumption. This research showed that the closer the temporal distance between purchase and consumption, the higher the intention to buy (Kim et al., 2009).

2.4.2. Spatial Distance

Spatial distance refers to the subjective perception of how far away a situation is physically from an individual (Fujita et al., 2006; Henderson et al., 2006; Kim, 2010; Trope & Liberman, 2010) and plays an important role in CLT (Henderson et al., 2011). Williams and Bargh (2008) also insists that the spatial concept is fundamental compared to other forms of psychological distance, as it is literal and more real than other distance concepts.

Individuals tend to interpret psychologically distant events by their essential and abstract features (high-level construal) and psychologically near situations by their concrete and practical features (low-level construal) (Darke et al., 2016; Huang et al., 2016; Liberman & Trope 2008; Liberman & Wakslak, 2007; Trope et al., 2007).

Henderson et al. (2006) found that as spatial distance increases, people tend to have an abstract, decontextualized attitude and judgement rather than being specific and contextualized. An and Lee (2017) examined factors affect visiting intention for the PyeongChang 2018 Winter Olympic

Games by adding temporal and spatial distance as additional variable of TPB. The study showed that spatial distance influences attitude toward behavior (An & Lee, 2017).

2.5. National Fitness Award Program Overview

The NFA is a sports welfare service aimed at improving the physical strength and health of Korean citizens by measuring and evaluating physical fitness both scientifically and objectively, and by providing individual exercise prescriptions and customized fitness classes. A certified level award is given based on individual measurement results. Tier 1 (Gold) is awarded if the participants are able to actively and voluntarily perform various sporting activities, Tier 2 (Silver) is awarded to participants performing at the minimum fitness level necessary for active physical activity, and Tier 3 (Bronze) is given if the participant′s fitness level is just enough to maintain minimum health. Performance below Tier 3 is classified as non-tier level (nfa.kspo.or.kr).

The project is located within the MCST and is managed by the KSPO, a public organization established in 1989 to commemorate the Seoul 1988 Summer Olympics and to promote sports participation among the Korean people. The KSPO was established initially through cycling, racing, and sports-toto (betting) to support sporting activities and participation by establishing infrastructure and researching sports science and policy

(kspo.or.kr).

The NFA program is conducted at fitness certification centers, and as of August 2019, there were 51 centers in operation, as well as two specialized visiting service teams, and a ″health charge bus,″ where fitness measurements can be completed on-board. Although the project budget differs for each fitness certification center, in most cases the project is carried out using local funds and the Korea Sports Promotion Fund (based on cycling, racing, and sports-toto).

The NFA is open to all citizens aged over 13 years with participants being classified at the youth level (13–18 years), adult level (19–64 years), and senior level (over 65 years). Those who wish to participate can use online, telephone, or in-person reservation to arrange measurement schedule appointment at a fitness certification center. After completing the measurement, participants receive a personalized exercise prescription program based on their results. Each fitness certification center runs an eight-week fitness class for adults and the elderly to encourage regular participation in sporting activities (nfa.kspo.or.kr; Park et al., 2015).

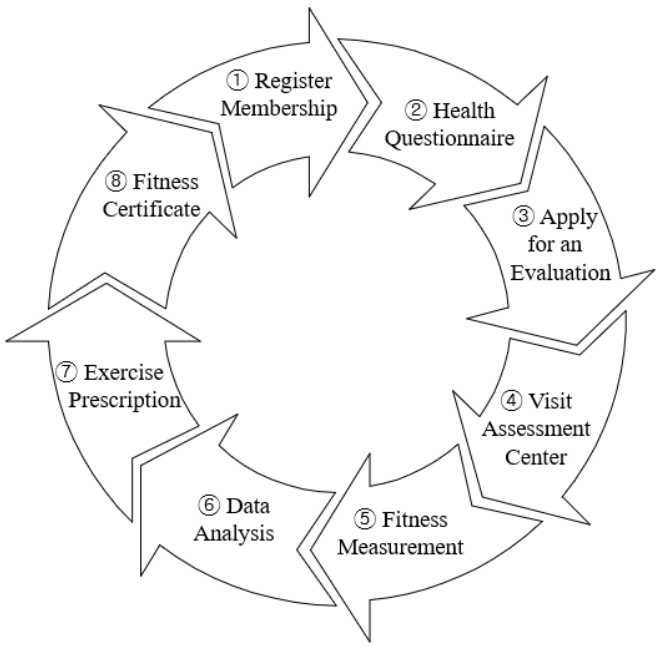


Figure 4. Participation process for National Fitness Award (nfa.kspo.or.kr)

2.5.1. Necessity and Effect of the National Fitness Award

The NFA project was selected as the most important policy related to sports welfare in the 2017 National Survey on Sports Participation, which was conducted with 9,000 citizens. In addition, a survey conducted in 2018 with 4,876 people revealed that participation in physical education programs increased the participation time and frequency among people′s daily physical activities. According to the survey, low-income households with no expenditure on sports goods are more likely to participate in the project. Being utilized by low-income citizens with low expenditure on leisure activities, the project fulfills its role as a national sports welfare policy

(MCST, 2019). In terms of economic advantages, the project increases productivity through continuous participation, and in terms of social aspects, the program also contributes to job creation (웨슬리 퀘스트, 2017).

The fitness promotion classes conducted as part of the project have been shown to be effective. In 2018, 8,456 of participants took part in the fitness promotion class, and 84% (n = 7,098) completed the final round, showing improvements in body composition and fitness indexes. Weight, BMI, waist circumference, body fat percentage, muscle strength, muscular endurance, flexibility, cardiopulmonary endurance maintenance, and improvement ratios are shown in Table 2.

Table 2. Ratios for maintaining or improving after eight-week exercise program

	Body Composition				Physical Fitness			
Indicator	Weigh	BMI	Waist	Fat	Strength	Endurance	Flexibility	Cardiovascular
Maintain/ Improve	46%	45%	45%	42%	73%	84%	76%	79%

In 2013, a survey of senior citizens who participated in the NFA fitness promotion class also demonstrated the effectiveness of the project. Participation in the eight-week program contributed to improvements in body composition, daily life fitness, balance confidence, and quality of life (Park et al., 2014). In addition, participation contributed to a change in participants' interest in physical fitness and related behaviors. In a survey conducted with 1,000 people who participated in the NFA in 2012, 71.8% of respondents indicated they had an increased awareness of the importance of

overall health compared with before they participated in the program. When asked about the importance of physical fitness and the importance of physical activity, 79.1% and 80.1% of Korean respondents, respectively, said that they experienced increased awareness. We can conclude that participation in the program enhanced awareness for members of the public of the importance of health, physical strength, and physical activity, and that it can induce positive changes in participants′ physical-related behaviors (KISS, 2014).

