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THE ROLE OF CONGRUECY WITHIN THE PARTICIPANT SPORT
INVOLVEMENT AND LOYALTY PROCESS

By

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B.A., Transylvania University, 1999
M.S., University of Louisville, 2012

Dissertation
Submitted to the Faculty of the
College of Education and Human Development of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy
in Educational Leadership and Organizational Development

Department of Leadership, Foundation, and Human Resource Education
University of Louisville
Louisville, Kentucky

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A Dissertation Approved on

June 22, 2015

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DEDICATION

This dissertation is dedicated to my family and friends. You fuel my life in so many ways. I thank you.

ACKNOWLEDGEMENTS

There is no “we” in dissertation, but there was in mine.

I would like to acknowledge and thank those individuals integral in shaping this dissertation. My committee, the College of Education staff and faculty, and my doctoral classmates have all provided assistance in their own way. I cherish the time we have spent together and will always remember the contributions you have made in my life. I owe you.

ABSTRACT

THE ROLE OF CONGRUECY WITHIN THE PARTICIPANT SPORT INVOLVEMENT AND LOYALTY PROCESS

Jason A. Rice

June 22, 2015

The endurance event industry has been experiencing a recent popularity boom, where number of events produced and event participants continue to reach record levels. Running USA (2013a; 2013b) has reported the number of finishers in the largest 100 timed running events has grown 77 percent in the last 14 years. A major factor in this current boom is the emerging number of non-traditional running events. Nonexistent a decade ago, non-traditional endurance events, such as obstacle-course races and a variety of themed runs, have flooded the market. For example, Tough Mudder, founded in 2009 (Branch, 2010), has grown to over 3.5 million participants worldwide in just its first five years (Widdicombe, 2014). The variety of offerings available in the endurance event market has not only assisted with growth with the endurance event segment of participatory leisure sport, but it has also spurred cross-category competition.

Interestingly, while endurance events have never been more popular or more accessible, health behaviors in the United States are at an all-time low (Healthy People, 2013). American society has been plagued with an overabundance of sedentary behavior and other poor health habits resulting in dire consequences. However, mass participatory endurance events, such as marathons and obstacle course events, and their supporting services represent a potential population-based intervention that may have the capacity to offer positive influence on both healthy and unhealthy populations (Funk, Jordan,

Ridinger, & Kaplanidou, 2011; Murphy & Bauman, 2007). These events have not only been shown to possess the ability to increase physical activity (Murphy & Bauman, 2007), they also have the potential to promote positive attitudes towards exercise from individuals across a range of fitness levels (Funk, et al., 2011).

To further investigate this recent growth and the potential endurance events have to act as a positive health intervention, by attracting and retaining participants, the purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Specifically, this study was designed to investigate the associations individuals have toward endurance events and the role these associations have in the process of involvement by developing increased attitudinal and behavioral loyalty. Additionally, constructs of self-congruity with endurance event functional and symbolic associations perceived by non-endurance event participants and participants were analyzed as to how they were associated with different levels of involvement.

Data were collected from current members of endurance running groups and undergraduate students in the United States. Results revealed both non-endurance event participants and endurance event participants considered both types of endurance events, traditional and non-traditional, to share obstacles for participation. Additionally, both event types required their participants to demonstrate an array of physical and mental demands, while still finding sources of enjoyment for participation. However, unique obstacles for participation, such as potentially dangerous and unpredictable, in non-traditional endurance events were considered by traditional event participants. Another

area where the two event types differed was in the perceived rewards for participation. Both groups considered traditional endurance event participation to be rewarding, but the non-endurance event participant group did not recall any rewards for non-traditional event participation.

Results also indicated significant differences were present in each of the four types of congruity (functional congruity, stereotypical user congruity with ideal self, stereotypical congruity with actual self, and brand personality congruity) based on level of endurance event involvement. Overall, scores of congruity grew in coordination with the Psychological Continuum Model level of the individual. Specifically, those within the highest involvement level, allegiance, displayed significant differences between all other levels along each congruity score. No significant differences existed between those occupying the attraction and attachment levels within each congruity measure.

Implications of this study are useful for individuals interested in further understanding the process an individual undergoes while becoming involved in a physical leisure activity such as endurance event participation. First, a segmentation strategy utilizing involvement level produced valuable and descriptive points of differentiation which may be used to generate effective marketing strategies. Second, constraints to activity participation should be minimized through marketing efforts to encourage involvement level elevation. Third, highlighting the benefits of activity participation should be used to encourage involvement level elevation. Finally, efforts to increase the overlap of how an individual perceives the activity with their own self-image and the benefits of activity participation should assist with increased involvement.

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CHAPTER I

INTRODUCTION

Endurance Event Market

While there have always been ebbs in general sport and leisure participation, participant endurance events have experienced rapid adult participation growth over the last decade. For example, USA Triathlon (USAT), the national governing body for triathlon, has experienced a 25 percent increase in members over a three-year time span, and adults age 18 years of older accounted for the majority of this increase (USA Triathlon, 2013). Half marathon and marathon running events have also experienced record breaking attendance records over the past few years (Running USA, 2013a; 2013b). While still considered niche sporting activities, these increases in participation numbers exhibit the growing appeal of these events within adult populations.

As the popularity of these events continue to increase, so too does the infrastructure supporting this growth. One way the mass participant event market has responded is by offering new and different types of events. There has been an influx of new endurance event growth of a non-traditional variety. These include the obstacle course events Tough Mudder, Warrior Dash, and Spartan Race, as well as a variety of themed runs such as Color Run, glow runs, and zombie runs. As a result, traditional endurance events, such as the marathon and half marathon, are now operating side-by-side with a new category of non-traditional endurance events that did not exist one decade ago (Branch, 2010).

The growth of this new category has occurred over a short amount of time but has been significant. For example, Tough Mudder was founded in 2009 (Branch, 2010) and the event series had over 3.5 million participants worldwide by 2013 (Widdicombe, 2014). The American Trail Running Association has also indicated growth within a greater number of niche endurance event categories. Events, such as mud runs and snowshoe events, have seen the number of events being produced per year jump from 450 in 2000 to over 2,700 in 2012 (Pattillo, 2013). Both traditional and these new non-traditional endurance events have contributed to the overall growth of the endurance market. But, do they have the ability to attract the less active individual? If so, which events types have the greatest potential to attract those not currently participating in any mass participatory events and possibly in the greatest need of a health behavior intervention?

Health Intervention

Interestingly, as endurance events have never been more popular or more accessible, health behaviors in the United States have hit an all-time low (Healthy People, 2013). American society has been plagued with an overabundance of sedentary behavior and other poor health habits resulting in dire consequences. Some figures indicate the United States may be in the midst of its most unhealthy time period in the modern era. Recent reports indicate that over half of U.S. adults (ages 18 or over) fail to meet the recommended amount of physical activity per week (Haskell et al., 2007; Healthy People, 2013; Pate et al., 1995). This translates to over 127 million insufficiently physically active adults displaying greater potential to have physical health issues, experience depression or low self-esteem, pass on inactive behaviors to their children, and be less

productive at work, among other negative physiological, psychological, social, or financial outcomes (Lindstrom, Hanson, & Ostergren, 2001; Sallis, Prochaska, & Taylor, 2000; Strawbridge, Deleger, Roberts, & Kaplan, 2002).

As a result, many government organizations and health professionals have pursued diverse avenues for combating inactive lifestyles (Let's Move, 2014; US Department of Health and Human Services, 2008). In this pursuit, education-only and short-term wellness training interventions focused on the individual have produced mixed results (Dunn, Andersen, Jakicic, 1998). Instead, long-term approaches, which concentrate on both population- and individual-level influences on health behaviors, have experienced more success in curbing unhealthy behavior and producing positive health outcomes (McLeroy, Steckler, & Bibeau, 1988). In response, a rather unexplored area receiving recent attention is the use of sport, mass participant events in particular, to change physical activity attitudes and behavior (Funk, Jordan, Ridinger, & Kaplanidou, 2011). In their research, Funk, Jordan et al. (2011) discovered these events, which included an eight kilometer road race, a half marathon, and marathon, had the potential to promote positive attitudes toward exercise and strengthening activity interest of individuals across a range of fitness levels.

Because of the successes more long-term approaches have experienced in generating positive health outcomes (McLeroy et al., 1988), mass participant events as an ecological approach are examined in the current review. One strategy to consider is the social ecological model approach, a behavioral framework evaluating the complex interplay between five levels of influence: intrapersonal, interpersonal and primary groups, institutional factors, community factors, and public policy (McLeroy et al.,

1988). While the infrastructure built into and around endurance sport participation may positively influence each of level of the ecological model (Alexander, 2013; “Alumni,” 2014; Masters, Ogles, & Jolton, 1993; Ogles & Masters, 2000) the current study mostly applies to the intrapersonal level.

The ground level of influence found within the ecological model, intrapersonal, contains the traits of the individual such as knowledge, attitudes, self-concept, and developmental history (McLeroy et al., 1988). Funk, Jordan, et al. (2011) suggested this intrapersonal level may be affected by endurance event participation by revealing that attitude toward physical activity is likely to be positively influenced once an individual participates in an endurance event. Positive changes in attitude have continually been linked to loyal behavior such as repeat performance in the behavior (Beaton, Funk & Alexamdris, 2009; Iwasaki & Havitz, 2004; Pritchard, Havitz, & Howard, 1999). As a result, endurance event participation shows the capacity to act as a healthy behavior intervention.

These mass participatory events and their supporting services represent a potential population-based intervention that may have the capacity to offer positive influence within many levels along the ecological model. Additionally, they have shown the ability to increase physical activity across a range of fitness levels (Murphy & Bauman, 2007). In the case of an individual with low fitness, many training programs are available to encourage them to move from a more sedentary couch lifestyle to 5K participation as well as half-marathon, or full marathon training (Luff, 2014; Rei, 2014). The requirements of event training for some endurance events, such as the half marathon, have the potential to move an individual into a healthy lifestyle category and transform

his or her life health behaviors and outcomes. In a study involving participants in an eight kilometer road race, a half-marathon, and a marathon, Funk, Jordan et al. (2011) found these events have the ability to produce incremental changes to physical activity over time by promoting positive attitudes toward exercise, with even the least active members of a population experiencing a strengthened interest in the activity. To investigate the relationship individuals have with these events, the current study has explored the process an individual undertakes in becoming involved with participatory endurance events.

While new evidence has suggested mass participatory events have the ability to change behaviors and attitudes towards physical activity (Funk, Jordan et al., 2011), recent changes in the market have presented new potential to attract participants. The additional of so many new event types have presented a greater selection of options. But, it is also possible that this evolution of the market has manipulated the environment in such a way that the applications of the Funk, Jordan, et al. (2011) are less valid to endurance sport as a whole. The landscape of the endurance market has been modified and each of today's event types may play a different role in their effect on participations. For this reason, a new investigation in the attraction of the mass participatory event market is necessary. Event marketing and public health program stakeholders should identify how these events differ in the market and the process an individual.

Study Perspective

As previously mentioned, there exists the potential for mass participatory events to positively affect unhealthy low physical activity lifestyles in the United States (Funk, Jordan, et al., 2011; Murphy & Bauman, 2007). Efforts to further unveil this capacity

will require a dual approach. First, an investigation of the endurance event participant's involvement process may assist efforts aimed to encourage involvement and continued loyalty. Second, it is important to understand how non-participants perceive endurance events and their possibility of future participation. To accomplish an investigation into these two areas, the current study employed the combination of leisure and sport involvement research to better understand the connections individuals have with endurance events and how these connections have the potential to drive participants and prospects to higher levels of activity involvement and loyalty.

To guide this dual approach, the foundation of the current research was built from the leisure activity participation model developed by Iwasaki and Havitz (1998) and brand association/personality research. Iwasaki and Havitz (1998) suggested involvement, understood to be a state of interest or motivation to partake in an activity or to consume a product (Havitz & Dimanche, 1997), is a multifaceted construct which is associated with the loyalty the individual may display towards an object such as a product, sport agency, or an activity. As loyalty, defined as an individual's resistance to change his or her attitude about an object as well as the duration, intensity, and the frequency in which he or she partakes in the behavior (Iwasaki & Havitz, 1998) increases, so too does the possibility of repeat behavior of the desired outcome (Funk & James, 2001).

This relationship has been supported by subsequent research (Funk & James, 2001; Kyle & Mowen, 2005) and has been developed into a model where attitudinal loyalty mediates the relationship between involvement and behavioral loyalty (Iwasaki & Havitz, 2004). Examination of Iwasaki and Havitz's (1998) model and the Psychological

Continuum Model (PCM) (Funk & James, 2001) offers greater insight into the development of involvement and loyalty. It has been hypothesized that involvement can be segmented into four hierarchical levels: awareness, attraction, attachment, and allegiance (Funk & James, 2001). As individuals move from the floor level, awareness, up to attraction, they are considered to undergo a transition from simple to complex behavioral engagement with the activity and weak to strong attitudinal engagement with the activity (Funk, Beaton et al., 2011). Each level is also said to have its own set of inputs/antecedents and outcomes/characteristics which aid processing between the levels (Beaton et al., 2011).

While recent studies have explored the relationships between certain involvement components (Beaton et al., 2011), studies comparing the individuals occupying the different involvement levels are still limited (Beaton et al., 2009; Filo, Chen, King, & Funk, 2013; Funk, Beaton, & Pritchard, 2011). An analysis of different involvement levels was expected to allow for a greater understanding of the mechanisms which move individuals between the levels, including what attracts individuals to begin participation and what may help retain participants.

Connections between levels invite the use of congruity theory as a level moderator. Past research has suggested movement between levels results from the effects of an individual evaluating his or her relationship with a product or brand in terms of the personal meaning, functional and symbolic meaning, value congruence, and identification experienced (Beaton et al, 2009). For example, does the individual hold value to the personal meaning signified by consumption of the product and does this self-evaluation change as a result of moving through different involvement levels? Additionally, are

different types of self-image congruity (such as actual and ideal self) or functional congruity activated along certain levels or between certain levels? By identifying differences between involvement levels, this study was designed to shed light into some of these rather unexplored areas of the process and bring greater levels of practical relevance to current involvement models by identifying different points of association along the involvement process.

To evaluate this process, the current research examined how brand congruity is associated with each level of the PCM. Two types of congruency have been acknowledged in past research and suggested in involvement staging (Beaton et al, 2009): (a) functional congruity and (b) symbolic self-image congruity. Functional congruity refers to the match or mismatch between perceived performance of the brand/product's functional attributes and the consumer's ideal performance of the brand/product's functional attributes (Ahn, Ekinci, & Li, 2013). Self-image is the "totality of the individual's thoughts and feelings having referenced to himself as an object" (Rosenberg, 1979, p. 7). Individuals experience congruity when they identify a match between the perceived image of a brand/product and their self-image (Ahn et al., 2013). For example, individuals may exclusively participate in only trail running endurance events because they find it best relates to the bohemian perception they have of themselves. Measures of self-congruency have been suggested to be important in understanding consumer behavior because of the symbolic meanings and associations consumers hold about products. Past research has demonstrated this relationship. Levy (1959) initiated the use of brands as symbols, which was later popularized in the work of Keller (1993) and Aaker (1996).

Sport also has utilized symbolic meaning, in the form of brand associations, with various levels of success (Gladden, Milne, & Sutton, 1998; Ross, James, & Vargas, 2006). Still, past research posits the existence of a relationship between an individual's evaluation of the meaning and value derived from the consumption of a product or brand may drive the involvement process (Beaton et al, 2009). Conceptualized through congruency theory, brand associations may find placement within popular involvement models and should assist in establishing relationships and differences between involvement levels with practically beneficial results. The current research examined the proposal that congruency theory may contribute to an individual's progression along the involvement and loyalty process as a formative factor of commitment and a moderator of involvement level movement.

It is important to understand this process and the attitudes and behaviors of endurance event participants for many reasons. First, recent growth in both traditional and non-traditional endurance event types and number of participants within the endurance event marketplace has created a competitive environment. Second, there is new evidence that organized sporting event participation may positively affect the attitudes participants have toward physical activity (Funk, Jordan et al., 2011). As United States adults exhibit poor health behaviors in recent years (Healthy People, 2013) understanding the attitudes and associations held by non-participants as well as endurance event participants may assist in creating effective intervention strategies for non-participant groups and assist with retention of current participants.

Based on previous research, the current study was designed to examine one way to accomplish this, by creating positive and effective brand associations which

distinguish the brand in the mind of the consumer (Keller, 2003; Plummer, 2000) and move them into and through the event involvement/commitment process. Congruity theory offers a way for individuals to activate brand associations or functional perceptions, defined as the utilitarian expectations of brand consumption, about a brand and attempt to link them to their self-image or desired needs when making a purchase decision (Ahn, Ekinici, & Li, 2013). Event participation is more likely to occur if a match is found between one of the following three combinations: between (a) the functional perception of participation and the actual functional outcome of participation, (b) the perception of the image of a stereotypical user and an individual's self-image (i.e., actual or ideal), or (c) the perception of the brand personality of the event and an individual's self-image. For example, if individuals view the stereotypical marathon participants as being very different from themselves and consider running to not be an enjoyable activity, they are less likely to participate in marathon events compared to those who experience more similarities. Research has also indicated that individuals currently involved display stronger attitudinal loyalty the more congruent the object is with the self (Funk & James, 2001). Thus, the importance of image congruence and association is suggested to exist within this process, but further analysis is needed.

Organizations operating in this space will need to gather a better understanding of their consumers and prospects and the involvement and loyalty process they undertake with their events. Congruity theory, operationalized with the help of brand association/personality research, has the ability to generate important consumer descriptions and implications with a high level of practical relevance. In sum, the current research was designed to address these issues, bring practical results to invested

parties within sport management and public health, and extend this particular area within sport research.

Study Purpose

The purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Additionally, a construct of self-congruity with functional and symbolic associations perceived with an endurance event was analyzed as to how it was associated with different levels of involvement. Past studies and scales have shown sport participation is complex and partially misunderstood (McDonald, Milne, & Hong, 2002; Ogles & Masters, 2003; Pelletier, Rocchi, Vallerand, Deci, & Ryan, 2013; Scanlan, Russell, Beals, & Scanlan, 2003; Scanlan, Russell, Scanlan, Klunchoo, & Chow, 2013). Yet, limited research has investigated the process of participant involvement in detail, and no study has employed congruity theory within a participant involvement framework. This is surprising because a clearer understanding of event participant actions and psychological connections would benefit an array of stakeholders, including event marketers, social program directors, sport researchers, public health practitioners, and other invested parties.