Continued participation in sporting activities reduces medical expenses (Kim, 2006); therefore, elderly adults with high physical fitness levels have fewer risk factors for conditions such as cardiovascular disease (Sui et al., 2007). The relationship between physical activity and medical expenses has been established in past studies. According to one report, those who had participated in sporting activities saved more than 12,000 won per year compared to non-participants (Park, 2007). In addition, those who participated in intense physical activity used fewer medical services than those who did not (Oh, 2013). Accordingly, the NFA can be considered effective not only in improving the health of the general public, but also in reducing medical expenses and preventing diseases.

2.5.2. National Fitness Award Management System

Role-players in the NFA can be largely divided into users (beneficiaries),

fitness certification centers (branch centers), and the central center. Those who wish to participate in the NFA visit a physical fitness center to make a measurement reservation and have their measurements taken. The fitness certification center provides users with measurement services, exercise prescriptions, and insurance certification services. Measurement data transferred from regional to central centers is used to provides record for users. Users can make an online reservation through the central center to view their measurement results, certification records, and exercise prescriptions.

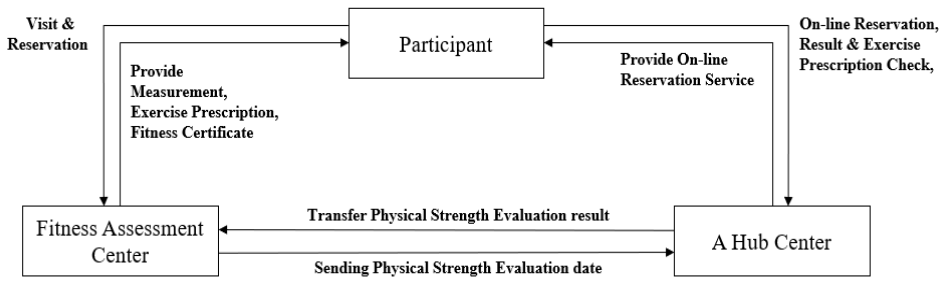


Figure 5. National Fitness Award Management System

2.5.3. National Fitness Award Program Measurement Grade

The program progresses as follows: online membership, questionnaire test, physical fitness application, physical fitness center visit, physical fitness measurement, physical fitness measurement analysis, exercise prescription, and certificate issuance order. Separate measurement criteria and certification standards are prepared for each distinguished class (youth, adult, elderly). All measurements include basic physique assessments (BMI,

Inbody); however, each measurement chart has a goal to measure physical strength for the target age group.

Table 3 presents the measurement item for ages 13 to 18 years. This group demonstrates the most diverse measurement factors (including the Illinois agility test and eye-hand coordination), which differentiate between tests with other groups.

Table 3. Measurement Item for Youth (age 13–18 years)

Section	Factors		Measurement Method	note
Physique	1) Body Mass Index 2) Body Composition		1) Height, Weight 2) Indody(machine)	Essential
Physical fitness	Health Related Test	Strength	Grip Strength	Essential
		Muscle Endurance	1) Sit ups 2) Repeated Jump test	Selective, Choose 1
		Cardiovascular Endurance	1) 20m shuttle run or 2) step test or 3) treadmill	Selective, Choose 1
		Flexibility	Sitting trunk flection test	Essential
	Exercise Related Test	Agility	Illinois Agility test	Essential
		Explosive Muscular Strength	Time of Staying in the air	Essential
		Coordination	Eye-Hand Coordination	Essential

Table 4 presents the measurement item for adults. It does not have coordination measurement and uses different measurement tool to assess physical fitness. For example, the Youth group uses the Illinois agility test for explosive muscular strength; however, adults perform a 10 m shuttle run test for agility.

Table 4. Measurement Item for Adults (Age 19–64 years)

Section	Factors		Measurement Method	note
Physique	1) Body Mass Index 2) Body Composition		1) Height, Weight 2) Indody	Essential
Physical fitness	Health Related Test	Strength	Grip Strength	Essential
		Muscle Endurance	Sit up	Essential
		Cardiovascular Endurance	1) 20m shuttle run or 2) step test or 3) treadmill	Selective, Choose 1
		Flexibility	Sitting trunk flection test	Essential
	Exercise Related Test	Agility	10m shuttle run (10m * 4)	Selective, Choose 1
		Explosive Muscular Strength	Standing long jump	

Table 5 presents the measurement item for seniors (aged over 65 years). The senior group is measured using different criteria. Standards for older people consist of physique and muscle function (upper and lower body), balance, flexibility, cardiovascular, and coordination. Some measurements for seniors are conducted when sitting on a chair because of the risk of injury during the process.

Table 5. Measurement Item for Elders (Age over 65 years)

Section	Factors		Measurement Method	note
Physique	1) Body Mass Index 2) Body Composition		1) Height, Weight 2) Indody	Essential
Physical fitness	Health Related Test	Strength	Grip Strength	Essential
		Muscle Endurance	Sit up	Essential
		Cardiovascular Endurance	1) 20m shuttle run 2) step test 3) treadmill	Selective, Choose 1
		Flexibility	Sitting trunk flection test	Essential
	Exercise Related Test	Agility	10m shuttle run (10m * 4)	Selective, Choose 1
		Explosive Muscular Strength	Standing long jump	

When participants have completed their measurements, a certificate grade is determined based on their record using the grading as shown in Tables 6, 7, and 8. Each grade requires the participant to attain the conditions that must be met to get a grade. For youth and adults, to attain a gold level (regardless of body composition) participants′ health-related test records must be in the top 30% and at the same time one exercise-related record should also be in the top 30%. Records for the silver level should be in the top 50% (and one exercise-related record) regardless of body composition. For the bronze level, participants′ body composition must be within the recommended range and all health-related records in the top 70%.