Research Questions

Non-Event Participant Associations and Behavior

RQ1.1: What associations do non-endurance event participants have for both non-traditional and traditional endurance events?

RQ1.2: Which type of endurance event category (traditional road running events versus obstacle course events) are those currently not participating in endurance events more likely to participate?

Endurance Event Participant Associations and Behavior

RQ2.1: What associations do traditional road running endurance event participants have for both non-traditional and traditional endurance events?

RQ2.2: How likely are traditional endurance event participants to participate in non-traditional endurance events?

Traditional Endurance Event Involvement Level and Congruity Relationship

RQ3.1: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the functional congruity of traditional endurance events?

RQ3.2: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their actual self?

RQ3.3: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their ideal self?

RQ3.4: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the brand personality congruity of traditional endurance events?

Questions 1.1 and 1.2 will address how prospective consumers view the endurance market and the ability these events have to attract new participants. Question

2.1 and 2.2 investigates how the associations of current participants and the likelihood they would try a non-traditional endurance event are associated with their behaviors and attitudes. Addressing the retention ability of endurance events, questions 3.1 through 3.6 examine the use of congruity theory within the involvement and loyalty process.

Delimitations

Delimitations are designed to acknowledge the boundaries of the study (Roberts, 2010). Several delimitations existed within the study. First, the term “endurance sport participant” is subjectively defined. As a result, an endurance athlete may be someone who participates in a variety of event types and distances. This may include running events of various terrain (trail, road, treadmill, beach, etc.), swimming events (channel swimming, pool lap swimming, etc.), and multi-sport events (triathlon, duathlon, etc.), among others. The current study narrowly defined the traditional endurance event as a road running event of 13.1 miles in distance or longer and a non-traditional endurance event as an obstacle course event 3.1 miles in length or longer. These events were chosen because of their relevance, popularity, and frequency in participation opportunities in the endurance sport world. Road running events and obstacle course events have the highest numbers of participants within their respected categories. Triathlon and long distance swimming, while having a long history, do not attract the participation numbers of half-marathons and marathons. Similarly, certain obstacle course events have the majority of participants (Widdicombe, 2014). Other non-traditional events, such as extreme hiking snowshoeing events, do not have the participation numbers or the cultural relevance as events such as Tough Mudder and Spartan Race.

Second, the sample groups in the current research were limited to road running and training groups in the United States and undergraduates enrolled at a Midwestern university in the United States. Participation in endurance events is an international affair. The sports of marathon and triathlon are represented at the Summer Olympic Games and obstacle course racing has a presence outside United States borders. Similarly, non-participants included collections of people outside the undergraduate student group chosen. Therefore, results should be generalized only to groups which demonstrate similar characteristics and not to endurance event participants as a whole.

Third, the cross-sectional nature of the study presented a snapshot of attitudes and behaviors. A longitudinal design may provide a full account of the involvement process, as an individual moves between different levels of the PCM and the key moderators of attitudinal and behavioral outcomes. Still, a cross-sectional design was able to generate an investigation of the current study's purposes.

Limitations

This study contained several limitations related to the utilized sample. First, the sample was purposively collected. While every effort was made to ensure a sample representative of a larger population, generalizing the results to fundamentally different populations should be done with care. The non-participant sample was selected to represent the younger consumer and potential future customers of endurance sports. Again, results may differ from other non-active populations. While efforts were made to increase the probability of a representative sample, possible differences may exist in samples from various geographical regions and demographic compositions, including different mixture of involvement levels.

Other limitations related to research design may have also existed. First, there are many different moderators of sport participation involvement level (e.g., personal benefits, side bets, switching costs). The current study focused on the relationship of different types of congruity. For this reason, the current analysis was not intended to capture the entire involvement process. Instead, the study was designed to examine the specific role of congruity in this process.

Third, the survey items were self-reported and may have been subject to certain biases such as self-report bias or social desirability bias. Self-report bias may occur from faulty memory, such as unknowingly reporting inaccurate participation behavior, while pressure to appear socially acceptable may similarly influence imprecise results from variable measures. Lastly, although the researcher conducted tests of reliability and validity of the scores, extraneous variables may have still existed and impacted the data.

Key Terms

Attitudinal Loyalty is “the tendency to resist changing preference for an activity” (Beaton et al., 2009, p. 190).

Behavioral Loyalty is the intention of future participation in the activity (Iwasaki & Havitz, 2004).

Brand Associations contain meaning of the brand and link it to a consumer’s memory (Keller, 1993), or the thoughts that come to mind immediately after the brand is recalled (Ross, 2006).

Brand Awareness is defined as the consumers’ ability to identify or recall the brand under different conditions (Keller, 1993).

Brand Equity is defined as “the differential effect that brand knowledge has on consumer response to the marketing of that brand” (Keller, 1993, p. 60).

Brand Personality refers to “the set of human characteristics associated with a brand” (Aaker, 1997, p. 347).

Brand Personality Congruity identifies the level of overlap found between an individual’s self-image with the image he or she holds for the brand itself.

Centrality is “how central the activity is to the individual’s lifestyle” (Beaton et al., 2009, p. 183).

Commitment is defined as the psychological construct reflecting desire and resolve to persist in an endeavor over time (Scanlan, Russell, Magyar, & Scanlan, 2009).

Ecological model is a behavioral framework evaluating the complex interplay between five levels of influence: intrapersonal, interpersonal and primary groups, institutional factors, community factors, and public policy (McLeroy et al., 1988).

Functional Congruity refers to the match or mismatch between perceived performances of the brand/product’s functional attributes and the consumer’s ideal performance of the brand/product’s functional attributes (Ahn et al., 2013).

Intentions capture the motivational factors that are associated with a behavior “an indication of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior” (Ajzen & Driver, 1992, p. 208).

Involvement is a state of interest or motivation to partake in an activity or to consume a product (Havitz & Dimanche, 1997).

Non-Traditional Endurance Events require participants to overcome various physical obstacles similar to what one might expect in military training and should be at least 3.1

miles in length. These include Spartan Race, Tough Mudder, and Warrior Dash, but should not include mud runs or trail runs where obstacles, other than mud, are not present.

Participation is the act of taking part in an activity.

Pleasure is “the combined enjoyment, interest, and importance associated with the activity” (Beaton et al., 2009, p. 183).

Self-Congruity refers to the match or mismatch between the perceived image of a brand/product and the self-image (Ahn, Ekinci, & Li, 2013)).

Sign is “the self-expression value or level of symbolism that the activity represents” (Beaton et al., 2009, p. 183).

Stereotypical User Congruity identifies the level of overlap found between an individual’s self-image with the image he or she holds for a conventional user or consumer.

Subjective Norm is a normative-based cognition and represents the person’s evaluation of whether significant others want him or her to engage in the target behavior and, in turn, his or her motivation to comply with these others (Ajzen & Fishbein, 1970; Hagger, Chatzisarantis, & Biddle 2002).

Traditional Endurance Events are any non-trail or multi-surface running events which take place on a paved surface and are at least 13.1 miles in length. This includes half-marathons and marathons.

CHAPTER II
LITERATURE REVIEW
Leisure Sport Participation

The purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Additionally, a construct of self-congruity with functional and symbolic associations perceived with an endurance event was analyzed as to how it is associated with different levels of involvement. The significance of this study was found in the suggestion that an identification of the desires and motivations of sport consumers has shown to be a significant determinant of sport involvement (McDonald et al., 2002). While many factors have been offered to affect the purchase decisions and behaviors of leisure activity consumers, understanding salient drivers of behavior will allow sport marketers and public health promoters to specifically target those items with effective marketing communication in an effort to attract and retain participant consumers.

Once participation has ensued, a complex multifaceted development occurs before behavior can be considered consistently loyal (Iwasaki & Havitz, 1998). For this reason, a full understanding of this process and the associations of key facilitators will benefit efforts to generate meaningful segmentation and communication strategies. The current research suggested, following Rohm, Milne, & McDonald (2006), effective segmentation can result from an understanding of what drives motivation and participation beyond

mere demographic factors. For this reason, the following review will evaluate valid instruments for generating participant segments. This should provide relevant characteristics of each segment which, in turn, with a full understanding of the sport participant involvement and loyalty process, can generate practical marketing communications for each segment.

The process a sport participant undergoes from non-involvement to involvement to a state of more predictable behavioral intentions or loyalty is paramount in this study. A fair amount of research has identified and explored the developmental relationships between involvement, attitudinal loyalty, and behavioral loyalty in a leisure activity setting (Beaton et al., 2009; Funk, Beaton, & Pritchard, 2011; Funk & James, 2001; Havitz & Dimanche, 1997; Iwasaki & Havitz, 1998; 2004; Kyle & Mowen, 2005; Pritchard et al., 1999). Involvement has been defined as “an unobservable state of motivation, arousal, or interest towards a recreational activity or associated product. It is evoked by a particular stimulus or situation and has drive properties” (Havitz & Dimanche, 1997, p. 246). After reviewing dozens of involvement studies with a variety of measures for the construct, Havitz and Dimanche (1997) suggested conceptualizing involvement as a multidimensional construct which behaves differently under an assortment of situations and individuals. Iwasaki and Havitz (1998) identified a sequential process that an individual must move along as they become more committed and loyal to an object. They also established the influence of attitudinal loyalty between involvement and behavioral loyalty. This relationship has been confirmed in both a physical activity (Iwasaki & Havitz, 2004) and a service product (Pritchard, Havitz, &

Howard, 1999) setting. To gain a better understanding of this process, each of the three main components is discussed in greater detail.

Leisure Activity Involvement

Understanding why individuals participate in sport has received significant attention in past research (Funk & James, 2001; Iwasaki & Havitz, 1998, 2004; Ko, Park, & Claussen, 2008; Masters et al., 1993; McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 1995; Pelletier et al., 2013; Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993; Scanlan et al., 2009). It has been suggested that loyal customers who exhibit repeat purchase behavior are highly valuable to an organization's success because they are able to generate more revenue at a reduced cost compared to new customer acquisition (Mullin et al., 2014). The first step is to develop a full comprehension of the involvement and loyalty process. "Understanding the sources of involvement provides a dynamic picture of the consumer's subjective situation and gives clues as to what appeals should be used in communicating with consumers" (Laurent & Kapferer, 1985, p. 43). Addressing what it is, what influences it, and what results from the process should provide valuable insight into leisure sport participation behaviors.

Involvement is understood to be a state of interest or motivation to partake in an activity or to consume a product (Havitz & Dimanche, 1997). Early research of involvement, such as Sherif and Cantril's (1947) social judgment theory, suggested the construct has a personal and emotional nature. They contended the individual ego reduces involvement decisions through self-expression by analyzing the personal relevance or importance of the product. Allport (1949) extended involvement to also include the hedonic pleasure an individual may experience from product consumption.

Using this perception, endurance event participation would be initiated by an individual determining which event participation outcomes would fulfill a certain set of personal needs. Should experience and/or additional information confirm a fit between the individual's needs and participation, involvement levels are likely to increase. Should the individual have expectations or experiences of a non-pleasurable relationship, involvement levels are equally likely to become reduced.

Laurent and Kapferer (1985) also highlighted the need to consider additional types of involvement beyond those previously considered. They cited Rothschild (1979) for distinguishing between enduring involvement and situational involvement. Enduring involvement is said to reflect an increasingly stable relationship with the product and is driven by more personally held beliefs and values. Whereas, situational involvement, as the name suggests, is situation specific and is heightened when risk is perceived as a possible outcome (Laurent & Kapferer, 1985). For example, an individual may wish to support his or her local running community by frequently participating in area running events and sign up for the same half marathon every year. This would be enduring involvement. However, he or she may face situational involvement when a good friend suggests signing up for a new 5K race benefiting their daughter's terminal illness. Not participating in this race has the potential to risk or influence their friendship, thus situational involvement with this race is likely to become heightened compared to other 5K events the individual would usually not consider.

Together, the above involvement profiles make up the genesis of Laurent and Kapferer's (1985) Consumer Involvement Profile (CIP). The original CIP consisted of five involvement components: (a) attraction, (b) sign, (c) centrality, (d) risk probability,

and (e) risk consequence (Laurent & Kapferer, 1985). Since this original creation, the risk components have been debated and removed from multiple studies for practical and conceptual purposes (Beaton et al., 2009; Bodet, 2012; Havitz & Dimanche, 1997; McIntyre & Pigrann, 1992). Beaton et al. (2009) and Iwasaki and Havitz (2004) both utilized the conceptualization and adopted measurements developed in the CIP, minus risk, in their studies within a leisure and sport participation setting. Research following Laurent and Kapferer (1985), such as the work of Iwasaki and Havitz (1998), McIntyre and Pilgrim (1992), and Bodet (2012), has provided further support for the multifaceted nature of the involvement construct, which has come to be generally accepted.

Havitz and Dimanche (1997) described how risk itself is multifaceted and the scope of the CIP cannot adequately measure its association. They also argued that risk does not consistently affect involvement, as it can either negatively or positively be associated with the behavior. For example, some individuals may avert risk while others may thrive from the same risk source. Additionally, Iwasaki and Havitz (2004), in their study of clients from a recreation agency, found risk measures to be statistically insignificant, and based on previous issues with the measures (Havitz & Dimanche, 1997) decided to drop it from further analysis. Bodet (2012) also decided to drop the risk measure for theoretical and methodological reasons. Thus, the current research will not include dimensions of risk to evaluate involvement, while retaining the attraction, sign, and centrality components of the CIP.

Iwasaki and Havitz (1998) identified attraction as the perceived importance or interest in an activity or a product and the pleasure acquired from consumption. This dual meaning has caused confusion for some who considered them to be two unique

constructs. Beaton et al. (2009), following the guidance of Allport (1943), suggested highlighting the importance of the hedonic pleasures component of involvement and omitting perceived importance. Giving the example of mindless workers daily slogging away at their job, they offered that perceived importance is not always grounds for ego-involvement. This dual conceptualization seems to fit within the endurance sport context, as some individuals may form excessive training habits but find limited satisfaction or pleasure in the activity. As a result, Beaton et al. (2009) renamed the attraction component to pleasure and relied on involvement measures more pleasure oriented than personally relevant.

Sign, or the ability to use product consumption as a form of self-expression, built from the work of Sherif and Cantril (1947), is also considered an important component of involvement (Beaton et al., 2009; Iwasaki & Havitz, 1998). Examples of sign are ubiquitous throughout endurance sport. At many marathons, finishers are encouraged to wear their medals through the day and at the airports when returning home. Once home, many of them may be seen running the streets in event shirts or display event stickers on their cars, or better yet, tattooing themselves with the event logo.

The next and final component, centrality, evaluates how central the activity is to the individual's lifestyle (Beaton et al., 2009). This component measures how much an individual's life is focused around the activity, including finances and social occasions. Centrality should also include social contexts such as friends and family members centered on the activity (Iwasaki & Havitz, 1998). This component is highly present within endurance sport, as athletes may purposely schedule vacations or business trips around running events. They may also reject social invitations which interfere with

training, or even choose a vocation or significant other which may compliment endurance event participation. Within this analysis, it stands that the involvement construct originated by Laurent and Kapferer (1985) is a good fit to analyze endurance event participation.

As a multifaceted construct, individuals are considered to have different experiences, and thus influences within measurements of involvement (Iwasaki & Havitz, 2004). Achieving high levels of involvement does not require consistently high scores across each component. Instead, individual experiencing different combinations of scores may experience similar outcome involvement levels. For example, an individual may find great pleasure and avenues for self-expression in completing long-distance triathlons but maintain it is not a central item in their life, taking a place well behind that of family, work, and faith. While their composite involvement score may be high, their individual scores may vary; they score high on pleasure and sign components of involvement but low on centrality. Further investigation of the involvement construct will be conducted later in the review, when the Iwasaki and Havitz (1998) model and the Psychological Continuum Model are reviewed in more detail. In the meantime, a further investigation of the involvement and loyalty process will resume.

Attitudinal Loyalty

Despite their importance to marketers, popular outcomes of customer involvement, such as attitudinal loyalty and commitment, have been debated over the years (Dick & Basu, 1994; Iwasaki & Havitz, 2004; Li & Petrick, 2010; Pritchard, Howard, & Havitz 1992). Some suggest they are distinct constructs (Iwasaki & Havitz, 2004), while others blur their division (Li & Petrick, 2010). If distinctions are to be made

between commitment and loyalty it must be done at the onset, with how the construct is defined. For example, Li and Petrick (2010) examined this relationship but conceptualized loyalty and commitment as attitudinal constructs. As a result they naturally concluded that loyalty and commitment in a leisure marketing setting as the same construct. However, other research has distinguished between both an attitudinal and behavioral component of loyalty and provided empirical support for the dual structure (Iwasaki & Havitz, 2004). For purposes of this research, following popular leisure activity research (Funk & James, 2001; Iwasaki & Havitz, 1998; 2004), commitment and loyalty are defined as two distinct concepts, addressed as (a) attitudinal loyalty and (b) behavioral loyalty throughout this study.

Scholars have indicated that even highly involved participants do not always become behaviorally loyal to an activity (Iwasaki & Havitz, 1998; 2004). Instead, attitudinal loyalty mediates the relationship. Crosby and Taylor (1983) described commitment as the stable preference bound by an attitude to resist change. Iwasaki and Havitz (2004) described this attitudinal loyalty as “the individual’s unwillingness to change their preferences toward, important associations with, and/or beliefs about a brand” (p. 50). They maintained that psychological commitment represents the attitudinal component of loyalty. This attitudinal element may come to fruition as a result of two antecedent processes: (a) the need to maintain a consistent informational structure and personal attachment and (b) the identification of important values and self-images linked to a preference (Crosby & Taylor, 1983).

Iwasaki and Havitz (2004) assessed these antecedents of psychological commitment by exploring formative factors derived from Pritchard et al.’s (1992)

Psychological Commitment Instrument (PCI). Examining the attitudes and behaviors of travel consumers, the researchers found the PCI empirically derived psychological commitment as being determined by the way attitudinal loyalty is heightened by how the consumer (a) links and identifies with important values and self-images associated with the object, (b) demonstrates positive beliefs towards an object which are consistent with their attitudes towards the object, and (c) is able to make volitional choices that are meaningful. Within the endurance sport setting, an individual may connect with the healthy lifestyle associated with running and believe they can achieve high levels of fitness from participation. If an individual comes to this conclusion, they may be said to have developed a psychological connection with the sport product. As involvement progresses, and commitment's formative factors lead to increased attitudinal loyalty, then it is expected that behavioral intentions and behavioral loyalty will also increase. As in the aforementioned example, the healthy runner will likely continue to run and develop attitudinal loyalty if they confirm their healthy assumptions with physical proof from their involvement.

One may believe that as an individual becomes more involved in an activity, equally high commitment will result. Yet, despite being closely linked, involvement, attitudinal loyalty, and behavioral loyalty do not always exhibit linear relationships. It is suggested that high involvement does not automatically result in high attitudinal loyalty and thus in high levels of loyalty (Iwasaki & Havitz, 1998; 2004). Instead, the two constructs are considered to be different and have been operationalized as such (Beaton et al., 2009; Iwasaki & Havitz, 1998; 2004). This is in part due to the influence of personal

and social-situational moderators which elicit their influence only after involvement has commenced.

While antecedents to involvement may directly be associated with the decision to participate in an activity, these same sets of factors may once again appear following a period of participation when decisions about future participation are considered. For example, Havenar and Lochbaum (2007) found first time marathoners who demonstrated more social or physical reasons for joining a running group were more likely to drop out than runners with other motivations. It could have been that after participating with the club, they determined the club, and thus running the marathon, did not meet their expectations or they could acquire their needs with the club without actually completing the marathon. This contrasts with other research where participation led to the increased likelihood of positive attitudes toward physical activity and increased commitment (Rohm et al., 2006; Ridinger, Funk, Jordan, & Kaplanidou, 2012).

In addition to preexisting antecedents of involvement, new moderators are often established only after initial involvement. Side bets and switching costs are considered to influence the relationship between involvement and loyalty (Iwasaki & Havitz, 2004). Side bets include various investments in an activity, and while they may not be able to establish commitment independently (Goff, Fink, & Oppliger, 1997), several side bets together may (Buchanan, 1985). For endurance sport participation, side bets include friendships made during training, equipment purchased for competition, or levels of physical endurance acquired. Switching, or sunk, costs may also moderate the involvement-commitment relationship. Burnham, Frels, and Mahajan (2003) define switching costs as “the onetime costs that customers associated with the process of

switching from one provider to another” (p. 110). As an individual continues to participate in an activity, they will likely accumulate side bets and switching costs which may influence their attitudinal loyalty, and in turn, behavioral intentions and behavioral loyalty with the activity.

As indicated, attitudinal loyalty is considered to be the commitment component of loyalty. It is considered to display characteristics of resistance to change (Iwasaki & Havitz, 1998) and mediate the involvement and behavioral loyalty relationship (Iwasaki & Havitz, 2004). This attitudinal loyalty is considered to be brought on by an individual obtaining a complex set of information about the object and the need to maintain important values and self-images linked to a preference (Crosby & Taylor, 1983). This complex set of information may be obtained from external sources, such as advertising or media confirming the individual’s assumptions, or internally through actual experience. The more information which is accumulated in support of a certain position, the more likely the individual will display attitudinal loyalty for the object of that support (Iwasaki & Havitz, 1997). Once an individual is considered to become involved with an object and develop a certain level of attitudinal loyalty, they may begin to display signs of behavioral loyalty.

Behavioral Loyalty

Loyalty is held to be an important outcome sought by leisure and sport marketers (Bodet, 2012; Funk & James, 2001; Iwasaki & Havitz, 1998, 2004; Li & Petrick, 2010). Funk and James (2001) contended that brand loyalty plays a critical role in repeat purchase behavior, a heavily desired outcome for sport practitioners. Mullin et al. (2014) asserted that understanding how to retain current consumers and move them to higher

brand loyalty levels will result in beneficial financial outcomes for the organization. This highlights not only the importance of this step in the process but the value in understanding how individuals move through the entire process between involvement, attitudinal loyalty, and behavioral loyalty.

While psychological commitment is considered to be the attitudinal component of loyalty, behavioral loyalty is distinct with unique measures (Iwasaki & Havitz, 2004). Iwasaki and Havitz (1998) categorized behavioral loyalty with the following components: duration, frequency, intensity, sequence, proportion, and probability of brand use over time. Where duration is related to the time measure of participation in the selected activity, frequency refers to the number of interactions an individual has with the activity over an established period of time. Intensity is considered to be the total amount of time an individual is interacting with the product or activity. The sequence and proportion of brand use is similar. The sequence of brand loyalty relates to the purchase patterns within or between brands, including undivided loyalty, divided loyalty, unstable loyalty, and absence of loyalty. The proportion of brand use refers to the percentage of specific brand use within a certain category. Lastly, probability of brand use is intended to predict behavior rather than quantify past behavior (Iwasaki & Havitz, 1998).

It has been noted that these components are not equal in their influence on loyalty (Iwasaki & Havitz, 1998; Pritchard, 1992). Runners may participate in one marathon per year. If they choose the same marathon every year, 100 percent proportion of brand use and consistent sequence of brand use, they would be considered loyal to that marathon. However, because they only participate in one marathon per year, as opposed to numerous 5K runs per year, they may not be considered loyal marathon runners. Yet,

industry practitioners may consider individuals who complete one marathon per year as highly involved marathoners because of the training involved in completing a single marathon. In comparison, participating in a 5K run does not require the same amount of preparation and may in turn be held to a higher rate of participation frequency to be considered highly involved. For this reason, the context of the measure should be considered during interpretation.

As stated, the purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Additionally, a construct of self-congruity with functional and symbolic associations perceived with an endurance event is analyzed as to how it is associated with different levels of involvement. Here involvement is considered to be a state of interest towards and object (Havitz & Dimanche, 1997), attitudinal loyalty is the tendency to resist change (Pritchard et al., 1999), and behavioral loyalty is the duration, frequency, and intensity of participating in the activity (Iwasaki & Havitz, 1997). As will be discussed later, a valuable construct of self-congruity will be analyzed for how it is associated with this process by evaluating its role between different levels of involvement. While the review up to this point has established the importance of many variables, it is apropos to understand how they operate within valid and reliable instruments designed specifically to measure leisure activity participation.

Sport Participation Theory

While the involvement and loyalty process has been a popular topic within leisure sport research, the current analysis takes a unique approach by using multiple scales and

frameworks from leisure, sport, consumer behavior, and social health fields to arrive at the best combination to detail the process. This mixture of popular frameworks functioning together should unveil complimentary benefits of each and offer a more comprehensive picture and better description of the sport involvement process than any one may possibly generate in isolation. The result provides analytic insight into each model, a greater understanding of their similarities and differences, and practical benefits for their aggregated use.

It has been said that behavioral and psychological variables provide a more useful means of characterizing participants in segments than do socio-demographic attributes (Havitz, Kaczynski, & Mannell, 2013). In an attempt to create a complete understanding of the psychological connections endurance participants make with events, the current research utilized participant segments generated from involvement profiles to investigate the sport brand associations held by consumers and the effects of their congruency upon these associations. To bring these involvement segmentation strategies to life, the current review also investigates the associations consumers possess and process for sport event products and their stereotypical users. The inclusion of popular involvement frameworks combined with an analysis of brand associations through congruity theory, will allow practitioners and scholars to build an improved understanding of participant characteristics and the relationships generated between consumer segments. This should improve the ability to generate improved marketing communication effectiveness, market positioning, and other marketing tactics (Ross, 2006).

Scales and Theoretical Frameworks

The following review of popular sport motivation/involvement scales and models will assist with the effort to organize the various literature streams existing to address the psychological connection between an individual and various sport behaviors. Analysis of these models will provide a high level review of the relationships individuals have been found to have with sport products. The process of this analysis should uncover important reasons for sport motivations across a wide range of different subgroups and activities. The three scales included are (a) the Sport Motivation Scale, (b) the Sport Consumption Motivation Scale, and (c) the Motivations of Marathoners Scales. The three theoretical models under review include (a) the Sport Commitment Model, (b) the Psychological Continuum Model, and (c) the Theory of Planned Behavior. This collection was chosen based on their repeated use within sport, leisure, and health behavior motivational and involvement studies (Beaton et al., 2009; Cunningham & Kwon, 2003; Funk & James, 2001; Iwasaki & Havitz, 1998, 2004; Ko, 2010; Ko et al., 2008; Masters et al., 1993; McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 1995; Pelletier et al., 2013; Scanlan, Carpenter, et al., 1993; Scanlan et al., 2009) and their ability to provide the current research with a greater understanding of endurance sport participation, the focus of this study.

The current review first discusses sport participation scales before moving on to leisure activity participation models. This approach allows the scales to first describe the specific groundwork for the unique characteristics of sport participation. Once this foundation of motivational characteristics is identified, a higher level review of leisure activity participation models will be able to fill in the gaps left by the scales and provide

a more encompassing view on participation. The comprehensive review provides a full description of the involvement and loyalty process, which will allow the current study to further investigate the relationships an individual undertakes while moving along this process.

The Sport Motivation Scale. The first scale in review is the Sport Motivation Scale (SMS), built on the tenets of Deci and Ryan's (1985) macro-theory of human behavior, Self Determination Theory. The theory was inspired by a desire to understand the internal reasons people behave the way they do (Deci & Ryan, 1985). It highlights the importance of humans' inner resources which manage personality development and behavioral self-regulation (Ryan & Deci, 2000). While the theory is not concerned with what causes intrinsic and extrinsic motivations (Ryan & Deci, 2000), it does provide a comprehensive framework for understanding motivation types--intrinsic motivations and extrinsic motivations--that can sustain sport participation (Hagger & Chatzisarantis, 2007). Intrinsic motivations refer to the inherent tendency to seek out novelty and challenges, exercise one's capacities, explore, and learn (Ryan & Deci, 2000). Pelletier et al. (1995) stated that individuals engage in an activity for intrinsic motivations purely for the pleasure and satisfaction derived from doing the activity. Extrinsic motivations are performing an activity as a means to an end in order to attain some separable outcome (Funk & James, 2001; Pelletier et al., 1995; Ryan & Deci, 2000), such as running for the sole purpose of losing unwanted weight.

Individuals arrive at their level of motivation based on the degree to which they receive support and satisfaction from external and internal sources. According to Self Determination Theory, three psychological needs are the basis for an individual's self-

motivation: (a) competence, (b) relatedness, and (c) autonomy. Competence occurs when an individual overcomes a challenge with their own capabilities. Relatedness is achieved when a person experiences interpersonal connections with others. Autonomy occurs when the individual is able to pursue activities which are congruent with their own values and beliefs (Pelletier et al., 2013). The degree individuals experience encouragement and fulfillment of these psychological needs within the activity, the more likely they are to internalize it (Pelletier et al., 2013). This internalization is viewed along a continuum. At one end exists the least self-determined, labeled amotivation, those lacking the intention to act (Ryan & Deci, 2000). At the other end is intrinsic motivation, when participating in the behavior is driven from satisfaction in the behavior itself. Extrinsic motivation is positioned between these two.

Studies within sport have utilized the components of the Self Determination Theory, confirming its suitability for understanding optimal motivation in sport (Vallerand, 2007). Despite this, Pelletier et al. (2013) contended that various early sport motivation studies utilizing ideas built from the Self Determination Theory either did not adequately measure the theory or presented weak factor structures. One exception was a multi-dimensional measurement tool found by Ryan and Connell (1989), which provided a valid and reliable framework for a number of scales, including the SMS (Pelletier et al., 2013).

Following the work of Ryan and Connell (1989), the original SMS was created in both French, called the l'Echelle De Motivation vis-à-vis les Sports (Briere, Sabourin, Boucher, & Vallerand, 1990), and English (Pelletier et al., 1995). Exploratory factor analyses performed on both scales revealed a seven-factor solution, each with four items,

for a total of 28 items (Pelletier et al., 2013). The factors measured motivation with the continuum originally developed in the Self Determination Theory, from nonexistent to high, along the following: amotivation, three types of extrinsic regulation (external regulation, interjected regulation, and identified regulation), and three types of intrinsic motivation (intrinsic motivation to know, intrinsic motivation to experience stimulation, and intrinsic motivation to accomplish). Results from confirmatory factor analyses supported the seven-factor structure and provided support for the construct validity of the scale (Pelletier et al., 1995).

Because the SMS has not been operationalized in a way to generate segments, it is not practical for creating involvement segments in the current study. However, it does identify important groups of individuals sometimes omitted from sport participant studies; those not currently involved or amotivated to participate in the activity. Beaton et al. (2011) states these individuals are often omitted due to the nature of the studies, focusing on freely chosen leisure and sport activities. But sport marketers and health program providers would contend they are very important to their organizational success. Methods used in the current study will gather information from a range of individuals with different experiences in different event types. Thus, amotivation associations, and evaluations from low involvement levels, will be surfaced.

The Sport Consumption Motivation Scale. While the SMS reviewed sources of motivations along a continuum as suggested by Self Determination Theory, the next motivation scale, the Sport Consumption Motivation Scale (SCMS), is built from Maslow's (1943) hierarchy of needs to explain individual reasons for behavior. Another unique aspect of the SCMS is that it was built within a family of studies exploring both

sport spectator and participant motivations (Funk & James, 2001; McDonald et al., 2002; Tokuyama & Greenwell, 2011). As the field of sport research grew, researchers began to experiment, using their fan motivation models and scales to explain sport participant behavior (Funk & James, 2001; McDonald et al., 2002). Upon further investigation, and learning more about motivations from each perspective, they questioned whether sport participants and spectators share similar consumer motivational characteristics. To address this question, McDonald et al. (2002) developed a unified scale to build profiles for both spectators and participants, named in their study as the Sport Consumption Motivation Scale (SCMS).

In building their scale, McDonald et al. (2002) chose Maslow's (1943) grand motivational theory of human needs as the base. This theory states that individuals are motivated to satisfy five basic needs: physiological, safety, love, esteem, and self-actualization (Maslow, 1943). The SCMS authors proposed that four of the five general needs presented by Maslow (physiological, social, esteem, and self-actualization) were found in existing sport motivation literature and would provide a good fit to explore motivation with their scale. Physiological needs are those which humans need to stay alive, such as food and shelter. Social needs are guided by interpersonal requirements such as feelings of belongingness deriving from social groups or family (Maslow, 1943). The final two needs, esteem and self-actualization, are considered growth needs (McDonald et al., 2002). Esteem is gained from obtaining respect from others, while self-actualization is the fulfillment of a "what a man can be, he must be" (Maslow, 1943, p. 382). McDonald et al. (2002) suggested 12 dimensions evaluating motivation for watching a sport and 13 motivations for participating in a sport (McDonald et al., 2002).

See Figure 1 for a review of Maslow’s general needs and the SCMS breakdown of the 13 motivations for sport participation and sport spectators.

Sort Motivation Constructs	Deficiency Needs				Growth Needs			
	Physiological		Social		Self-Esteem		Actualized	
	Part.	Spec.	Part.	Spec.	Part.	Spec.	Part.	Spec.
Physical Fitness	◆				◆			
Risk Taking	◆	◆			◆	◆		
Stress Reduction	◆	◆			◆	◆		
Aggression	◆	◆						
Affiliation			◆	◆				
Social Facilitation			◆	◆				
Self Esteem					◆	◆		
Competition					◆	◆		
Achievement					◆	◆		
Skill Mastery					◆	◆		
Aesthetics					◆	◆		
Value Development							◆	◆
Self Actualization							◆	◆

Figure 1. Sport Motivation Construct Positions within Maslow’s Needs Hierarchy.

Results of the initial study indicated consumers have different motivations for playing and watching sport. This has also been confirmed in a follow-up study (Tokuyama & Greenwell, 2011). Additionally, McDonald et al. (2002) found that except for two constructs, achievement and self-esteem, which had high means across the sample, participants differed significantly between 11 of the 13 motivational constructs across all nine profiled sports. Another unique finding was the difference found between participants of team contact sports, who were highly motivated by physical risk, and individual sports, which scored individual risk lowest.

In an attempt to extend the use of the SCMC, Ko, Park, and Claussen (2008) utilized a modified form of the model to evaluate action sports participants. They made minor revisions to the original scale, adjusting the wording of several items, reducing the items count from 96 to 42, and adding fun/enjoyment as a motivational factor. Results of

their study found fun/enjoyment, the added factor, was rated as the most important motivation of the action sport sample. A general theme among motivational research in sport participation is the integral role of fun and enjoyment. Huizinga's (1955) classic piece *Homo Ludens* claimed sport is, or should be, similar to play. Other important motivations included risk-taking, aesthetics, and affiliation, all of which ranked low in the McDonald et al. (2002) study. A study by Ko (2010) extended the SCMS even further by adding two additional factors, cultural awareness and self-defense, to describe motives for martial arts participants. Consistent with other sport motivation studies, Ko (2010) found youth participants are highly motivated by fun, skill development, challenge, and fitness, while extrinsic factors, such as competition and aggression, scored lowest.

While hedonistic reasons for sport participation have been found to be rather stable, other studies have also identified inconsistencies in reasons for participation between different subgroups and activities. For example, researchers have investigated differences between several activities, sexes, age groups, ethnicities and other demographical classifications (Frederick & Ryan, 1993; Ogles & Masters, 2000; Place & Beggs, 2011). In particular, Seippel (2006) established differences between the sexes, which seem to increase with age. His research on exercise involvement stated that women like 'to keep fit' while men more often state 'competition and achievement' as their reason for participation. Ko, Kim, and Valancich (2010) determined cross-cultural divergence between North American and Korean samples in martial art participation. The variety of reasons individuals are motivated to participate in sport is ever present.