Table 6. Certificate Standard for Youth (age 13–18 years)

	Level	Requirement	Body Composition
Certificate Grade	Gold (1st)	Health-related test record are in the top 30% and at the same time, one of exercise-related test record is in the top 30%	Exception
	Silver (2nd)	Health-related test record are in the top 50% and at the same time, one of exercise-related test record is in the top 50%	Exception
	Bronze (3rd)	Body Composition are in recommended range and all health-related record are in 70%	Including
Body Composition	BMI: Less than 85% by gender and age Body fat rate: (men)Less than 77.8% (women)Less than 85.3%		

Table 7. Certificate Standard for Adults (age 19–64 years)

	Level	Requirement	Body Composition
Certificate Grade	Gold (1st)	Health-related test record are in the top 30% and at the same time, one of exercise-related test record is in the top 30%	Exception
	Silver (2nd)	Health-related test record are in the top 50% and at the same time, one of exercise-related test record is in the top 50%	Exception
	Bronze (3rd)	Body Composition are in recommended range and all health-related record are in 70%	Including
Body Composition	(Men) 7% < Fat rate < 25%, 18 < BMI < 25		
	(Women) 16% < Fat rate < 32%, 18 < BMI < 25		

Table 8. Certificate Standard for Seniors (age over 65 years)

	Level	Requirement
Certificate Grade	Gold(1st)	All 5 physical fitness test records are in top 30%
	Silver(2nd)	All 5 physical fitness test records are in top 50%
	Bronze(3rd)	All 5 physical fitness test records are in top 70%

Senior group get certification if their physical fitness test records are in certain level, for example, all 5 physical fitness results are in top 30% the one gets gold level.

Chapter 3. Methodology

The purpose of this study is to investigate the effect of attitude, subjective norms, perceived behavior control, temporal distance, and spatial distance on revisit intention of NFA participants, based on the ETPB. This theory is being used because its efficiency has been proven especially for predicting and explaining human behavior (Godin & Kok,1996). The data obtained from the research will be used to analyze the factors involved in the program. Those data also will be utilized to promote and develop the NFA.

3.1. Sampling

The study was conducted with participants who took part in the NFA program, and the sample was obtained using a non-probability convenience sampling method. The survey measured factors affecting intention to revisit the program, and was administered with 240 participants who had accessed the NFA representative center, which is located in the Olympic Park, Seoul. Data was gathered over a period of three weeks from October to November 2019. In the final analysis, 226 questionnaires were used, as 14 were excluded due to inaccurate responses.

With regards to age, 21.7% (n = 49) were between the ages of 20 and 29 years, while 20.8% (n = 47) were aged between 30 and 39 years and 18.1% (n = 41) were aged between 40 and 49 years. Some 16.4% (n = 37) were aged between 50 and 59 years, and 23.1% (n = 52) were aged over

60 years old. With regards to academic achievement, 1.8% (*n* = 4) had less than high school education, 19.9% (*n* = 45) had completed high school, 13.3% (*n* = 30) were currently in college, 51.8% (*n* = 117) had a college education, and 13.3% (*n* = 30) were either master′s or doctoral graduates. In terms of occupation, 30.5% (*n* = 69) were office workers, 4.4% (*n* = 10) worked in technical industries, 11.1% (*n* = 25) were professionals (such as doctors or lawyers), 4.9% (*n* = 11) were self-employed, 9.7% (*n* = 22) worked in education and government areas, 14.2% (*n* = 32) were homemakers, 12.4% (*n* = 28) were students, 10.2% (*n* = 23) were unemployed, and 2.7% (*n* = 6) chose ″other″ as their employment category. With respect to participation experience, 26.1% (*n* = 59) of the sample had measurement experience and 73.9% (*n* = 167) had no experience. With regards to residence, 77.4% (*n* = 175) lived in Seoul and 22.6% (*n* = 51) lived elsewhere. Characteristics of the study participants are described in Table 9. below.

Table 9. Demographic Characteristics of Sample (*N* = 226)

Variable		*N*	Percent
Gender			
	Male	111	49.1
	Female	115	50.9
Age			
	20–29	49	21.7
	30–39	47	20.8

	40–49	41	18.1
	50–59	37	16.4
	Over 60	52	23.1
Education			
	Less than high school	4	1.8
	High school	45	19.9
	Currently in college	30	13.3
	College graduate	117	51.8
	Advanced degree	30	13.3
Occupation			
	Office worker	69	30.5
	Technical	10	4.4
	Professional	25	11.1
	Self-employment	11	4.9
	Educating/government employee	22	9.7
	Homemaker	32	14.2
	Students	28	12.4
	Unemployed	23	10.2
	Others	6	2.7
Household income	Less than $2,000	15	6.6
	$2,000–$3,999	80	35.4
	$4,000–$5,999	59	26.1
	$6,000–$7,999	39	17.3
	Over $8,000	33	14.6
Experience			
	Yes	59	26.1
	No	167	73.9
Location	Seoul	175	77.4
	Elsewhere	51	22.6

3.2. Survey Instrument

The survey was based on Ajzen′s TPB Questionnaire (2002) and temporal and spatial distance variables were derived from prior research (Basoglu & Yoo, 2015; Broemer et al., 2008; Fujita et al., 2008; Liberman et al., 2007; Trope et al., 2007). As Kim (2010), Lee and Joo (2014), and An and Lee (2017) have suggested, the questionnaire was constructed to enable respondents to answer considering situations in the future based on the degree of distance they feel in time and space.

All variables were designed with a seven-point Likert scale and contained items related to the participants demographics (i.e., age, gender, educational background, employment status, and income status). The questionnaire consisted of questions about each component of the TPB and CLT; attitudes toward behavior (three items), subjective norm (three items), perceived behavioral control (three items), temporal distance (three items), spatial distance (three items), and intention (four items) as shown in Table 10.

Attitude toward a behavior refers to overall evaluation of performing the action in question (Ajzen, 2002). As one of the main factors of TPB, this indicates how a person feels toward a certain behavior (Fishbein, & Ajzen, 2011). Attitude includes cognitive judgement or feeling on a specific subject and indicates either a favorable or unfavorable

evaluation (Kim, 2013).

To measure subjective norms, it needs to be formulated variously. Items related to subjective norms have low variability because relevant people normally agree to perform desirable behavior and do not agree to perform undesirable behavior. Subjective norms include descriptive norms to alleviate this weakness (Ajzen, 2002).

Perceived behavioral control includes the confidence that a person has in being capable of performing the behavior. Some questions have to check the level of difficulty to perform a behavior or the possibility. These types of questions measure the perceived capability of performing the behavior. Other items are used to assess controllability. These refer to a person′s beliefs that they can control an action, or whether the performance is under their control (Ajzen, 2002).

Temporal distance is the cognitive judgement of how much of a future situation is left from the present. The temporal distance concept considers ″time″ as an evaluation (Trope & Liberman, 2003). If a person feels that an event is likely to occur in the distant future, its temporal distance is distant. Conversely, if they think it is likely to happen in the near future, we can consider them to have near temporal distance.