Overall, studies of sport spectator/fan and participant motivations have found minimal similarities of motivation characteristics (McDonald et al., 2002; Tokuyama & Greenwell, 2011). The differences in motivations continue when various sports are considered (McDonald et al., 2002) as well as different sample groups (Frederick & Ryan, 1993; McDonald et al., 2010; Milne, & Hung, 2002; Ogles & Masters, 2000; Place & Beggs, 2011). This collection of research identifies three important findings. First, a measure of enjoyment or pleasure, when appropriately measured as an independent construct, reveals a significant contribution to explaining sport participant motivations. The impact of this factor may vary across subgroups, but generally returns as a significant explanation for participation. Second, motivational factors differ across subgroups such as age, gender, culture, level of competitiveness, and experience with the sport, to name a few. Different results with the same scale or measure are not indications of poor measurement performance, but rather an explanatory characteristic of the sample. Third, scales should be modified according to the characteristics of the activity they are measuring or created broadly enough to capture the diversity of activities or samples they are likely to evaluate. As established in the Ko (2010) study, some studies lend themselves to measurement alteration.

Motivations of Marathoners Scale. While understanding motivations for general sport participation is of interest for many scholars and marketers, there is also value in understanding motivations to engage in and remain involved with specific activities. For example, the current study is interested in the behaviors of endurance sport participants. As noted in the introduction, concerns about the health of adults in the United States are abundant, as obesity and sedentary lifestyles are at an all-time high

(Healthy People, 2013). Running and other endurance activities, such as participation in triathlons and marathon events, provide unique opportunities to engage in physical activity. It has been suggested that mass participatory events, such as marathons, have the ability to produce positive attitude changes toward exercise (Funk et al., 2011). Masters et al. (1993) contended that studies of marathon running motivation are important because these participants train more than is necessary to maintain fitness and continue their regimen for extended periods of time. While the adherence problem is well documented, research has consistently suggested that at least 50 to 70 percent of individuals discontinue an exercise program within the first six months (Martin & Dubbert, 1982; Dishman, 1994), but marathoners may provide a model of “super-adherence” (Masters et al., 1993).

While it has been shown that motivational distinctions exist across leisure activity activities (Frederick & Ryan, 1993; McDonald et al., 2010; Milne & Hung, 2002; Ogles & Masters, 2000; Place & Beggs, 2011; Sieppel, 2006), still some differences and similarities exist within the same activities. Of particular interest in the current study is the behavior of endurance sport participants. Studies within this category have found different sets of motivations. In a study on marathon runner motivations, differences between adults and youth were established by Ogles and Masters (2000). They concluded older runners (greater than 50 years of age) were more strongly motivated to run as part of a broad health orientation, weight concern, life meaning, and affiliation with other runners, while the younger sample (20-28 years of age) was more motivated by personal goal achievement. A follow-up study found a younger and predominately male cluster of runners holding the same characteristics of personal goal achievement and

self-esteem as the strongest motivational scores while the older cluster was more health oriented (Ogles & Masters, 2003).

Additional studies on adult marathon runners have found differences between when individuals begin running marathons and their motivations as they continue with the sport. For example, Barrell, Chamberlain, Evans, Hold, and Mackean (1989) found that runners began marathon participation to stay in shape, but over the years took on additional competitive motivations. Other research has indicated runners initially began participating for a greater array of motivations, including physical fitness, but also competitive motives, such as personal challenge, sense of achievement, and personal satisfaction (Summers, Machin, & Sargent, 1983; Summers, Sargent, Levey, & Murray, 1982). Still, even with a narrower focus of motivations within the same contexts differences do exist.

The Motivations of Marathoners Scales (MOMS) was developed to address the limited availability of conceptually and psychometrically sound instruments to specifically measure the motivations of marathon runners. “Although generalizing broad theories of motivation is important, empirical methods of developing sport motivational theories using select samples of athletes can lead to sport-specific findings” (Masters et al., 1993, p. 135). Some research has found that runners began marathon participation for health reasons, but move on to other motives as their participation continues (Barrell et al., 1989). It was also suggested that as runners age their motivations and goals changed, becoming more related to physical health (Summers et al., 1982). Creating an instrument accounting for the diversity of this group would benefit marketers and those interested in physical activity adherence alike.

The MOMS was based on early running motivation research and identified four general reasons for running: (a) psychological, (b) physical, (c) social, and (d) achievement. Within these broad categories, nine specific motives were catalogued (Masters et al., 1993). The psychological category contained life meaning, self-esteem, and psychological coping. The achievement category included personal goal achievement and competition. Social reasons for running included recognition/approval and affiliation, while the final category, physical reason, included health orientation and weight concern. See Figure 2 for a complete list of categories and motives. In later amalgamations, the initial pool of 120 items was reduced to 56 items, ranging from four to nine items per category. Results indicated adequate internal consistency, retest reliability, and factorial validity (Masters et al., 1993).

General Category Scale	Sample Items
I. Physical Health Motives Health Orientation	to improve my health, to prolong my life, to become more physically fit, to reduce my chance of having a heart attack, to stay in physical condition
Weight Concern	to look leaner, to help control my weight, to reduce my weight
II. Social Motives Affiliation	to socialize with other runners, to meet people, to visit with friends, to share a group identity with runners
Recognition	to earn respect of peers, people look up to me, brings me recognition, to make my family or friends proud of me
III. Achievement Motive Competition	to compete with others, to see how high I can place, to get a faster time than my friends, to beat someone I've never beaten before
Personal Goal Achievement	to improve my running speed, to compete with myself, to push myself, to beat a certain time, to try to run faster
IV. Psychological Motives Psychological Coping	to become less anxious, to distract myself from daily worries, to improve my mood, to concentrate on my thoughts, to solve problems
Self-Esteem	to improve my self-esteem, to feel more confident, to feel proud of myself, to feel a sense of achievement, to feel mentally in control of my body
Life Meaning	to make my life more purposeful, to make myself feel whole, to feel a sense of belonging with nature, to feel at peace with the world

Figure 2. General Categories, Scales, and Sample Items from the Motivations of Marathoners Scale.

The application of MOMS proved to be a valuable tool explaining participation motives of this niche activity. Although their sample was predominately older males, Masters et al. (1993) found personal goal achievement, self-esteem, and health orientation, in order of importance, to be the major reasons for marathon participation, while psychological coping and the extrinsic motivation of recognition/approval received the lowest average scores. To address gaps in previous research, Ogles and Masters

(2000) applied MOMS to different subgroups of marathoners to see if motivations differed across age. Their results indicated motivations were indeed different between older (over 50 years of age) and younger (20 to 28 years of age) runners. Collectively, older runners were more strongly motivated to run for general health reasons, such as weight concern, life meaning, and affiliation with other runners. Younger runners, on the other hand, were more motivated by personal goal achievement. In one area, competitiveness, the groups shared low motivation scores (Ogles & Masters, 2000).

One of the previously mentioned benefits of conducting motivational studies is to assist with segmentation strategies. With previous research identifying general motivations (Masters et al., 1993) and age subgroup demographic differences (Ogles & Masters, 2000), Ogles and Masters (2003) conducted a study to see if runners were heterogeneous in terms of their motive for running. They found runners can be distinguished by their motivation profiles. Specifically, five clusters were identified and named: (a) running enthusiasts, (b) lifestyle managers, (c) personal goal achievers, (d) personal accomplishees, and (e) competitive achievers. The clusters were distinguishable by their pattern of endorsement of motives for running, training habits, and demographic profiles (Ogles & Masters, 2003). Of important note is that four of the five groups ranked, in different orders, the same top three motives: (a) health orientation, (b) personal goal achievement, and (c) self-esteem. The fifth group listed these three motives within its top five, confirming their motivational power. Among these tests, heterogeneous marathoner populations still display high levels of intrinsic motives.

Despite the information MOMS research has generated, other motivation studies on long-distance runners reveal some components may be missing. For example,

in their study of half-marathon and marathon runners, Funk, Jordan, et al. (2011) found 95 percent of the sample credited the four motives of challenge, enjoyment, strength and endurance, and positive health as reasons for participating. In a separate study, Ridinger et al. (2012) evaluated marathon participants and found that a combination of the pleasure and centrality dimension of involvement explained the majority of variance in commitment to running, suggesting that this group of endurance participants is drawn to the sport for hedonistic reasons and because it is an important part of their lifestyle. These results, in addition to other sport participant studies, indicate a construct focused on enjoyment would benefit the MOMS. This reveals the complexity of evaluating results of one scale with results of another. Unaccounted constructs may change the correlations and explanatory power of the scale items and concepts. For this reason, a scale encompassing all previously found motives would benefit the current study.

While scales may provide order to a collection of items or estimation of magnitudes, a conceptual framework can guide research by providing a visual representation of theoretical constructs and variables of interest. The current review of sport participant scales has revealed some important items to consider when conducting leisure activity participant research and considering models to use. It has been established that a component of pleasure is a powerful motive for a variety of participant groups and activities. For this reason, popular models were investigated in this study to see if they accommodate this item. Additionally, models were evaluated for generalizability to see how they perform under a variety of circumstances, samples, and activities.

The Sport Commitment Model. Popular among motivational researchers has been the idea of commitment reflecting factors supporting persistence in a course of action, or resistance to change (Iwasaki & Havitz, 1998). Once engaged in an activity, commitment can be defined as the psychological construct reflecting desire and resolve to persist in an endeavor over time (Scanlan et al., 2009). The Sport Commitment Model (SCM) is a social-psychological approach to participation targeting the motivational basis of continued involvement (Scanlan, Carpenter, et al., 1993).

This model has undergone a number of transformations over the years. Initially developed within the framework of Personal Investment Theory, the SCM was constructed with five determinants of an individual's attitudinal loyalty to sport participation: (a) Sport Enjoyment, (b) Involvement Alternatives, (c) Personal Investments, (d) Social Constraints, and (e) Involvement Opportunities (Scanlan, Carpenter, et al., 1993). Scanlan, Carpenter, et al. (1993) felt the ability to examine enjoyment is imperative in the understanding of committed behavior in sport. Previously, enjoyment as a construct was not often applied to motivational models. The SCM not only validates its inclusion but demonstrates it as a vital concept. In a later rendition, Scanlan, Russell, Beals, and Scanlan (2003) proposed the addition of a sixth component, social support, which was later empirically supported by Scanlan et al. (2009).

The initial SCM constructs are defined as follows (Scanlan, Carpenter, et al., 1993). Sport enjoyment is a positive affect response to the sport experience that reflects generalized feelings such as pleasure, liking, and fun. Involvement Alternatives are related to the attractiveness of the most preferred alternatives to continued participation in the current endeavor. Personal Investments are resources that are put into the activity and

cannot be recovered if participation is discontinued. Social Constraints are the social expectations or norms that create feelings of obligation to remain involved in the activity. Finally, Involvement Opportunities are valued opportunities that are present only through continued involvement (p. 8).

These components were initially tested with youth and adolescent sport participants (Carpenter, Scanlan, Simons, & Lobel, 1993; Scanlan, Carpenter, et al., 1993; Scanlan, Simons, Carpenter, Schmidt, & Keeler, 1993). In these studies, all constructs except Involvement Alternatives and Social Constraints positively predicted commitment in the sample. Likely due to the population's view of time constraints within their daily lives, the younger sample was said to possibly have difficulty interpreting Involvement Alternatives versus the older high school aged sample (Carpenter et al., 1993; Scanlan, Carpenter, et al., 1993). To clarify the construct and expand its meaning, Scanlan et al. (2003) changed the name to Other Priorities. This allowed for the inclusion of a measure and position of other life priorities which may supersede the activity. While thought to have a positive effect on increased commitment, Social Constraints have shown either no effect or a weak negative effect (Carpenter et al., 1993). To account for this missing effect, Scanlan et al. (2003) added Social Support, defined as the support and encouragement the athlete perceived significant others provide for their involvement in sport, as the sixth component. For an overview of the updated SCM see Figure 3.

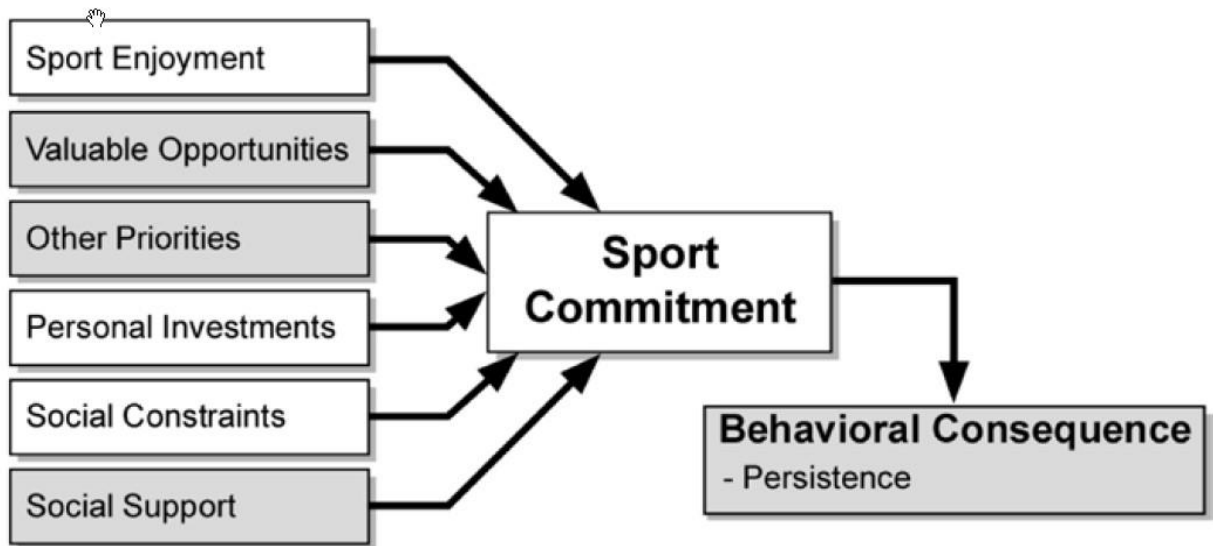


Figure 3. The Sport Commitment Model.

Scanlan et al., (2013) examined the completeness of the SCM to see if any additional sources of commitment could be found. From interviews with elite athletes, they found four additional commitment sources: (a) Desire to Excel, (b) Team Tradition, (c) Elite Team Membership, and (d) Worthy of Team Membership with only one, Desire to Excel, having the ability to transition into all sports and competitive levels. This component “focuses on the desire and striving to achieve excellence through mastery and social achievement behaviors” (Scanlan et al., 2013, p. 533).

The inclusion of enjoyment is a key finding from the SCM. But the SCM’s focus on only the “enthusiastic form of commitment” (Scanlan et al., 2013. p. 527), disregarding personal constraints and the insistence of a direct effect relationship within the commitment process when other studies have identified involvement as a mediator, weakens the overall validity of the model. This restricted view overlooks important motivational variables and variable relationships leading to participation and enduring

involvement. Additionally, the majority of validation studies, which have heavily influenced model transformations, have been with a select group of elite athletes. For these reasons, the academic and practical uses of SCM are somewhat restricted.

Iwasaki and Havitz's Model. Addressing these limitations within the SCM, Iwasaki and Havitz's (1998) conceptual model was designed to fully explain the relationship among involvement, psychological commitment's role as attitudinal loyalty, and behavioral loyalty. This model shares many similarities with the SCM but also addresses some important omissions and relationships not found in the SCM. Involvement has been defined as a state of motivation or interest in an activity (Havitz & Dimanche, 1997). After reviewing dozens of involvement studies, Havitz and Dimanche (1997) concluded multidimensional evaluations of involvement are better than unidimensional measures, such as those outlined in the SCM, in the leisure activity activity context.

In conceptualizing the relationship between involvement and loyalty, Iwasaki and Havitz (1998) identified the sequential process an individual moves through in becoming loyal to an activity, product, or agency. They established a causal relationship between each of the following levels: (a) involvement, (b) psychological commitment or attitudinal loyalty, and (c) behavioral loyalty. But because individuals face different influences, personally and socially, at each level, there exists a moderating effect of additional components (Iwasaki & Havitz, 1998). A full diagram of their model is presented in Figure 4. This moderating relationship may explain some of the low scores of certain variables in past studies, such as the SCM, featuring a more direct effect relationship.

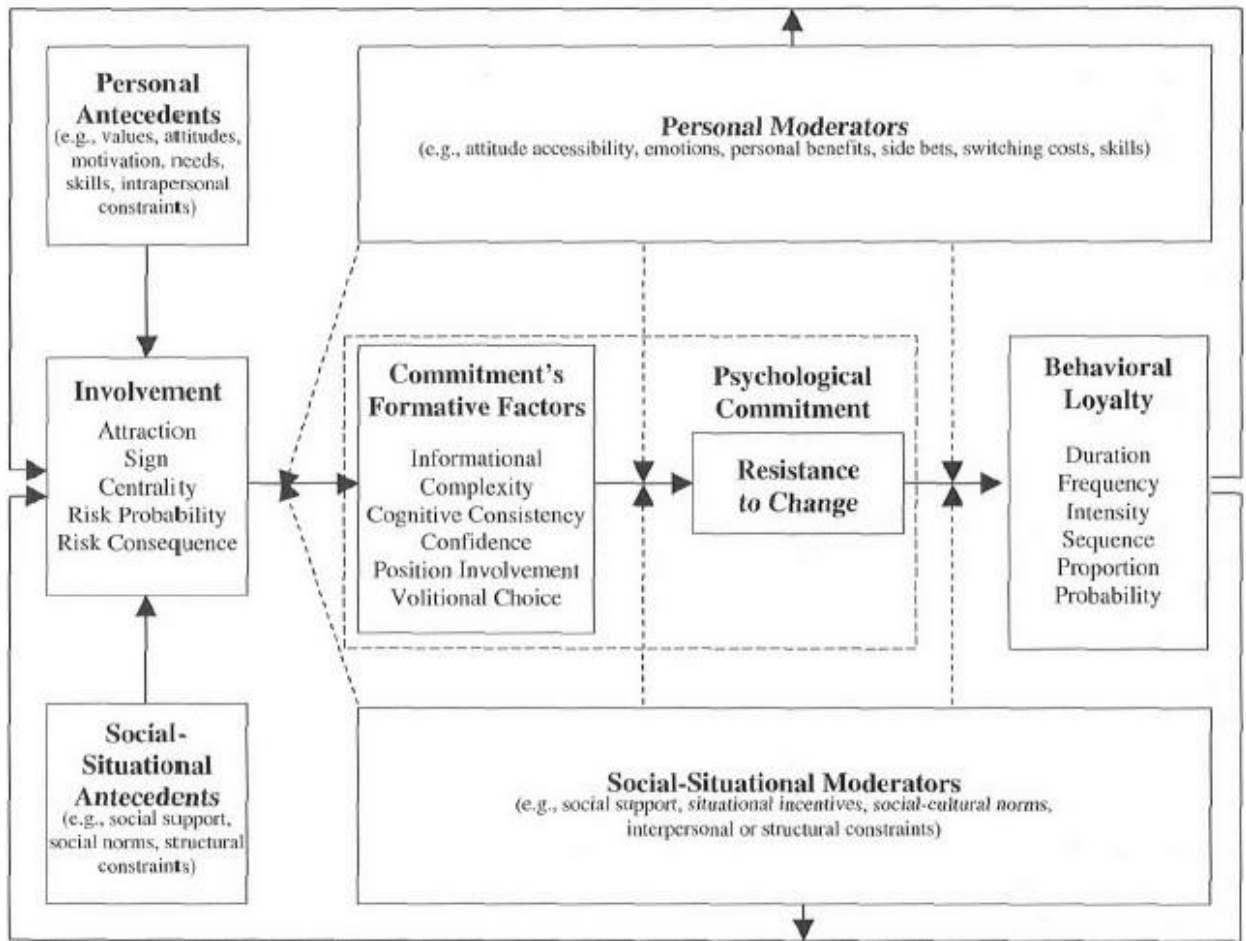


Figure 4. A Conceptual Model of the Relationship between Involvement, Psychological Commitment, and Behavioral Loyalty.

The mediating relationship between involvement, commitment, and loyalty has been confirmed in both a physical activity (Iwasaki & Havitz, 2004) and a travel service product (Pritchard, et al., 1999) setting. Individuals were shown to be first influenced by sets of personal and social-situational antecedents to involvement. These include commonalities with the SCM, such as attitudes (sport enjoyment), social support, and social constraints. In addition, Iwasaki and Havitz's (1998) model includes a number of other antecedents. Personal values, motivations, needs, skills, and even intrapersonal constraints effect an individual's involvement with the object. Likewise, social norms

also guide whether an individual participates in a certain activity (Iwasaki & Havitz, 1998). Once these antecedents produce a level of involvement, their influence, along with other moderators, at the individual and socio-situational level, moderate the process between involvement and commitment. The additional personal moderators include the existence of other valuable opportunities, other priorities, and side bets, while the socio-situational moderators include interpersonal constraints and situational incentives (Iwasaki & Havitz, 1998). These moderators continue to project their influence on the relationship between commitment and loyalty (Iwasaki & Havitz, 1998). Thus, depending on the individual's relationship with such moderators, they may not experience a continuation of high levels across the entire process. Instead, high involvement may transition to various degrees of commitment and loyalty based on the individual effects of these moderators.

The relationships of these moderators within the involvement and loyalty process have been supported by follow-up research. A study attempting to operationalize Iwasaki and Havitz's (1998) model found the relationships between involvement and loyalty to be very complex (Iwasaki & Havitz, 2004). In their study, Iwasaki and Havitz (2004) suggested a fully mediated model to explain the relationship because involvement is not directly associated with behavioral loyalty; it must go through attitudinal loyalty. This establishes the multiple-level effect certain variables play within the process. Thus, certain influences may be present at the onset of involvement and may continue through high levels of behavioral loyalty, while others may be substituted with other moderators along the way.

As established in the introduction of this review, the understanding of the dynamic relationship and process of leisure activity involvement and loyalty leads to beneficial outcomes for practitioners and scholars. Therefore, it is paramount in the current study. Iwasaki and Havitz's (1998) model provides a solid framework which includes many of the motivational factors highlighted in sport participation research, including a measure for enjoyment or pleasure (McDonald et al., 2002; Masters et al., 1903; Scanlan, Carpenter, et al., 1993). This model also meets the generalizability criteria. It has been verified and operationalized in a leisure sport setting (Beaton et al., 2009; Iwasaki and Havitz, 2004), while many of its components have been evaluated in a service consumer setting (Prichard et al., 1999) and with recreation travelers (Kyle & Mowen, 2005). Thus, past research solidifies its ability to be used in the current study of endurance event participants.

The Psychological Continuum Model. Building on the research of Iwasaki and Havitz (1998; 2004), the sport Psychological Continuum Model (PCM) is designed to evaluate an individual's level of involvement with a sport object. Similar to the SCMS, which was built to evaluate both sport spectator and participant involvement, the PCM has dual roots in spectator and participant studies, as it was originally created to differentiate spectators. The PCM also shares characteristics with previously outlined scales, including Self Determination Theory and the SCM. The PCM suggests that as individuals move to higher states of involvement, extrinsic motivations are replaced by more intrinsic motivations, similar to the assertions of the Self Determination Theory and the SMS. Connections with the SCM include the measure of attitudinal loyalty as the outcome variable of most importance (Scanlan et al., 2009).

A key attribute of the PCM is its focus on the social-psychological connection an individual makes with the sport object (Funk & James, 2001). This is the feature linking it to Iwasaki and Havitz's (1998) model. Referencing Allport (1945) the PCM identified that sport involvement exists when individuals evaluate their participation in a sport activity as a central component of their life, and this participation provides both hedonic and symbolic value. The theory suggests that involvement differences between individuals can only be understood through an analysis of how contextual influences and antecedents work together (Beaton et al., 2011). The outcome of these differences is assigned along levels within the framework.

As a stage-based framework, the PCM examines both the sociological and psychological processes that are associated with attitude formation along four vertical levels: (a) awareness, (b) attraction, (c) attachment, and (d) allegiance (Funk et al., 2011; Funk & James, 2001). The framework theorizes that inputs, processes, and outputs govern the developmental progression of a psychological connection between a person and an activity. A progression of both attitudinal and behavioral tendencies working in conjunction with extrinsic to intrinsic motivations identifies definable escalations within the model. Understanding how individuals move between these levels and the characteristics they exhibit at each level is intended to guide researchers and practitioners to a better understanding of sport participation. See Figure 5 for a visual presentation of the model.

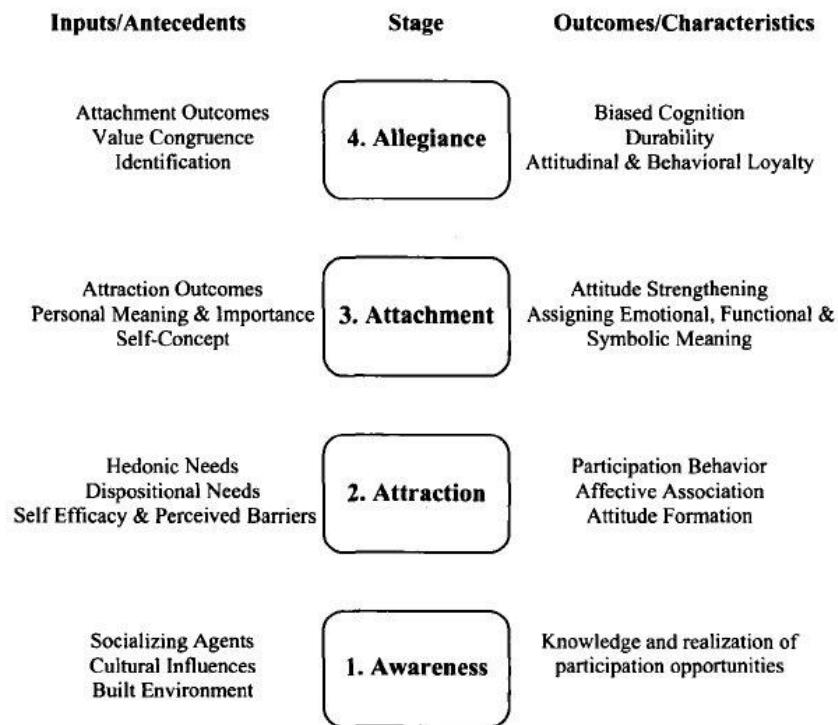


Figure 5. The Psychological Continuum Model.

Involvement has been defined as psychologically or physically participating in an activity (Havitz & Dimanche, 1997). An individual may initially be aroused or interested in an activity. This is often categorized as awareness or attraction, where they are aware of the activity but are not participating (Stebbins, 2005). Green (2005) expressed the important role ‘sponsors,’ or socializing agents, play in creating this initial interest, and James (2001) illustrated the influence of socializing agents in children’s commitment towards a sport entity. If the individual wishes to satisfy their needs or continue their affiliation with the ‘agent’ it is more likely they will attempt the activity.

Individuals move between the awareness and attraction levels when hedonic and dispositional needs interact with social situational factors to trigger a desire to meet a need or seek a benefit from participation (Funk & James, 2001). Sport introduction is

commonly brought on by family and mass media for younger Generation Y members versus peer groups and mass media for older Generation Y members, leading to volition and emotional responses (Funk & James, 2001). Once aware of the opportunity the individual must process the option and evaluate potential outcomes for participation. In example, youth may be interested in activities they and their social peers identify as fun, cool, or trendy. If they consider the activity acceptable or desirable, they may begin to participate.

A dynamic transition happens between the attraction and attachment levels. The reliance on external social forces gives way to intrinsic interactions. At the same time attitudinal preferences begin to result from the behavior. The attachment process represents an individual assigning emotional, functional, and symbolic meaning to an activity. Thus begins the use of self-concept to govern these transitions from attraction to attachment as well as attachment to allegiance (Funk & James, 2006). The strength of a consumer's commitment is determined by a complex causal structure in which their attitudinal loyalty is maximized by the extent to which they identify with important values and self-images associated with the preference (McDonald et al., 2002). From the example above, an individual may be socially introduced to the activity. After this initial attraction and participation, they will begin to internalize and accept the activity if they wish to move to the next level, attachment.

The final level, allegiance, is reached when the activity is completely integrated into the self-schema of the individual (Funk & James, 2006). Being schematic with respect to the activity is strongly associated with behavioral intentions (Sheeran & Orbell, 2000). Once the activity is thought to be properly aligned with self-concept, a level of

commitment and attitudinal loyalty is formed. Existing theories state that commitment is one among a set of stimuli contained under the larger concept of motivation which lead to repeat behavior (Meyer, Becker, & Vandenberghe, 2004). The more central the self-concept is held by the individual and the stronger the activity is in line with self-concept, the greater the attitudinal loyalty. Brands behaving as an extension of an individual's self are a core process of the PCM.

Unlike other stage-based involvement models, the PCM is not concerned with temporal measures to move individuals between the levels. According to the PCM, an individual may move through each level or even skip levels. More important than time spent in a particular level is the measure of their attitudinal loyalty. Additionally, individuals may move in both directions within the level. Inputs and outputs between the levels may assist managers in identifying appropriate messaging or complimentary activities to support individuals as they move along the model.

The PCM is similar to other previously reviewed scales and models. Operationally it is connected with the SCM and Iwasaki and Havitz's (1998) model in how involvement antecedents play an important role in loyalty formation. It also brings together theoretical associations with SCM and Self Determination Theory, in that forces combine and initiate transitions from extrinsic to intrinsic motivations. What sets it apart from other reviewed models, is the theoretical attention it gives to the behavioral to attitudinal connections made within an individual to their activity choice. Where it lacks, similar to the SCM, is the omission of behavioral loyalty measures, which may be found within Iwasaki and Havitz's (1998; 2004) model. Additionally, no research has been conducted to empirically measure the processes between each level.

Where the PCM and Iwasaki and Havitz's (2004) model share an important similarity is how they operationalized involvement. Beaton et al. (2009) and Iwasaki and Havitz (2004) contended that the Consumer Involvement Profile (CIP), developed by Laurent and Kapferer (1985), serves as the basis of understanding involvement in the participatory sport context. They suggested involvement occurs from a result of conditions: perceived importance, perceived sign, perceived pleasure, and perceived risk (both risk probability and risk consequence) (Laurent & Kapferer, 1985). It was determined that some conditions influence specific behaviors while others do not. This results in a need to understand the conditions as a whole, instead of evaluating them separately, to capture a more complete involvement profile (Laurent & Kapferer, 1985).

Beaton et al. (2009) and Iwasaki and Havitz (2004) utilized the conceptualization and adopted measurements used for the CIP in leisure and sport participation settings. Further research has provided additional support for the multifaceted nature of involvement (Bodet, 2012; Iwasaki & Havitz, 1998; McIntyre & Pilgrim, 1992). However, as previously indicated, the risk components of the original CIP components have been debated and removed from multiple studies for practical and conceptual purposes (Beaton et al., 2009; Bodet, 2012; Havitz & Dimanche, 1997; McIntyre & Pigram, 1992). Additionally, Beaton et al. (2009) adjusted the attraction component measures and changed the name to pleasure in an attempt to avoid semantic confusion with the level, which shares the same name. Following their lead, the current research has retained the pleasure (formerly attraction), sign, and centrality components of the CIP.

While the PCM has been beneficial at staging activity participants along involvement levels, there are still unaccounted measures worth investigating. For example, PCM procedures (Beaton et al., 2009) lack measures of behavioral loyalty and the commitment's formative factors found in the work of Iwasaki and Havitz (1998; 2004). The current research suggested a complete analysis of the involvement, attitudinal loyalty, and behavioral loyalty process would provide beneficial descriptions of the associations and outcomes of antecedents and moderators on the process of participants and involvement. These items could be useful to practitioners. It has been suggested that additional studies on PCM properties and construct measures would help identify the strengths of the model, as well as areas needing improvement (Beaton et al., 2009).

Theory of Planned Behavior. The current review reveals how the majority of leisure activity motivation scales appear most concerned with individuals involved in activity participation and measures their general activity loyalty. They either measure reasons for participation (McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 2013; Scanlan, et al., 2003, 2013) or assess a level of commitment to the activity (Beaton et al., 2002; Iwasaki & Havitz, 1998). A gap in this research is a measure which specifically defines individuals who have been introduced but are not yet participating in or predicting the specific behaviors for those already involved. This may include analyzing the likelihood that a marathoner would participate in an obstacle course event or a long-distance runner's evaluation of repeat performance. An evaluation of this type is necessary, as repeat customers are considered valuable to the success of sporting organizations (Mullin et al., 2014).

Understanding individual attitudes pre- and post-activity participation is also paramount in assessments of possible health benefits found within mass participant events and designing interventions for sedentary populations. While mass participant events have been considered to improve individual attitudes to physical activity participation (Funk, Jordan, et al., 2011), additional studies should be conducted to fully understand their value, as the existing sport motivation scales and models seem deficit in this category. Thus, a model within social health, the Theory of Planned Behavior (TPB), will be evaluated for its effectiveness in addressing this research gap.

Like most modern day theories, the roots of the TPB trace back to grand motivational theories. As a counter to stimulus-response theories, such as classical conditioning, Dulany (1967) produced the Theory of Propositional Control, which suggested intention was a result of external reinforcement. Fishbein (1967) quickly introduced an extension of Dulany's model to account for prediction of behavioral intentions, which are said to mediate overt behavior. At the time, Fishbein and Ajzen (1975) felt existing models of behavioral intention were not sound and needed further exploration. Together, with Dulany's (1967) groundwork, they introduced the Theory of Reasoned Action (TRA) to explain behavior by way of behavioral intentions caused from attitudes towards the behavior and from salient subjective norms. It was later realized the TRA was limited in explanatory scope to behaviors under considerable volitional control, those under the power of the individual (Ajzen & Driver, 1992). To advance the theory and help explain behaviors with less volitional control, the TRA was extended to the TPB with the addition of a perceived behavioral control construct.

As with the original TRA, a key component of the TPB, and one considered in the current study, is an individual's intention to perform an activity or behavior. Yet the intention construct has experienced various degrees of conflict in previous research. Most notable is that some studies have failed to adequately define it (Hausenblas, Carron, & Mack, 1997). Intention was sometimes framed as an expectation, or the estimated likelihood of performing a task. Instead, Ajzen and Driver (1992) explained "intentions are assumed to capture the motivational factors that influence a behavior; they are indication of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" (p. 208). This intention-behavior link is strongly supported by meta-analytic reviews of the TPB and is said to be a direct antecedent of behavior (Hagger, Chatzisarantis, & Biddle, 2002). Ajzen (1991) argued that under conditions of low volitional control, intentions alone would account for only small amounts of the variance in behavior and the added perceived behavioral control construct should also independently predict behavior. In contrast, as originally designed with the TRA, under conditions of very high volitional control, behavioral intentions should be the only predictor of behavior. This relationship is indicated in Figure 6.

As indicated, intention is one immediate antecedent of actual behavior. Factoring into how intentions are determined, as suggested by the TPB, are three conceptually independent variables. The first, attitudes toward the performance of the behavior, is the degree to which a person has a favorable or unfavorable evaluation of the behavior in question. Next, subjective norm is the perceived social pressure to perform or not to perform the behavior. And finally, perceived behavioral control (PBC) is the individual's perceived ability to both navigate obstacles to perform the activity and the actual ability

to perform the activity. Any additional variable is held to affect behavior only indirectly by influencing one or more of these determinants (Ajzen & Fishbein, 1970).