Spatial distance concerns how far things or events are physically from the person and also has an effect on construal level (Henderson et al.,

2011). Spatial distance used in this study is subjectively perceived distance, such that distances can be the same for everyone.

Table 10. Measurements of variable

Dimension	Questions	Reference
Attitude	For me to revisit NFA is Good. For me to revisit NFA is Enjoyable. For me to revisit NFA is Pleasant.	Ajzen (2002)
Subjective Norm	Most people who are important to me think that it is good. Most people who are important to me think that I should revisit NFA. It is expected of me that I revisit NFA	Ajzen (2002)
Perceived Behavior control	If I wanted to, I could revisit NFA. How much control you have in revisiting NFA? For me, revisit NFA is possible.	Ajzen (2002)
Temporal distance	It is too early to make specific plans for the visit. The timing of the visit in the program seems vague. I think re-participating in the NFA is a distant future.	Liberman et al. (2002, 2007), An & Lee (2017)
Spatial distance	I think the distance from my residence is far. It feels to be a challenging place to come back. Measurement site NFA is located far away from my residence.	
Behavioral intention	I have an intention to revisit NFA. I have a plan to revisit NFA. I will revisit NFA. I will try to revisit NFA.	Ajzen (2002)

3.3. Procedure

Before conducting the survey, permission was obtained from the KSPO. The survey was conducted according to the following procedure. 1) participants of NFA finish the assessment; 2) participants were contacted; 3) consent was sought and received; 4) respondents answered the questionnaire; 5) data from the survey was analyzed using Statistical Package for the Social Sciences 22.0 (SPSS) and AMOS 22.0 to validate the measurement items and to test the research hypothesis.

3.4. Statistical Analysis

To identify the impact of factors (attitude toward behavior, subjective norm, perceived behavioral control, temporal distance, spatial distance) on revisit intention, this study used SPSS 22.0 for descriptive analysis and utilized SPSS 22.0 and AMOS 22.0 for reliability and discriminant validity, confirmatory factor analysis (CFA), and structural equation model analysis (SEM).

3.4.1. Reliability and Discriminant Validity Analysis

The reliability of the concepts was examined with Cronbach′s coefficient alpha using SPSS 22.0. This process is necessary to determine whether multiple questions measure the same concept correctly. If an item is found

that undermines reliability, it should be removed, thereby increasing the reliability of the measuring toll. In the field of social science, generally a Cronbach′s coefficient alpha value higher than 0.7 is considered reliable (Nunnally & Bernstein, 1994).

In addition, two ways of determining the reliability and validity were computed: construct reliability (CR) and average variance extracted (AVE). Construct reliability was calculated to identify the internal consistency of the measurement model. According to Hair et al. (2010) and Fornell and Larcker (1981), values of over 0.7 can be acceptable. The convergent validity was measured by the average variance extracted (AVE), and the discriminant validity was confirmed when a value of AVE for each construct was greater than 0.5 and the square of the correlations between them (Fornell & Larcker, 1981).

3.4.2. Confirmatory Factor Analysis

According to Jöreskog (1993), testing the structural model may be meaningless unless it is first established that the measurement model holds. For this reason, the items for this study were tested by CFA using AMOS 22.0 before testing the SEM.

To identify whether the proposed model in this study would fit the sample data, four kinds of fit indices, including the chi-square (x^2)/*df* ratios

(Wheaton, 1987), comparative fit index (CFI; Bentler, 1990), Tucker–Lewis Index (TLI; Tucker & Lewis, 1973), and the root mean square error of approximation (RMSEA; Steiger, 1999) were utilized. The chi-square (x^2)/df ratios and RMSEA are fit indices for a measure of absolute fit. Both CFI and TLI are utilized as a measure of parsimonious fit (Hu & Bentler, 1999). The cut-off criterion for the acceptable model fit is as follows: $x^2/df < 5$, RMSEA < .1, CFI > .9 and TLI > .9 (Hu & Bentler, 1999; Stieger, 1990; Wheaton, 1987).

3.4.3. Structure Equation Model

After completing the test of the measurement model by CFA, the SEM was tested using AMOS 22.0 to examine the relationships between the latent variables: attitude, subjective norms, perceived behavior control, temporal distance, spatial distance, and intentions to revisit NFA. Path analysis demonstrated these relationships. In addition, the fit of the model was determined. The significance level in all of the analyses was set at $p < .05$.

Chapter 4. Results

4.1. Descriptive Analysis

Descriptive analysis was proceeded in order to identify the sample including analyzing the mean and standard deviation. The size of the factor loading is a criteria used to evaluate the reliability of the indicator with the constructs it intends to measure (Seidel & Back, 2009). For this reason, the items showed a factor loading greater than the conservative threshold of .6 (Fornell & Larker, 1987; Hair et al., 2010). The items attitude 4, attitude 5, subjective norms 4, perceived behavior control 3 were eliminated, as their factor loading failed to exceed the cut-off point.

Table 11. Variables for attitude, subjective norm, perceived behavior control, temporal distance, spatial distance, and behavioral intention

	Items	Mean	SD	SL
AT	For me to revisit NFA is Good.	6.084	.8677	.943
	For me to revisit NFA is Enjoyable.	5.965	.9562	.972
	For me to revisit NFA is Pleasant.	5.907	.9639	.933
SN	Most people who are important to me think that it is good.	6.292	.7622	.885
	Most people who are important to me think that I should revisit NFA.	6.354	.6918	.938
	It is expected of me that I revisit NFA	6.341	.7387	.880

	If I wanted to, I could revisit NFA.	6.195	.8365	.917
PBC	How much control you have in revisiting NFA?	6.177	.8081	.921
	For me, revisit NFA is possible.	6.150	.8612	.824
	It is too early to make specific plans for the visitation.	5.199	1.7236	.954
TD	The timing of the visitation in the program seems vague.	5.527	1.5090	.925
	I think Re-participating in the NFA is a distant future.	5.323	1.7093	.988
	I think the distance from my residence is far.	3.602	1.6629	.945
SD	It feels to be a challenging place to come back.	3.465	1.6058	.974
	Measurement site NFA is located far away from my residence.	3.186	1.5088	.881
	I have an intention to revisit NFA.	6.190	.8454	.907
	I have a plan to revisit NFA.	6.062	.9824	.950
BI	I will revisit NFA.	6.124	.9250	.954
	I will try to revisit NFA.	6.049	1.1045	.884

Note: SL, standardized factor loading (all factor loadings are significant, $p < .001$).