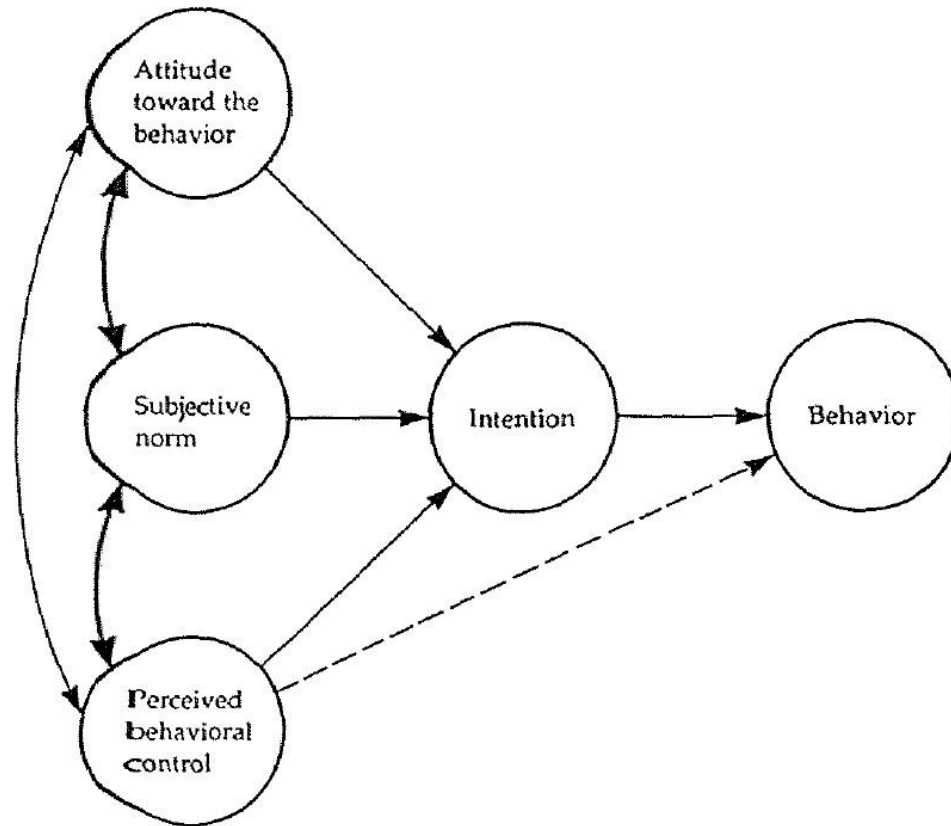


Figure 6. Theory of Planned Behavior.

A number of studies have shown that a considerable amount of variance in intentions can be accounted for collectively by TPB's three constructs. The addition of PBC to the TPB led to considerable improvements in the prediction of intentions (Ajzen, 1991). Researchers comparing the TPB and TRA in a physical activity context have demonstrated that the TPB is superior to the TRA in accounting for the variance in intention (Anderson & Lavalley, 2008; Fen & Sabaruddin, 2008; Hausenblas et al., 1997; Mummary & Wankel, 1997). Cunningham and Kwon (2003) also found the TPB to exhibit greater explanation than the TRA in regards to consumers' intention to attend a

sporting event. With their meta-analysis of exercise behavior, Hagger et al. (2002) showed that when compared, the overall explanation of the variance in intention of TPB was greater than that of the TRA. A systematic approach to path analysis modeling indicated the studies' TRA constructs explained 37.27 percent of the variance in intentions and 26.04 percent of the variance in behavior, with attitude being the strongest significant predictor of intention ($\beta = .56$). Using the same analysis, the TPB model explained 44.50 percent of the variance in intention and 27.41 percent variance in behavior (Hagger et al., 2002). Additional studies have also shown strong support for the TPB's inclusion of PBC (Anderson & Lavallee, 2008; Hausenblas et al., 1997; Mummery & Wankel, 1999; Mummery, Spence, & Hudec, 2000). Thus, preference is given to the TPB compared to TRA for predicting and explaining exercise and physical activity intentions and behaviors.

Studies measuring exercise and other athletic activities have recorded fairly consistent responses to the predictive powers of the TPB components to intentions and then intentions to behaviors. Certain studies, such as Mummery and Wankel's (1999) review of elite youth swimmers' adherence to training, found intention was the best predictor of behavior, while the other measures of the TPB did not independently contribute to the prediction of behavior but did contribute to intention prediction. Similarly, in a study of English elite junior netball athletes, Palmer, Burwitz, Dyer, and Spray (2005) found the original three TPB components had a significant influence on endurance training behavior, explaining 44 percent of the variance, while intention had a small ($R^2 = .07$) yet significant influence on behavior. Rhodes and Courneya (2003) found additional support for the TPB components when evaluating undergraduate student

exercise behavior. They found all components to have a significant influence on intention, explaining 68 percent of its variance, whereas intention explained 72 percent of the variance in exercise behavior. Still, researchers have found reasons to make adjustments in the model.

Some have recommended adding multiple intention measures to improve predictive ability. For example, Orbell, Hodgkins, and Sheeran (1997) suggested, especially in the case of chronic or postponed intentions, enhancing measures with implementation intentions that specify where and when a behavior will be performed. Overall, Ajzen (1991) stated that reviews of the literature suggest measures of behavioral intention have satisfactory predictive ability and typically account for 20 to 30 percent of the variance in future behavior. It is suggested that low predictive results of certain studies are more likely a result of incorrect measurements than of theory defects (Fishbein & Ajzen, 2010). For example, Palmer et al. (2005) suggested that a combination of response formats, continuous open format for the behavior and a dichotomous-graded scale for intention, may have attenuated the relationship between training intentions and adherence behavior in their study of elite athlete endurance training.

Additionally, the temporal instability of intentions may further explain the gap between intention and behavior. Temporal stability is defined as the extent to which an attitude remains unchanged over time regardless of whether it is challenged (Sheeran et al., 1999). Ajzen (1991) stated that the temporal stability of behavioral intentions is a necessary condition for accurate behavioral prediction. Because intentions measured prior to performance of a behavior may change as a result of new information or

unforeseen obstacles, the original intention measure may not accurately predict behavior. Cooke and Sheeran (2004) contested that between-subjects designs have shown the importance of temporal stability, a moderator of the relationship between TPB variables and behavior, but TPB variables are not stable because they are single-point-in-time measures (Hobbs, Dixon, Johnston, & Howie, 2013).

Many researchers have concentrated on the contribution subject instability provides to the intention-behavior gap. Orbell and Sheeran (1998) identified ‘intenders,’ those who failed to turn strong intentions into behavior, as the greatest source of inconsistency between intention and behavior. Palmer et al. (2005) concurred, citing one possibility for low predictive ability of behavior due to good intentions not turning into behavior. Further, Courneya and McAuley (1993) reported that the instability of intention is at least partly responsible for the moderated relationship of intention and physical activity that is typically found in the exercise adherence literature.

Studies have also shown that certain sample characteristics are indicative of exhibiting unstable intentions. With their meta-analysis, Hagger et al. (2002) reported that age moderated the intention-behavior relationship. They suggested older samples were more likely to fulfill their intentions compared to their younger counterparts. Nigg (2009) not only found similar results between the age groups, but the research also established that females had a stronger interrelationship of intention and behavior compared to males. Interestingly, a meta-analysis of 98 studies by Randall and Wolff (1994) found no significant association between the time interval and the strength of the intention-behavior association. Thus, further research into this relationship is necessary to establish the impact of time on measures of intention and behavior.

Additionally, a matter of concern is the validity of the popular self-report method of data collection. These measures of physical activity are susceptible to memory decay and social desirability distortion. It is suggested to make every effort to obtain actual behavioral measures when possible. Also, researchers should try to avoid single measurement items, such as those used in Hobbs et al. (2013). While attempting to reduce participant burden, Hobbs et al. (2013) found these items may not best reflect a participant's cognition towards a particular behavior. Also, the TPB may be better at identifying highly specific behavior, such as 'eating five fruit and vegetables per day,' which may be less open to a range of interpretation (Povey, Conner, Sparks, James, & Shepherd, 2000).

In summary, the TPB was built to account for behavioral intention prediction, which is said to mediate overt behavior. This relationship mediates how intentions are determined through three conceptually independent items: (a) attitudes toward the performance of the behavior, (b) perceived subjective norm to perform or not to perform the behavior, and (c) perceived behavioral control. Any additional variable is held to affect behavior only indirectly by influencing one or more of these determinants (Ajzen & Fishbein, 1970). A number of studies have shown that a considerable amount of variance in intentions can be accounted for collectively by TPB's three constructs (Anderson & Lavalley, 2008; Fen & Sabaruddin, 2008; Hagger et al., 2002; Hausenblas, Carron, & Mack, 1997; Mummary & Wankel, 1997). The addition of PBC to the model led to considerable improvements in the prediction of intentions (Ajzen, 1991); however, a number of studies have indicated issues with TPB measurements.

The power of the TPB in the current study is its focus on the connection between behavioral intentions and actual behavior. Many participatory sport measures are reflective in nature, evaluating only reasons for past or current participation (McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 2013; Scanlan, et al., 2003, 2013). A missed opportunity within these studies is the evaluation of a very valuable group, prospective participants. The current study takes note from the TPB and included behavioral intentions, as a measure of probability within behavioral loyalty, in its analysis. As for the formative variables of intention within the TPB--attitude, subjective norm, and PBC--they are conceptualized as antecedents within the aforementioned model developed by Iwasaki and Havitz (1998) and operationalized by Laurent and Kapferer's (1985) CIP. Thus, the current research study considered the individual variables found within the TPB to affect attitudinal loyalty, behavioral intentions, and behavioral loyalty by influencing the operationalization of involvement.

Overview of Relevant Scales and Models

Past studies and scales have shown sport participation is complex and partially misunderstood (McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 2013; Scanlan et al., 2003, 2013). Like most groups of considerable size, sport participants have an array of definable characteristics and subgroups. Even within subgroups, such as marathoners, they exhibit different behaviors and motivations for involvement. A clearer understanding of their actions and psychological connections would benefit event managers, social program directors, sport researchers, and other invested parties. For this reason, a combination of popular leisure activity participant and health behavior models is considered to provide a more holistic view of these behaviors.

The current review of sport participation models identified six important findings. First, a measure of enjoyment or pleasure, when appropriately created, provides significant contribution to the explanation of sport participant motivations. The impact of this factor may vary across subgroups, but generally returns as a significant explanation for participation. Results from studies utilizing measures not considering some form of joy or pleasure should be considered deficient. The SCM, PCM, Iwasaki and Havitz' (1998) model, and the TPB all account for this item. Second, motivational factors vary across subgroups such as age, gender, culture, level of competitiveness, and experience with the sport, to name a few. Different results with the same scale or measure are not indications of poor measurement performance, but rather an explanatory characteristic of the sample. Thus, inconsistencies among individual test samples should not drive theory. Instead, researchers should use a broader approach and view overall trends to create participant theory. Third, there is a need for scale modification in effort to encompass a greater number of activities and a more holistic view of activity participation. As established in the Ko (2010) study, some scales and models lend themselves to measurement alteration. When applicable, scale adjustments should be considered based on empirical evidence from past research or pilot studies.

Next, as exhibited by the PCM and the Iwasaki and Havitz (1998) model, motivations for sport involvement are multifaceted (Beaton et al., 2009). From a health behavior standpoint, the TPB echoes the need for multifaceted measures in understanding exercise and other health behaviors (Ajzen & Fishbein, 1970). Comprehensive theories of sport participation should be constructed based on existing research of sport participation studies and allow for flexibility of use in more specific areas. Whether from mere

oversight or flawed attempts to measure different motives, too often general scales and models miss important constructs with demonstrated explanatory power.

Fifth, many sport participation scales and models are missing evaluation opportunities important to practitioners. These include individuals not currently participating in the activity and the ability of the involvement/attitudinal loyalty process to forecast intentions and behaviors. For this reason, the current study has infused valuable characteristics from each of the reviewed models. The power of enjoyment or pleasure has been previously discussed and has been included. The current study also featured a fully mediated relationship between involvement, attitudinal loyalty, behavioral intentions, and behavioral loyalty as illustrated by the PCM (Beaton et al., 2011), the Iwasaki and Havitz (1998) model, and the TPB (Ajzen & Fishbein, 1970).

Finally, scales such as the MOMS (Ogles & Masters, 2007) and models like the PCM (Beaton et al., 2011; Filo, Chen, King, & Funk, 2013) show the capability to generate valuable market segmentations for practical uses. Still, a greater understanding of these segments and how individuals move between them is needed (Beaton et al., 2011). After initial operationalization of the PCM, Beaton et al. (2009) suggested further studies aimed to investigate each of the individual involvement facets would benefit use of the model. Beaton et al. (2011) also called for more research to be conducted which could account for differences between the different involvement levels and explore factors that facilitate increases in involvement. Of particular interest in the current study were the effects of affective association, self-concept, symbolic meaning, and functionality as outcomes and inputs between the levels of the PCM. These items are also related to a component of Iwasaki and Havitz's (1998) formative factors of

commitment of attitudinal loyalty. For this reason, the current study has included an evaluation of participant congruency with an endurance event.

Consumer Congruency

One of the benefits gained by understanding and organizing the complexities of event participant involvement is that effective segmentation strategies can be built from the result (Rohm et al., 2006). Scholars have indicated that behavioral and/or psychological variables provide a more useful means of characterizing participants than mere demographic attributes (Havitz et al., 2013; Iwasaki & Havitz, 2004; Rohm et al., 2006). In particular, the PCM has demonstrated it can create involvement segments based along four levels of sport involvement (Beaton et al., 2011). While recent studies continue to explore the relationships between involvement components (Beaton et al., 2011), and the effects of including an additional component such as negotiation-efficacy within the involvement process (Ridinger et al., 2012) or to measure loyalty outcomes (Filo et al., 2013), these studies comparing the individuals occupying the different segments are still limited. To date, no study has empirically examined relationships between the proposed moderators, often characterized as outcomes and inputs, which generate movement between the levels. The current research explores one such moderator, the congruency an individual perceives with the event. By identifying differences between involvement levels, the current study brings greater levels of practical relevance to current involvement models and evaluate their conceptualized processes.

Two types of congruency have been acknowledged in past research: (a) functional congruity and (b) self-congruity. Functional congruity has been defined as “the match

between a consumer's ideal expectations of utilitarian brand features and their perceptions of how the product is perceived along the same features" (Kressmann et al., 2006, p. 955). Self-congruency occurs when a consumer's behavior is, in part, driven by a perceived match between a consumer's self-concept and that of a particular brand or stereotypical user (Aguirre-Rodriguez, Bosnjak & Sirgy, 2012). Self-congruity theory suggests that for value-expressive (or self-expression) brands, congruence between the brand and consumers will provide favorable consumer responses. Individuals are considered to possess two types of self-concept: actual and ideal self. Actual self is how consumers actually see themselves (Sirgy & Su, 2002). The ideal self is how consumers would like to be (Hung & Petrick, 2011).

It is suggested that self-congruency is an important aspect in understanding consumer behavior because of the symbolic meanings and associations consumers hold about products. Levy (1959) initiated the use of brands as symbols, which was later popularized by the work of Keller (1993) and Aaker (1996). Keller (1993) developed a model of brand equity which has been used to spawn other branding models, such as Gladden, Milne, & Sutton (1998) brand equity in sport model. Within these models, brands are often personified as symbols within the consumer's mind. This idea of brand is important, especially in mature markets where functional differences are minimal, to allow organizations or products to distinguish themselves from competitors based on symbolic meaning (Plummer, 2000). Brand associations are considered to contain meaning for the brand and are linked to the consumer memory (Keller, 1993). These ideas have also been conceptualized in sport by the work of Gladden et al. (1998) and Ross (2006) who have each produced brand equity frameworks unique to the category.

Brand associations, operationalized as brand personality within consumer congruency theory, may have a powerful effect on sport participant behavior as it may translate into how individuals access and use symbolic meaning as a motivator for involvement.

Congruency theory may be naturally placed within popular involvement models and should assist in establishing relationships and differences between involvement levels with beneficial practical outcomes. The Iwasaki and Havitz (1998) model displayed a fully mediated effects relationship between involvement, attitudinal loyalty, and behavioral loyalty. They proposed, and have since empirically tested (Iwasaki and Havitz, 2004), the presence of commitment's formative factors between involvement and attitudinal loyalty. Echoing Crosby and Taylor (1983), Pritchard (1999) established three sources of commitment's formative factors: informational complexity, volitional choice, and position involvement. While the first two sources are important, their associations are not within the scope of the current research, which instead, focuses on the latter, position involvement. This component of commitment's formative factors is considered to evaluate the identification an individual makes with the object and the links they can draw between it and their own self-image (Pritchard, 1999). Thus, congruency theory seems like a comfortable fit within Iwasaki and Havitz's (1998) model as a formative factor of commitment.

Congruency theory also fits neatly into the conceptualization behind the PCM. As a level based construct, the PCM relies on transitions between four different levels of involvement. It has been hypothesized that each level has its own set of inputs/antecedents and outcomes/characteristics which initiate processing between the levels (Beaton et al., 2011). Conceptualizations behind congruency theory are

represented in processes identified within all four of these levels. The first level, awareness, is characterized by external influences such as socializing agents and social-situational barriers to participation (Beaton et al., 2009). Within this level the consumer is not participating in an event. Still, it is possible this non-participant behavior is influenced by their perception of non-congruity with themselves and the event. As they move on to the second level, individuals continue to process information about the event as not only potentially satisfying a need but also aligning with some aspects of self. This second level, attraction, is considered to be stimulated by dispositional needs which are said to include social self-expression and the need to satisfy belonging within a community (Funk & James, 2006). Thus, it could be conceived that ideal and social self would be stimulated within the consumer. Moving out of attraction onto the next two levels, attachment and allegiance, requires the individual to internalize the relationship and results in a more stable connection between the participant and the event. The attachment level includes an analysis of self-identity, as well as functional and symbolic meaning, which are central to congruency theory. The allegiance level continues this relationship as it is characterized by individuals seeing the activity as representing their own core value and beliefs (Beaton et al., 2009).

Examination of Iwasaki and Havitz's (1998) model and the PCM confirm the theoretical placement of congruency theory within their models. It is also suggested the inclusion of congruency measures will heighten the practical applicability of these involvement models. Limited research has been conducted on how consumers move between levels of involvement. The current study attempted to provide empirical evidence behind the role of congruency and attempt to identify its association between

the different levels of involvement. To gain a better understanding of congruency's practical relevance, an investigation of past self-congruency studies is also presented. Additionally, the relationship between self-congruency and brand association, operationalized as brand personality as a function within the analysis of brand equity, is provided.

Functional Congruency

Some researchers claim consumer decisions are based on both functional and symbolic functions (Hung & Petrick, 2011; Kressmann et al., 2006; Sirgy et al., 1997; Sirgy & Su, 2000). Functional congruity is the "assessment of the brand by focusing on the extent to which functional attributes of the brand matches the consumer's ideal or desired performance specifications" (Kressmann et al., 2006, p. 957). Based on sport participation motivation scales, some functional expectations from event participation may be a level of fun or enjoyment, the ability to compete, socialization opportunities, health outcomes, and achievement to name a few (Funk et al., 2011; Masters et al., 1993; McDonald et al., 2002; Ogles & Masters, 2000; 2003; Rice, in press; Ridinger et al., 2012; Scanlan et al., 2003; 2013; Summers et al., 1982; 1983). In their study on automobile consumer brand loyalty, Kressmann et al. (2006) found the direct effect from self-congruency to be equal to the predictive power of functional congruity. In an analysis of travel destination preferences, Ahn et al. (2013) found the effect of functional congruence to be greater than self-congruence. Hung and Petrick (2011) evaluated the influence of functional congruity on traveler cruising intentions and concluded that both functional congruity along with self-congruity should be considered in evaluations for a complete measure.

It has also been indicated that functional congruity and self-congruity are complimentary, as functional congruity is biased by self-congruity (Hung & Petrick, 2011; Kressmann et al., 2006; Sirgy & Su, 2000). Sirgy and Su (2000) proposed this biasing effect of self-congruity on functional congruity. They cited that self-congruity takes priority over functional congruity because the symbolic nature of self-congruity is easier to process than the cognitive efforts required for functional congruity (Sirgy & Su, 2000). Researchers investigating this relationship have found empirical evidence to support these claims (Hung & Petrick, 2011; Kressmann et al., 2006). This analysis has yet to be applied in the sport consumer setting. As the research has shown, functional congruity has predictive ability and a unique relationship with self-congruity. For this reason, the current analysis included measures of both symbolic (self-congruity) and functional measures of congruity.

Self-Image Congruency

While functional congruity will be analyzed, another primary interest of the current study lies within the effect of the more symbolic expressions represented in self-congruity analysis. This seems appropriate based on the common tendency of endurance event participants to wear event finisher's apparel, tattoo themselves with event logos, and celebrate their achievements on social media. Aguirre-Rodriguez, Bosnjak, and Sirgy (2012) claimed congruity between event brand and a targeted consumer's self-concept have the ability to provide favorable consumer responses. Self-congruence research has demonstrated significant effects in various consumer behaviors such as attitudes, brand choice or preference, loyalty, and satisfaction (Ahn et al., 2013; Kressmann et al., 2006).

Rosenberg (1979) defined self-concept, or self-image, as “the totality of the individual’s thoughts and feelings having referenced to himself as an object” (p. 7). This idea of consumer behavior acting to align this self-image with a product’s image was originated by the work of Levy and Gardner (1955). They suggested images were projected by certain products, and consumers looking to match with those images would prefer such products. While the concept has undergone slight variations over the years, the tenets are still very much intact. Even now, self-congruity research evaluates self-concept along two constructs as presented by Sirgy (1985): product image as it relates to the stereotypical user and product image in direct association with the self-concept. Parker (2009), with an analysis of each measure, identified they were distinct constructs and could provide unique descriptions from each. For this reason, the current research will utilize both measures.

Consumer research has been used to identify the process and importance of consumers matching their own self-image and with that of the stereotypical user (Ahn et al., 2013; Kang, 2000; Kwak & Kang, 2009; Parker, 2009; Sirgy, 1985; Sirgy et al., 1997; Sirgy & Su, 2000). Sirgy (1985) evaluated self and ideal self-congruity with the typical user of two automobile brands and two magazines along four measures (purchase intention, attitude, and two composites of attitude and intention). Their results indicated all congruity effect relationships were significant. Sirgy et al. (1997) conducted six unique analyses, ranging from shoe consumption to choosing a university major, to determine which technique to measure stereotypical user image was more appropriate. They concluded self-congruency with stereotypical users of products across an array of

categories and functions has the ability to effectively predict brand preference, brand attitude, consumer choice, and consumer satisfaction (Sirgy et al., 1997).

Kang (2002) and Kwak and Kang (2009) utilized the supported methods from Sirgy et al. (1997) in a sport setting. Kang (2002) discovered that as individuals experience higher levels of congruence between self-concept and stereotypical participant image, within a ski resort and health club setting, they will be more likely to consume the activity. Kwak and Kang (2009) found that intentions to purchase team branded sportswear increased when there was a match between a consumer's self-concept and a typical team follower.

It has been suggested that attribution theory, the idea that individuals make inferences about themselves and others based on their observed behaviors (Bradley, 1978), explains the stimulus behind self-congruency theory. Sirgy and Su (2000) revealed how self-congruity actually influences functional congruity because symbolic attributions are easier for us to process as compared to functional analysis, which requires deeper cognitive processing. Still, consumers or prospects may attach and evaluate attributes to both a stereotypical user and the brand itself. Parker (2009) conducted a study to compare these two popular consumer self-congruity constructs. He concluded stereotypical user congruency contributed more than brand attribute congruency when analyzing publicly consumed brands and brand attribute congruency was more appropriate for privately consumed good.

As indicated by Parker (2009) consumer decisions may be based on both brand attributes and the attributes of the stereotypical user. Other research confirms congruity between the self and the brand perceived by the consumer to be a significant indicator of

desired marketing outcomes (Hung & Petrick, 2011; Kressmann et al., 2006; Tsai, 2005). Tsai (2005), exploring consumer luxury goods, provided support for a relationship between self-gratification, identified as self-orientation towards consumption, and actual self-congruity in an Asian, Western European, and North American sample. Data suggested congruity with actual self, in a combined sample, had a path parameter of 0.179 ($p < 0.01$) on self-gratification, which was shown to significantly impact luxury-brand repurchase intention, path parameter of 0.256 ($p < 0.001$) (Tsai, 2005). Kressmann et al. (2006) and Hung and Petrick (2011) not only confirmed the biasing effect of self-congruency on functional congruency, as suggested by Sirgy and Su (2000), but also suggested utilizing both measures to capture a more complete view of consumer behavior. Hung and Petrick (2011) utilized brand attributes found in past cruise/travel literature, while Kressmann et al. (2006) employed a popular more general measure of brand attributes, Aaker's (1997) brand personality scale, from branding research to analyze the congruity effect. Kressmann et al.'s (2006) results indicated the predictive power on brand loyalty of self-congruency with automobile brand attributes, measured by 15 brand personality traits, is equal to the predictive power of functional congruity.

The link between attribution theory and brand attributes, also called brand associations, has been established by previous research within self-congruity theory (Hung & Petrick, 2011; Kressmann et al., 2006; Sirgy & Su 2000; Tsai, 2005). To gain a complete view of the relationship between congruency theory, which has already been described, and brand associations, the current analysis reviewed the concept of brand associations within branding research. This review brings together the three main fields

of literature covered in this study: endurance sport participation involvement/commitment, self-congruency theory, and brand personality.

Brand Personality/Associations/Equity

Within consumer congruency research, the brand-as-a-person or brand attribute construct has been used interchangeably with the notion of brand personality. Self-congruency theory has adopted the terminology from a broader field of consumer research, brand equity (Parker, 2009). While brand equity and self-congruency research differ in many ways, there are also similarities which can be highlighted within the current research. The concept of brand personality is considered valuable for practical purposes (Braunstein & Ross, 2010). Theorists claim brand personality should assist organizations in developing an enriched understanding of the consumer, guide marketing communications, and generate brand equity (Aaker, 1996). Studies have also indicated the usefulness of brand personality in assisting brands to differentiate from competitors and generate brand equity (Bodet & Chanavat, 2010) as well as to identify the value of matching sponsors with celebrities and athletes (Dees et al., 2010). Similarly, self-congruency theory aims to utilize attribution theory where individuals seek matches in functional and symbolic representations of the brand. To better understand the role of salient brand associations within branding literature, the current analysis reviews the formative structure of brand personality within brand equity and brand associations.

Sport Brand Equity

Modern day sport organizations are challenged to increase brand equity (Gladden, Erwin, & Sutton, 2001), defined as “the differential effect that brand knowledge has on consumer response to the marketing of that brand” (Keller, 1993, p. 60). In other words,

brand equity encompasses what outcomes occur from marketing activities because of a brand name--outcomes that would not occur if a product or service was generic. This brand equity is often considered to come from two sources: (a) brand awareness and (b) brand association (Keller, 1993; Ross, 2006). Keller (1993) stated that “brand equity occurs when the consumer has a high level of awareness and familiarity with the brand and holds some strong, favorable, and unique brand associations in memory” (p. 67). Brand awareness is the consumers’ ability to identify or recall the brand under different conditions (Keller, 1993). Brand associations are thought to be the meaning contained within this recall and link the brand to a consumer’s memory (Keller, 1993; Ross, 2006). Thus, brand associations draw similarities to self-congruency theory and have the practical ability to function as differentiators of brands.

Pioneering theorists (Aaker, 1996; Keller, 1993; Keller, 2003) developed frameworks to help researchers and practitioners understand and build brand equity. Gladden et al. (1998) proposed a conceptual framework for assessing brand equity in Division I college athletics using Aaker’s (1996) suggested components. In this model, brand equity was identified as brand awareness, brand associations, perceived quality, and brand loyalty. Antecedents of these components included team-related items (coaches, athletes), organization-related items (reputation, conference, schedule, and product delivery), and market-related items (media coverage, geographic location) and led to consequences such as media exposure, sales, donations, support and atmosphere.

Ross (2006) contended this framework, and those crafted by Aaker (1996) and Keller (1993; 2003), are too steeped in manufactured goods and required revision when applied in a sport service setting. Where Gladden et al.’s (1998) framework was heavily

influenced by Aaker (1996), Ross (2006) proposed an updated sport spectator framework based on Berry's (2000) service branding model. Berry (2000) stated that with services, the company is the primary brand, in comparison to packaged goods where the product is the primary brand. Here, brand equity is considered to compile two components, brand awareness and brand association, and more focus is placed on the customer experience. Brand equity antecedents are broken into three categories: (a) organizational induced (marketing mix), (b) market induced (word of mouth and publicity), and (c) experience induced (actual consumer experience) (Ross, 2006). This updated model has consequences similar to Gladden et al. (1998) such as media exposure, sales, and revenue opportunities, but moves brand loyalty from being a component of brand equity to a consequence and asserts that atmosphere should not be a consequence but rather included within the brand association element. In full, the Ross (2008) framework utilizes many aspects of early models but makes adjustments to accommodate for the unique nature of sport as a service product. This framework can be seen in Figure 7.

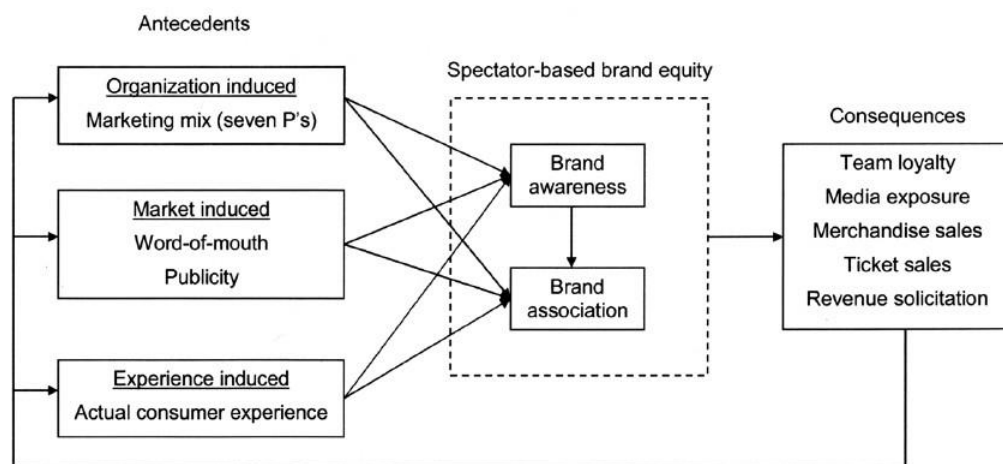


Figure 7. Spectator-Based Brand Equity.

Another important item to note is that within mature product categories, such as many participatory sports and entertainment events, organizations face a need to develop unique brands (Keller, 2003). Endurance sports, such as the marathon, half marathon, and triathlon, have existed in North America for many years. The first marathon (Boston) was said to be hosted in 1897 (James, 2009), while the first triathlon (San Diego) was in held 1975 (ESPN, 2008). Despite a crowded market space in such categories, new offerings or repositioned brands have the ability to carve out extra space and change the market landscape. Recently, obstacle course events have grown in popularity, creating a new niche in the old category of endurance sport (Branch, 2010; Pattillo, 2013; Widdicombe, 2014). While these obstacle course events are still considered endurance events, they are noticeably different.

As mentioned, one of the proposed benefits of brand personality development is the ability to differentiate from competitors (Aaker, 1996). Research suggests some of the strongest brands are those that have made a conscious effort to be different (Berry, 2000; Plummer, 2000). Plummer (2000) provides a case study of how Dr. Pepper struggled early to find an identity in the soft drink market space. It was not until after they pursued an approach to distinctively separate themselves from others did they find success. A series of half marathon events in the United States has used the “go green” movement to create a point of differentiation by having not providing cups along the course. Instead, participants are encouraged to either bring their own receptacles or opt for a small personal water bladder during registration (Vacation Races, 2014). One way events could achieve differentiation is through the benefits of an effective branding strategy (Aaker, 1996).

Brand Awareness. For practical reasons it is beneficial to look within brand equity frameworks to find points where organizations may enact strategies to differentiate themselves from other category members and assist the product category in differentiating from competing categories. Bauer et al. (2005) claimed that when a product category is well known by the customers, as is common in mature markets, awareness does not add a lot to the understanding of brand equity. Yet, the thoughts associated with a brand are often used to make consumption decisions (Aaker, 1996). While brand awareness plays an important role in the brand equity frameworks reviewed and within the consumer decision process, the current study is mostly concerned with how brand associations provide avenues to build unique brands and facilitate self-congruency links between the participant and the event.

Brand Associations. Using Keller's (1993) consumer-based classification of brand association, Gladden and Funk (2002) operationalized brand association as categorized product attributes, product benefits, and attitudes towards a product that may exist within the consumer. Attributes include both product and non-product related features, highlighted by overall product delivery. In team sport, product related features include personnel (players and ownership) and successes of the team. Studies of satellite (foreign) fans (Bodet & Chanduat, 2010; Gladden & Milne, 1999) show team success and the inclusion of star players have a positive economic influence. Yet, Bauer et al. (2005) contended that value creation can be separated from on-field performance. As such, non-product related features, including corporate marks, point of consumption facilities, and organizational history, are also important (Gladden & Funk, 2002) and may be applied to the participatory sport setting. Five product benefit constructs were identified in the

Gladden and Funk (2002) study to contribute to brand association: (a) fan identification, (b) nostalgia, (c) pride in place, (d) escape, and (e) peer group acceptance. The attitudinal component was comprised of importance of the object as perceived by the subject and knowledge the subject displays about the object. Gladden and Funk's (2002) brand association model combined with Ross's (2006) brand equity antecedents provide an adequate set of brand association influences.

These influences can accumulate within the consumer. Through a filtration process they are registered in many different ways. As Plummer (2000) expressed, a brand presents itself to consumers, who in turn interpret the brand through many different filters, experiences, perceptions, and the value systems which they live. Of greatest importance is the outcome of this process, or as Ross (2006) expressed brand associations, the thoughts that come to mind immediately following brand recall. The results of such a process could be measured a variety of ways. One popular means has been through a measurement of brand personality. According to attribution and self-congruity theory, these brand personalities also draw the link between a participant and the event.

Brand Personality. Aaker (1997) developed one of the most widely used brand personality (BP) scales. The initial scale indicated that a five factor structure of sophistication, sincerity, excitement, competence, and ruggedness could explain consumer brand associations. The concept continues to be studied as many consider it valuable for practical purposes (Braunstein & Ross, 2010). For example, in an effort to analyze brand equity among Asian football fans, Bodet and Chanavat (2010) indicated results from a qualitative process demonstrated that BP could be a useful approach to

operationalize customer-based brand equity. The concept of BP is said to not only aid with differentiation, but also assists the organization in developing an enriched understanding of the consumer, guiding communication and generating brand equity (Aaker, 1996). Despite its popularity, Aaker's (1997) methods and theoretical support have experienced criticism over the years.

The majority of Aaker's (1997) original scale criticisms stem from two issues: poor theoretical underpinnings and lack of generalizability across product categories. One of the most widely cited critiques was developed by Austin, Siguaw, and Mattila (2003). They claim Aaker's (1997) original framework was entirely empirically based and lacked a strong theoretical foundation, causing residual effects. Aaker (1997) based her scale on popular human personality research (Goldberg, 1990) and identified BP as the set of human characteristics associated with a brand. She stated this was possible because consumers often imbue brands with human personality traits during recollection. However, some have questioned this connection with the Big Five human personality categories of (a) extroversion, (b) agreeableness, (c) conscientiousness, (d) emotional stability, and (e) openness (Goldberg, 1990) and expressed how descriptors of human personality are not synonymous with their brand counterparts and that they convey different meanings when attributed to brands (Caprara, Barbaranelli, & Guido, 2001). Axis (2012) claimed that BP should not be limited to only human characteristics, because unlike human personality, which is bound by biology, brands do not need to be limited in such a way.

Empirical evidence suggests these theoretic critics may be correct. When the original scale has been replicated in different settings, poor factor loadings and fit indices

have become common (Austin et al., 2003; Braunstein & Ross, 2006; Caprara, Barbaranelli, & Guido, 2001). Following these initial replication studies, researchers began to experiment with the BP concept. Some contended that a brand cannot possess human personality traits as it is not an inherent process (Azoulay & Kapferer, 2003), and instead maintain that a brand can only be given traits by marketers (Heere, 2010). As a result, some sport studies have measured brand personality as a concept entirely crafted by marketers (Heere, 2010; Walsh, Clavio, Lovell, & Blaszk, 2013). While their results have practical benefits, they do not fully encapsulate the BP concept as a function of brand association within brand equity models.

As Gladden and Funk (2002) and Ross (2006) stated, brand associations are compiled by items within an organization's control and outside of their efforts. What remains central to the measure of BP, like all brand associations, is the result of these influences in the minds of consumers. After the initial BP construct was criticized, and the domain of the construct was not clear, the diversity of BP research which followed has figuratively gone 'off the rails' by spurring research into different directions and creating further confusion of the construct domain. Churchill's (1979) first procedural step for measurement development was to specify the domain of the construct, as some claim Aaker's (1997) original assessment lacked clarity. Today it is more muddled than ever. Thus, more exploratory research is necessary to better understand the construct so it can provide more reliable managerial implications. Some say a better understanding of BP can be gained by more qualitative approaches and study designs (Arora & Stoner, 2009). Once the construct is better defined and an appropriate measure is found, analyses of what marketing activities influence BP and further application of BP may ensue.