4.2. Reliability and Discriminant Validity Analysis

This study utilized Cronbach′s alpha to evaluate the reliability of the data. Reliability is higher when Cronbach′s alpha coefficient is greater than .70 (Nunnally & Bernstein, 1994). In this research, Cronbach′s alpha value was calculated, and the results are shown in Table 12. This demonstrates that the values of Cronbach′s alpha ranged from .916 to .967, indicating sufficient reliability.

Then, the standardized factor loadings were applied, and the AVE was extracted for each construct to verify the convergent validity. For each construct, the standardized factor loading was above the threshold of 0.50 suggested by Bagozzi and Yi (1989) and the AVE estimate was higher than the threshold of 0.50 recommended by Fornell and Larcker (1981). The composite reliability (CR) for each construct is used to verify the convergent reliability. The CR was greater than the recommended value of 0.70, as suggested by Hair et al. (2010). Discriminant validity is established if the AVE estimates are larger than the squared correlations between constructs (Fornell & Larcker, 1981). All of the squared correlations were smaller than the AVE of respective constructs. The significance of the parameter estimates and high variance extracted for each scale provided evidence of convergent validity.

The inter-construct correlations were consistent, indicating that nomological validity was present. Accordingly, CR, AVE results, construct correlations, and descriptive statistics are presented in Table 12. The data indicate strong evidence of construct validity and reliability for the scale of behavioral intentions in NFA.

Table 12. Correlations of variables and discriminant validity.

	ATT	SN	PBC	TD	SD	BI	AVE	CR	α
ATT	1						.914	.970	.963
SN	.555***	1					.888	.960	.927
PBC	.575***	.630***	1				.841	.941	.916
TD	.269***	.204**	.150*	1			.804	.925	.967
SD	-.328***	-.314***	-.333***	-.438***	1		.737	.894	.952
BI	.522***	.431***	.490***	.411***	-.503***	1	.859	.961	.954

Note: ***$p < .001$, **$p < .01$, *$p < .05$, CMIN/DF = 2.584, RMSEA = .084, TLI = .947, CFI = .958.
ATT, attitude; SN, subjective norm; PBC, perceived behavioral control; TD, temporal distance; SD, spatial distance; BI, behavioral intention.

4.3. Confirmatory Factor Analysis

A CFA was used to test the validity by applying SEM using AMOS 22.0. A CFA is often the analytic tool of choice for developing and refining measurement instruments, assessing construct reliability and validity, identifying method effects, and evaluating factor invariance across time and

groups (Brown, 2006).

The results of the CFA are presented in Table 13. The overall fit of the measurement models was adequate. The x^2/df (2.584) was lower than the threshold of 5.0 as suggested by Wheaton (1987). The RMSEA value (0.084) was equivalent to 0.1, indicating adequate fit (Stieger, 1990). As for the CFI and TLI, they were equivalent to 0.958 and 947, respectively, as suggested by Hu and Bentler (1999). The overall fit measures of the structural model suggest that the hypothesized model provides an acceptable fit with the data. The fit statistics (RMSEA = 0.084, CFI = 0.958, TLI = 947) suggest a satisfactory fit in light of the extremely high statistical power of the model and the consequent need to accept a more relaxed interpretation of fit than is typical, as proposed by McQuitty (2004).

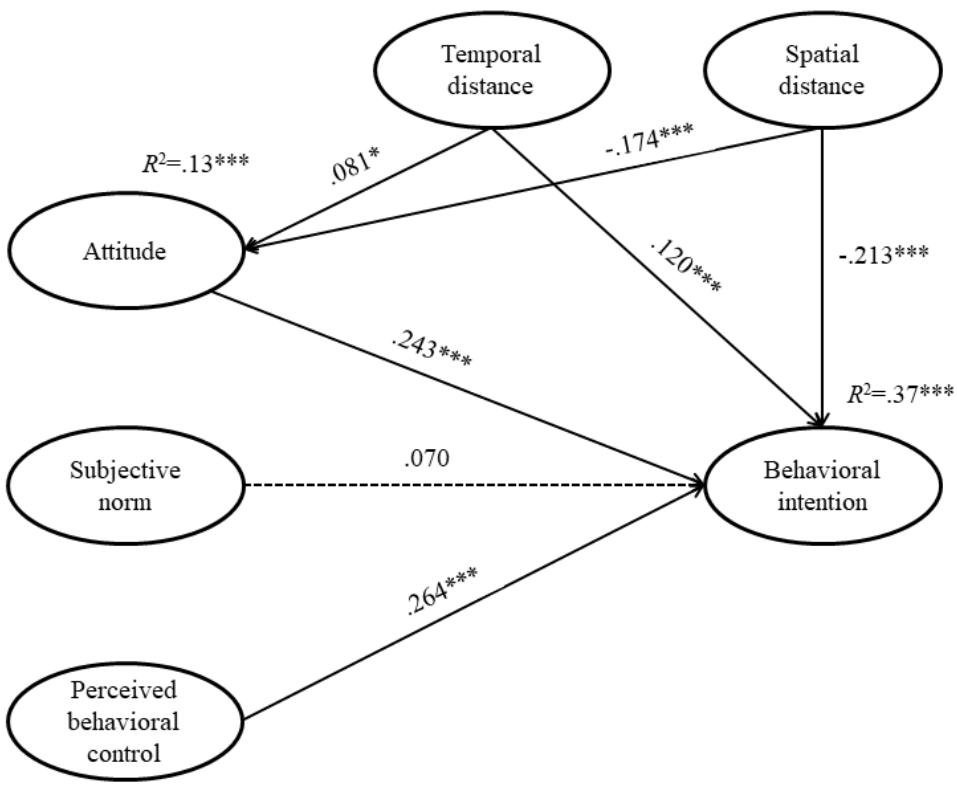
4.4. Hypothesis Testing

The proposed model and hypothesized paths in this study were tested using SEM analysis utilizing AMOS 22.0. The model indicates an acceptable fit with the data except for RMSEA: x^2/df = 3.875, RMSEA = .113, TLI = .904, CFI = .919. Finally, the results of the hypothesis tests are given in Table 13 and Figure 6.

Table 13. Structural parameter estimates

Hypothesized path	Coefficient	*t*-value	Results
H1: ATT → BI	.243	4.399***	support
H2: SN → BI	.070	1.025	not support
H3: PBC → BI	.264	3.940***	support
H4: TD → ATT	.081	2.314*	support
H5: SD → ATT	-.174	-3.536***	not support
H6: TD → BI	.120	3.288**	support
H7: SD → BI	-.213	-4.212***	not support

Note: ***$p < .001$, **$p < .01$, *$p < .05$, CMIN/DF = 3.378, RMSEA = .113, TLI = .904, CFI = .919.



H1: There will be a positive relationship between attitude towards and intentions to revisit the NFA.

Hypothesis 1 predicted that attitude has positive relationship with behavioral intention based on the TPB. The standardized path coefficient representing the relationship between the two variables was .243($p < .001$). Thus hypothesis 1 was supported.

H2: There will be positive relationship between subjective norms and intentions to revisit the NFA.

Hypothesis 2 predicted that subjective norm has a positive relationship with behavioral intention based on the TPB. The standardized path coefficient representing the relationship between the two variables was .070 ($p >.05$). Thus, hypothesis 2 was not supported.

H3: There will be a positive relationship between perceived behavioral control and intention to revisit the NFA.

Hypothesis 3 predicted that perceived behavioral control has a positive relationship with behavioral intention based on the TPB. The standardized path coefficient representing the relationship between the two variables was .264($p < .001$). Thus, hypothesis 3 was supported.

H4: There will be a positive relationship between temporal distance and attitude toward behavior.

Hypothesis 4 predicted that temporal distance has positive relationship with attitude toward behavior based on the CLT. The standardized path coefficient representing the relationship between the two variables was .081($p < .05$). Thus, hypothesis 4 was supported.

H5: There will be a positive relationship between spatial distance and attitude toward behavior.

Hypothesis 5 predicted that spatial distance has positive relationship with attitude toward behavior based on the CLT. The standardized path coefficient representing the relationship between the two variables was -.174($p < .001$). Thus, hypothesis 5 was not supported.

H6: There will be a positive relationship between temporal distance and intention to revisit the NFA.

Hypothesis 6 predicted that temporal distance has a positive relationship with behavioral intention based on the CLT. The standardized path coefficient representing the relationship between the two variables was .120($p < .01$). Thus, hypothesis 6 was supported.

H7: There will be a positive relationship between spatial distance and intention to revisit the NFA.

Hypothesis 7 predicted that spatial distance has a positive relationship with behavioral intention based on the CLT. The standardized path coefficient representing the relationship between the two variables was -.213(p < .001). Thus, hypothesis 7 was not supported.

Chapter 5. Discussion

5.1. Summary of Key Findings

The NFA is a necessary program for the management of the Korean people′s health, and the effectiveness of participation has been verified by prior research (KISS, 2014). The following results derived from this study can provide information to better understand revisit intention and factors affecting the behavioral intentions of participants. With these findings, the program designers and operators will be able to promote the program to provide benefits to the public.

First, this study examined variables affecting behavioral intention and tried to understand re-participation decision-making processes by applying the TPB. As confirmed from the hypothesis verification, attitude and perceived behavioral control have significant effects on intention

toward behavior. Two of the three components of the TPB have a positive effect on behavioral intention.

Second, subjective norm has a positive effect on intention, but it is not significantly related intention to revisit. This result is in line with Kim′s 2017 research, which applied the TPB to predict spectator sport consumers′ behavior. Previous research that claims the subjective norm is most weakly related to intention supports this finding (Armitage & Conner, 2001; Sheppard et al., 1988). Godin and Kok (1996) examined patterns of behavior change related to health screening and showed that subjective norm is the weakest variable in explaining variance in intention.

Third, this research has shown that psychological distance affects attitude and intention by adapting the temporal distance and spatial distance concepts of CLT. For temporal distance, it is proven that it has positive relationship with attitude and revisit intention as claimed by CLT. However, for spatial distance, this has negative impact on attitude and intention. This result means people have increased attitude and intention when they feel the event is closely located and easy to access.

With regard to the relationship between spatial distance and attitude, the result is same as prior research by Kim, Lee, and Jeong (2019). They investigated the effect of spatial distance on attitude and visit intention to the Daegu Samsung Lions Park. The results of the research showed that

the closer people perceive spatial distance, the greater their attitude.

Fourth, CLT has been widely used in the tourism and marketing field by setting a certain period or objectively measured distance to identify the construal level based on psychological distance. However, in this research, temporal and spatial distance are subjectively perceived distance by individuals. Those psychological distances were used to analyze the impact on attitude and behavioral intention (An & Lee, 2017; Broemer et al., 2008; Kim et al., 2017).

5.2. Theoretical and Practical Implications

This research has various practical implications. First, attitude and perceived behavioral control of the TPB impact on intention. Thus, it is expected that the intention of re-participation will be improved if program designers emphasize attitudes and make people think they can control their situation.

Second, the research has shown that spatial distance has negative relationship with attitude and intention. This could affect decision-making for people through marketing activities by changing the spatial distance that participants perceive (Eyal et al., 2009; Fujita et al., 2008; Henderson et al., 2006; Trope & Liberman, 2010). For example, a strategy would be needed to reduce spatial distance using a message that it would take little time to revisit or measure. Thus, one of the ways to promote re-participation of the NFA program is to reduce spatial distance by securing more NFA

certification centers.

Third, temporal distance has positive relationship with attitude and behavioral intention. The more time people feel they have, the better they are and the more willing they are to participate. People who have distal psychological distance have a higher construal level and when people with a high construal level form an attitude that value events or core value of the product rather than contextual constraints (Trope et al., 2007).

These findings show that people have different psychological distance based on their situation or environment. Previous research has demonstrated that it is more effective when the communication message has a similar level as the construal level. In other words, for people who have distal psychological distance, messages that emphasize disposition and core values are effective. Conversely, messages that highlight feasibility and practical matters are efficient for those who have proximal psychological distance (Boo et al., 2012).

In this case, KSPO needs an approach that accentuates the value of objective physical measurement for participants who have greater psychological distance (high-level construal), and a specific means or method for people who have proximal psychological distance (lower-level construal) to be more effective.

5.3. Limitations and Future Research Directions

This research examined the factors affecting revisit intention of NFA participants by applying the ETPB. Although this research has meaning in terms of identifying decision-making processes of participants′ revisit intention, it has some limitations as follows. Future studies can develop this study through the methods mentioned here.

First, this research was conducted with only 226 people who visited the NFA representative center located in the Olympic Park. Furthermore, this study used convenience sampling because of the limited amount of time. Thus, there is a limit to how the results can be generalized to a wider population, which has different social, environment, and geographical characteristics. A survey with more participants in different areas would allow a cross-sectional measurement of results.

Second, this study applied the TPB with temporal and spatial distance concepts of CLT to better understand revisit intention. However, all the variables used in this research cannot fully explain the entire process of having an intention to revisit the program. Therefore, future studies need to be conducted with addition variables that can enhance the value and accuracy of the research.

Third, in this study, the results were simply examined for the effect of psychological distance on attitude and behavior rather than dividing the

research group into high-level and lower-level construal. Therefore, it is necessary to conduct follow-up studies in the future to distinguish groups by level of construal and to identify the characteristics between the groups.

Fourth, in this study a quantitative research method was used to apply the ETPB. For more detailed analysis in the future, qualitative research methods such as interviews and observation techniques are required to be applied for an in-depth study.

Finally, this research was conducted to identify participants′ continued involvement. Therefore, the survey was conducted on active participants. There will be limits to the extended application of these results to people who never participate in the NFA program.

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서울올림픽기념국민체육진흥공단 홈페이지. http://kspo.or.kr

Appendix A

Survey on the intention of Re-participate in National Fitness Award

Dear participants,

This survey is a questions of your thoughts on the intention of re-participating the National Fitness Award. This research is conducted to collect basic data related National Fitness Award. I promise that i will never use any information except for research purposes. Please answer all questions honestly. Thank you.

Wonil Choi(Seoul National University - Global Sport Management)

[Attitude Toward the Behavior]

For me to re-participate National Fitness Award is _____.

1	**Extremely Bad**	<----------					**Extremely Good**
	①	②	③	④	⑤	⑥	⑦
2	**Extremely Unenjoyable**	<----------					**Extremely Enjoyable**
	①	②	③	④	⑤	⑥	⑦
3	**Extremely Unpleasant**	<----------					**Extremely Pleasant**
	①	②	③	④	⑤	⑥	⑦
4	**Extremely Worthless**	<----------					**Extremely Valuable**
	①	②	③	④	⑤	⑥	⑦
5	**Extremely Useless**	<----------					**Extremely Beneficial**
	①	②	③	④	⑤	⑥	⑦

[Subjective Norm]

6. Most people who are important to me think that it is **good for me to re-participate National Fitness Award.**

Strongly Disagree	<----------					**Strongly Agree**
①	②	③	④	⑤	⑥	⑦

7. Most people who are important to me think that I **should re-participate National Fitness Award.**

Strongly Disagree	<----------					**Strongly Agree**
①	②	③	④	⑤	⑥	⑦

8. It is **expected of me that I revisit National Fitness Award.**

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

9. The people in my life whose opinions I value **would approve of my revisitation National Fitness Award.**

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

[Perceived Behavioral Control]

10. If I wanted to, I could revisit National Fitness Award.

Definitely False	<----------					Definitely True
①	②	③	④	⑤	⑥	⑦

11. **How much control do you believe you have in revisitation** National Fitness Award?

No control	<----------					Complete Control
①	②	③	④	⑤	⑥	⑦

12. I have enough economic power to revisit National Fitness Award.

Definitely False	<----------					Definitely True
①	②	③	④	⑤	⑥	⑦

13. For me, **revisit National Fitness Award** is **possible.**

Extremely Impossible	<----------					Extremely Possible
①	②	③	④	⑤	⑥	⑦

[Temporal Distance]

14. It is too early to make specific plans for the revisitation of the National Fitness Award.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

15. The timing of the revisitation in the National Fitness Award seems vague.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

16. I think revisitation in the National Fitness Award is a distant future.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

[Spatial Distance]

17. I think the distance from my residence to the measurement site is **far.**

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

18. It feels to be a **challenging place to come back** to measuring location of National Fitness Award from my residence.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

19. Measurement site of National Fitness Award is **located far away from my residence.**

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

[Intention]

20. I have an **intention to revisit National Fitness Award.**

Extremely Unlikely	<----------					Extremely Likely
①	②	③	④	⑤	⑥	⑦

21. I **have a plan to revisit National Fitness Award**.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

22. I will **revisit National Fitness Award**.

Strongly Disagree	<----------					Strongly Agree
①	②	③	④	⑤	⑥	⑦

23. I will **try to revisit National Fitness Award**.

Definitely False	<----------					Definitely True
①	②	③	④	⑤	⑥	⑦

24. What is your gender? ① Male ② Female

25. How old are you?

① 20s ② 30s ③ 40s ④ 50s ⑤ 60s ⑥ 70s~

26. What is your educational background?

① Less than high school ② High school graduate ③ In College Now
④ College graduate ⑤ Advanced degree

27. What is your profession?

① Office worker ② Technical ③ Professional (Doctor, Lawyer, etc)
④ Sales ⑤ Self-employment ⑥ Educating/government employee
⑦ Homemaker ⑧ Students ⑨ Unemployed ⑩ Others( )

28. What is your monthly household income?

① Less than $2,000 ② $2,000 ~ $3,999 ③ $4,000 ~ $5,999
④ $6,000 ~ $7,999 ⑤ $8,000 ~ $8,999 ⑥ More than $9,000

29. Do you have any experience participating National Fitness Award?

① Yes, I have. ② No, I don't.

30. Where do you live? (State, Province, etc.)_____

<< Thank you very much for responding to the survey :) >>

Appendix B

국민체력100 재참여 의도에 관한 설문

안녕하십니까?

본 설문은 국민체력100 참여자들을 대상으로 재참여 의도에 대한 여러분의 생각에 관한 질문입니다. 국민체력100 참여자의 다양한 의견을 파악한 후 연구의 기초자료로 사용하고자 합니다. 본 설문에 응답하시는 내용은 연구목적 이외에는 절대로 사용하지 않을 것을 약속드립니다. 모든 질문에 솔직하게 답변해 주시기 바랍니다. 감사합니다.

2019년 11월

서울대학교 대학원 체육교육과 최원일

다음 문항을 읽고 해당사항에 체크(◯)해주시기 바랍니다. (7점 척도)

태도

1. 나는 국민체력100에 **재참여** 하는 것이 **좋다고** 느낀다.

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

2. 나는 국민체력100에 **재참여** 하는 것이 **즐겁다고** 느낀다.

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

3. 나는 국민체력100에 **재참여** 하는 것이 **기쁘다고** 느낀다.

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

4. 나는 국민체력100 **재참여**가 **가치 있다고** 느낀다.

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

5. 나는 국민체력100에 **재참여** 하는 것이 **유익하다고** 느낀다.

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

주관적 규범

6. **나에게 중요한 사람들은** 내가 국민체력100에 재참여 하는 것을 **좋다고 생각할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

7. **나에게 중요한 사람들은** 내가 국민체력100에 재참여 하는 것을 **지지할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

8. **나에게 중요한 사람들은** 내가 국민체력100에 재참여 하는 것을 **이해할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

9. **나에게 중요한 사람들은** 내가 국민체력100에 재참여 하는 것을 **동의할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

지각된 행동 통제

10. **내가 원하기만 하면** 국민체력100에 **재참여 할 수 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

11. 나는 국민체력100에 재참여 할 수 있는 **여건을 가지고 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

12. 나는 국민체력100에 재참여 할 수 있는 **충분한 경제력을 가지고 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

13. 나는 국민체력100에 재참여 할 수 있는 **충분한 기회가 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

시간적 거리

현재 시점으로부터 얼마나 남아있는지에 시간(기간)에 대한 주관적 생각

가까운 미래 <<----------<<----------<<----------<< 먼 미래

14. 국민체력100 **재참여를 떠올릴 때**, 아직 **구체적인 계획을 세우기에는 이르다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

15. 국민체력100 **재참여를 떠올릴 때**, **시기적으로 막연하게 느껴진다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

16. 국민체력100 **재참여를 떠올릴 때**, **먼 미래의 일로 느껴진다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

공간적 거리

얼마나 멀리 떨어져 있는지 물리적 거리에 대한 주관적 생각

가깝다 <<----------<<----------<<----------<< 멀다

17. 내 거주지에서 국민체력100 측정장소까지의 거리는 **멀게 느껴진다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

18. 내 거주지에서 국민체력100 측정장소까지 **다시 오기 힘든곳으로 느껴진다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

19. 내 거주지에서 국민체력100 측정장소는 **멀리 위치하고 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

재참여 의도

20. 나는 향후에 국민체력100에 **재참여 할 의도가 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

21. 나는 향후에 국민체력100에 **재참여 할 계획이 있다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

22. 나는 향후에 국민체력100에 **재참여 할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

23. 나는 향후에 국민체력100에 **재참여 하기 위해 노력할 것이다.**

① 전혀 그렇지 않다	② 그렇지 않다	③ 별로 그렇지 않다	④ 잘 모르겠다	⑤ 약간 그렇다	⑥ 그렇다	⑦ 매우 그렇다

인구통계학적 특성

24. 귀하의 **성별**은 무엇입니까? ① 남성 ② 여성

25. 귀하의 **연령대**는 어떻게 되십니까?

① 20대 ② 30대 ③ 40대 ④ 50대 ⑤ 60대 ⑥ 70대 이상

26. 귀하의 **최종학력**은 어떻게 되십니까?

① 고졸 미만 ② 고졸 ③ 대학재학 ④ 대졸 ⑤ 대학원 이상

27. 귀하의 **직업**은 무엇입니까?

① 사무직 ② 기술직 ③ 전문직 ④ 영업직 ⑤ 자영업
⑥ 교육직/공무원 ⑦ 전업주부 ⑧ 학생 ⑨ 무직 ⑩ 기타( )

28. 귀댁의 월평균 **가구총소득**은 어느 정도 되십니까?

① 200만원 미만 ② 200 ~ 400만원 미만 ③ 400 ~ 600만원 미만
④ 600 ~ 800만원 미만 ⑤ 800 ~ 900만원 미만 ⑥ 900만원 이상

29. 기존에 국민체력100에 **참여한 경험**이 있으십니까? ① 있음 ② 없음

30. 귀하의 **거주지**는 어디십니까? _____(시,도) _____(군,구,시) _____(동)

국문초록

확장된 행동이론을 통한 국민체력100 참여자의 재참여 의도에 관한 연구

최원일
글로벌스포츠매니지먼트 전공
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본 연구의 목적은 확장된 계획행동이론(Extended Theory of Planned Behavior)을 활용하여 국민체력100(National Fitness Award) 참여자들의 재참여 의도를 살펴보는데 있다. 계획된 행동이론(Theory of Planned Behavior)의 태도, 사회적규범, 인지된 행동통제와 해석수준이론(Construal Level Theory)의 시간적, 공간적 거리가 재참여에 대한 태도 및 의도에 미치는 영향을 규명하였다. 해석수준이론의 시간적 거리는 미래의 상황이 현재로부터 시간적으로 얼마나 떨어져 있는지에 대한 주관적 인식이고, 공간적 거리는 미래의 상황이 나로부터 공간적으로 얼마나 멀리 떨어져 있는지에 대한 주관적 인식이다. 올림픽공원에 위치한 국민체력센터를 방문하는 방문객을 대상으로 설문을 실시하였으며, 수집된 총 226부의 설문지를 SPSS 22와 AMOS 22를 통해 확인적 요인분석 및 구조방정식 모형을 통해 분석을 실시하였다. 연구결과 계획된 행동이론의 구성요소 중 태도, 인지된 행동통제는 재참여 의도에 정(+)의 영

향을 미치는 것으로 나타났다. 하지만 사회적 규범은 재방문 의도에 영향을 미치지 않는 것으로 나타났다. 시간적 거리의 경우, 재참여에 대한 태도와 의도에 정(+)의 영향을 미치는 것으로 나타났다. 즉 시간적으로 재측정까지 많이 남아있다고 느낄수록 가치 중심적인 상위해석수준이 작용하여 재참여에 대한 태도와 방문의도가 증가한다. 한편, 공간적 거리의 경우 재참여에 대한 태도 및 의도와 부적(−) 상관관계가 있는 것으로 나타났다. 참여자들이 국민체력센터가 가깝다고 느낄수록 구체성과 실행가능성 중심의 하위해석수준이 작용하여 재참여에 대한 태도와 의도가 증가하는 것이다. 이처럼 참여자가 지각하는 심리적 거리감에 따라 각기 다른 해석수준이 작용하게 되고, 해석수준을 토대로 커뮤니케이션 메세지를 전달하면 설득력을 높일 수 있다. 따라서 본 연구결과는 국민체력100 참가자들의 재참여 의사결정을 유도하고 프로그램 활성화를 위한 마케팅 전략을 수립하는데 도움을 줄 것으로 기대한다.

핵심용어: 확장된 계획행동이론(ETPB), 해석수준이론(CLT), 시간적 거리, 공간적 거리, 국민체력100(NFA), 재참여 의도