Researchers have also identified how Aaker's (1997) original five factor scale is not applicable across all product categories, as it was originally intended. This is due in part by the issues expressed above. As the original scale is used in different settings, such as sport, items tended to cross-load (Ross, 2008), additional factors were found (Smith, Graetz, & Westerbeek, 2006), and original factors did not present themselves (Dees et al., 2010). While it seems improbable that a framework could be developed for universal use (Austin et al., 2003), individual product categories should make attempts to customize scales to address their unique attributes.

Brand Personality in Sport. A handful of researchers have claimed the task of finding unique brand attributes within sport. To date, the majority of sport brand personality research exists in three categories. First, studies have attempted to utilize existing and modified BP scales to measure sponsorship matches (Carlson, Donavan, & Cuminsky, 2009; Carlson & Donavan, 2013; Dean, Smith, & Adams, 2003; Musante & Milne, 1998). The second group of studies attempted to assess the use of Aaker's original BP scale or modified versions in a sport setting (Dees, Bennett, & Ferreira, 2010; Ross, 2008; Smith et al., 2006). Finally, some have crafted their own sport BP scales (Braunstein & Ross, 2010; Lee & Cho, 2007; Tsiotou, 2012).

In one of the more endorsing results of Aaker's (1997) BP scale, Musante and Milne (1998) generated an early sport studies test of the usefulness of BP. Their goal was to assess the image congruency between a sponsor and an event using a modified version (removal of one factor and a reduction of items) of the original scale. Overall, results of scale measurement exhibited satisfactory fit with only one item loading in an unexpected manner. Additionally, the analysis found sponsorship fit between a sport and

a brand increases as their personalities become more congruent. While this study showed relative support for Aaker's (1997) original scale, it was heavily modified to achieve such results. Unfortunately, future sponsor fit studies failed to assess the usefulness of Aaker's (1997) scale because of their design. Deane et al., (2003) examined personality fit between the sport of golf, the Ryder Cup event, and a sponsor. But their study asked respondents to simply rank five of most descriptive traits for the target. Similarly, Carlson et al. (2009) and Carlson and Donovan (2013) utilized only single-item measures of the five domains. Because factors of the original BP scale were still in question and these studies did not attempt to measure its validity or reliability, their results must be considered incomplete. It would have been prudent to assess the usability of the scale in sport and address previous issues and criticisms of the scale before applying it in more diverse research settings.

To test Aaker's (1997) original scale, some sport researchers have used unabridged versions of the scale (Dees et al., 2010; Ross, 2008; Smith et al., 2006). Dees et al. (2010) evaluated fit between NASCAR driver and sponsor. Results indicated a three, not five, factor structure with one item removed because of cross-loading. Smith et al. (2006) investigated Netball Victoria, a state membership-based organization. They found some of the items had weak fit and the emergence of an additional factor, possibly due to the divergent Australian sample, compared to Aaker's (1997) North American sample. The authors conclude that further testing should be conducted to see if Aaker's (1997) instrument has the ability to include measures to adequately measure the variety of sport organizations which exist and whether organizations have the ability to effectively separate their brand from product attributes (Smith et al., 2006).

Ross (2008) continued this exploration of Aaker's scale in sport with a sample of university students analyzing their university's football team. Results echoed some of the previous criticisms. Ross (2008) concluded that Aaker's (1997) proposed factors correlated with other factors, from which they should differ, and the scale is both invalid and not generalizable. He also suggested better construct definitions and exploratory qualitative methods are needed to fully understand how the scale can be used in a sport setting. From this collection of studies it seems replication of Aaker's (1997) original BP scale is not appropriate for sport and modified versions are necessary.

To continue the evolution of BP within sport, researchers have attempted to create unique brand personality scales (Braunstein & Ross, 2010; Tsiotou, 2012). Through an extensive literature review and inclusion of Aaker's (1997) original scale items, Braunstein and Ross (2010) attempted to develop a scale to measure sport team brand associations. Through a leveled process, they whittled 84 initial items down to a six-factor, 41-item scale. Despite acceptable fit measures, the authors explained that issues with the reliability and validity of the scores remain and future research should attempt to specifically address discriminate validity issues.

In developing a unique sport BP scale, Tsiotou (2012) took a different approach. While many past scales utilized free-association techniques or extensive literature reviews to develop an initial list of traits, Tsiotou (2012) conducted a content analysis of official team and fan websites of six well known sport teams in Greece. The final scale contained 48 adjectives and five factors (Competitiveness, Prestige, Morality, Authenticity, and Credibility) emerged. The author concluded that the personality of a

sport team has a more complex structure than other types of services and future studies may want to explore the hierarchical elements of the construct.

Overall, it seems Aaker's (1997) original scale may not supply the scope to articulate BP in sport service, but does provide a guide. Only recently have studies attempted to build a specific sport BP scale and found more relative success in the sport setting. These scales need to be tested for their appropriateness before specific factors can be utilized in future applications. While research methods are still being ironed out, the practical importance of the concept remains. Measures of brand associations and brand personality not only assist with estimating the overall value of a brand, but also have the ability to garner an enhanced understanding of consumers, serve as a point of differentiation, and improve marketing productivity through effective marketing communication (Aaker, 1996; Ross, 2006).

Summary of Literature Review

This review has addressed an array of potential benefits which may be generated from the current study. American society has been plagued by sedentary lifestyles which have built up over the years (Healthy People, 2013), but recent research has indicated new approaches utilizing mass physical activity participatory events, such as endurance events, may produce positive interventions (Funk, et al., 2011). These events and supporting services may have the ability to produce a long-term ecological approach to design interventions which positively influence health outcomes. Endurance events are chosen for the current study because they may have the ability to increase physical activity across a wide range of fitness levels (Murphy & Bauman, 2007) as well as develop positive attitudes towards exercise (Funk, et al., 2011). However, further

investigation is needed to uncover the capacity of these events to promote healthy lifestyles. First, it needs to be determined how these events are currently perceived by individuals. Next, it will be important to identify the process an individual undergoes while becoming involved in the activity.

These beneficial outcomes are not limited to health program stakeholders. Event organizers are faced with these same needs, to attract and retain consumers. These consumers may include inactive and unhealthy populations in addition to a more general group of participant consumers and prospects. This is typical of any market, but particularly true in the current endurance event environment. While statistics indicate the endurance sport market has never been more popular (Running USA, 2013a, 2103b; Widdicombe, 2014), an increase in new and diverse event offerings has also created a level of competition never before experienced. For this reason, it is not only necessary for these organizations to continue to attract new event participants but it becomes vital to retain current participants.

The current study addressed the process these groups undergo while becoming involved with an activity, such as endurance event participation. In the current study, this was done by combining research across a variety of fields. For example, consumer behavior theories were used within leisure and participatory sport models. Consumer behavior scholars have contended an important strategy is to create and communicate unique brand attributes or associations to differentiate a brand from others (Keller, 2003; Ross, 2006). These associations carry meaning which may be locked into the memory of the consumer (Keller, 2003). The current review has offered a link between brand associations as brand personality and self-image through an investigation of congruity

theory where individuals who perceive a link between their self-perceptions and that of the brand display more likelihood of intended behavior than those who do not perceive this link (Ahn et al., 2013, Sirgy & Su, 2000). The value of the current study is that multiple types of congruity (functional and symbolic) and self-image (actual and ideal) are utilized for evaluation. Also, both non-participants and participants will be sampled. This collection of techniques should provide a comprehensive view of the endurance event market and assist marketers and health advocates in determining how participants and prospects perceive these events and the connections they make with them.

To further the use of these associations and connections, the review has also linked the use of congruity theory to popular leisure and participatory sport frameworks such as the involvement and loyalty process described by Iwasaki and Havitz (1998) and Funk and James' (2001) PCM. These models are used as guiding frameworks in the current study. Iwasaki and Havitz (2004) suggested a fully mediated relationship between each construct, where involvement does not have direct effect on behavioral loyalty as it must pass through attitudinal loyalty. Within this process, a component of commitment's formation is suggested to evaluate the identification an individual makes with the event and the links they are able to draw between it and their own self-image (Pritchard, 1999). Thus, congruency theory seems to assist progress along the Iwasaki and Havitz's (1998) model.

To identify how an individual moves along this process, the current research utilized segmentation strategies suggested by Beaton et al. (2009) within the PCM. These segments were used to create groups of participants based on level of psychological involvement. Additionally, sampling strategies provided the best

opportunity to collect information from both non-participants and those currently participating in endurance events. This allowed the data to explore the relationships between groups and test previous suggestions that different associations and evaluations of congruity are held for the different groups. The results of this evaluation were intended to provide valuable insight into the attraction, early levels of the PCM, and retention along latter levels of the PCM within endurance event participants. In sum, the current research attempted to provide the potential to produce a number of valuable insights. Specifically it unveiled the associations held towards participatory endurance events from both participants and non-participants as well as evaluated the usefulness of congruity theory within the leisure activity involvement and loyalty models.

CHAPTER III

METHOD

Study Purpose

The purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Additionally, a construct of self-congruity with functional and symbolic associations perceived with an endurance event was analyzed as to how it was associated with different levels of involvement. Past studies and scales have shown sport participation is complex and partially misunderstood (McDonald et al., 2002; Ogles & Masters, 2003; Pelletier et al., 2013; Scanlan et al., 2003, 2013). Yet, limited research has investigated the process of participant loyalty in detail. Employing congruity theory within a participant involvement framework will provide a clearer understanding of event participant actions and psychological connections. This should benefit an array of stakeholders, including event marketers, social program directors, sport researchers, and other parties invested in the leisure, sport, and behaviors of individuals. To achieve these goals, the following research questions were presented.

Research Questions

Non-Event Participant Associations and Behavior

RQ1.1: What associations do non-endurance event participants have for both non-traditional and traditional endurance events?

RQ1.2: Which type of endurance event category (traditional road running events versus obstacle course events) are those currently not participating in endurance events more likely to participate?

Endurance Event Participant Associations and Behavior

RQ2.1: What associations do traditional road running endurance event participants have for both non-traditional and traditional endurance events?

RQ2.2: How likely are traditional road running endurance event participants to participate in non-traditional endurance events?

Traditional Endurance Event Involvement Level and Congruity Relationship

RQ3.1: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the functional congruity of traditional endurance events?

RQ3.2: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their actual self?

RQ3.3: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their ideal self?

RQ3.4: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the brand personality congruity of traditional endurance events?

To accomplish the primary purpose of this research, the research questions analyzed the process an individual undergoes while becoming involved with an activity.

Particularly, questions 1.1 and 1.2 analyzed how current non-participants may view endurance events and the possibility of participating in them. Question 2.1 was interested in the associations current endurance event participants hold for different endurance event types. Question 2.2 continued the evaluation of current endurance event participants by evaluating their behavioral intentions towards endurance event activity. Addressing the process of involvement, the analysis explored the relationship of different types of congruity along different levels of involvement in questions 3.1 through 3.4.

Research Design

As discussed in the literature review, endurance events were considered in the current research because of their potential ability to produce a multi-level ecological model framed intervention to address unhealthy behaviors and the growth they have experienced in recent years. With poor health trends established in certain segments of the United States population, it was valuable to look into areas where adherence to a physical activity program is essential. Endurance event participants, such as runners, fit this description because of the training necessary for event completion. Thus, an evaluation of the associations and intentions of non-participants towards endurance events and endurance event participants may illustrate the associations these potential consumers hold and the likelihood these events have in recruiting new consumers.

Additionally, the endurance event market has become cluttered with an array of event offerings (Pattillo, 2013; Widdicombe, 2014). Event participants may choose between more traditional event types, such as marathons and half marathons, or non-traditional events, such as obstacle course events. An evaluation of current event participant loyalty and involvement may lend insight into the ability of the market to

retain its existing customer base. This evaluation was accomplished in the current study with a review of the role self-congruity played within traditional endurance event participants and the process of loyalty and involvement in the events of their choice.

The current research utilized a cross-sectional survey design. This design type benefited the purpose of this study by revealing attitudinal and behavioral characteristics found in different groups (Creswell, 2008). This was appropriate because the objective was to establish the different associations both non-endurance event participant and current endurance event participants had toward traditional and non-traditional endurance events and the role of congruity within the involvement process. Surveys have been used in similar research (Iwasaki and Havitz, 2004; Beaton et al., 2009) since they are easy to use and have ability to capture information from distinct groups assigned a priori (Creswell, 2008). While evidence of change over time and a direct causal relationship cannot be evaluated with this type of design (Hall, 2008), a snapshot of the represented group's characteristics will allow for an evaluation of individuals in the different groups. Inferences can be made about the differences and similarities from the data.

Data Collection/Sampling Procedure

To accomplish an evaluation of the associations held by individuals and the involvement process they undergo, the instrument, which will be discussed in greater detail in the following section, contained measures of involvement, attitudinal loyalty, behavioral loyalty, intentions, brand personality, and congruity. These measures developed the variables necessary to address the research questions. Specifically, the following variables were measured: pleasure, sign, and centrality built the involvement construct as suggested by Beaton et al (2009); an attitudinal loyalty variable measured

resistance to change (Beaton et al., 2009; Iwasaki & Havitz, 1998); a behavioral loyalty variable including a measure of probability/intentions (Ajzen & Fishbein, 1970; Iwasaki & Havitz, 1998); and congruency variables of functional congruity, stereotypical user congruity, and brand personality congruity. Finally, a set of symbolic associations, identified as brand associations, were also generated for both non-traditional and traditional endurance events.

The population frame of the study contained both non-endurance event participants and individuals with previous endurance event participation. To investigate the diverse population needed to achieve the purposes of the study, two unique samples were considered: (a) a convenience sample of non-endurance event participants or those with low levels of endurance event involvement and (b) a purposive sample of moderate to high involved traditional endurance event participants. This dual sample approach provided an assessment from an array of individuals displaying different perspectives necessary for the current investigation. While probability sampling, such as random, systematic, and/or stratified sampling, is often considered to be the preferred sampling method, non-probability sampling techniques such as convenience, purposive, and snowball sampling are also appropriate when the entire population cannot be reached, as in the current research (Ary, Jacobs, Sorensen, & Razavieh, 2010). Specific reasons for selecting each group are discussed in greater detail within each of their subsections.

As will be shown, the statistical analysis used to evaluate the research questions necessitated statistical methods for choosing sample size. Dillman (2007) proposed certain sample sizes in order to generalize to the populations of interest and suggested that a population of one million or more, which includes both the endurance non-

participant and participant populations of interest in the current study, required a sample size of 384 at the 95% confidence level with a 5% margin of error. In addition to those generalizability methods, the study also needed to consider minimums suggested for multivariate analysis, which were applied to endurance event participant data. Stevens (2009), for example, recommended a minimum of 15 per independent variable found within a MANOVA. This translates to a recommended sample of 60 endurance event participants, with 4 measured variables to be analysis by multivariate statistics in the current survey. To accommodate both Dillman (2007) and Stevens (2009), based on the type of statistical analysis employed in the current study, a sample minimum of 384 individuals representing endurance event participants was considered.

The non-endurance event participation data underwent different analysis, resulting in different sample size requirements. First, open ended response data were collected and coded for a content analysis from this population. A sample size number for this analysis was not be set a priori. Instead, it was dictated by suggestions made by Miles, Huberman, and Saldana (2014), which recommended decisions regarding qualitative sample size not be based on statistical grounds, but when the researcher feels no new information on the topics of interest are being developed, and a desirable level of confidence in the analytic generalizations has been satisfied. However, statistical approach to sample size was necessary for research question 1.2 analysis.

To account for the descriptive statistics being used with the non-endurance event participant sample, a smaller sample size, compared with the endurance event participant sample group, was utilized. Research question 1.2 required a descriptive statistical analysis of the following 7-point Likert scale (1 = not at all likely, 7 = extremely likely)

survey item “Select the likelihood you would register and participate in each type of event in the next 12 months.” The event types in question included marathon, half marathon, and an obstacle course event. The following formula was suggested to assist with determination of sample size for estimating the mean of a population (Western State Michigan University, n.d.; Gerstman, 2003); $n = \frac{4\sigma^2}{m^2}$, where σ is the standard deviation and m is the desired size of the 95% margin of error. To obtain the estimated sample size for this analysis two calculations, varying in level of conservatism, are considered. First, a standard deviation of one is studied followed by a more conservative calculation with a standard deviation of two. Considering this sample group has shown past characteristics of not participating in endurance events, it was likely their scores on this 7-point scale would not vary dramatically, as limited responses in the upper “extremely likely” score should be rare. For illustration, a two point difference in survey response score could move the individual from possible participation to very likely participating. Additionally, a desired size of the 95% margin of error of .5 was considered appropriate for both computations. On the seven-point scale this translates to approximately a 95% confidence level and a 7% margin of error. Another way to say this, based on this sample size, the researcher expects that 95 out of 100 times the survey is conducted, the results should land within the proposed margin of error, or 1-point on the 7-point scale. The calculations are as follows. The first option, with a standard deviation of one suggested a sample size of 16 respondents; $= \frac{4(1)^2}{(.5)^2}$. The more conservative calculation, with a standard deviation of two, suggested a sample size of 64; $= \frac{4(2)^2}{(.5)^2}$. The current

research followed the more conservative recommendation of 64 for the non-endurance event participant sample size.

Human Subjects Institutional Review Board reviewed and approved all study protocol prior to participant recruitment. Informed consent was retrieved from study participants prior to study participation.

Non-Endurance Event Participants. The goal of this study was to generate associations and congruity measures from the two different populations previously indicated. The first group, non-endurance event participants, was defined as individuals who were aware of endurance event offerings but had not participated in these events. By definition, these individuals occupied the PCM level of awareness.

To achieve the objective of providing an encompassing view of the endurance event market, investigation of individuals from a range of involvement levels was necessary. This sample of non-participants is crucial to the continued growth of the endurance event market and the ability for mass participant endurance events to act as a healthy behavior intervention. Practitioners will benefit from a greater understanding of this group. Additionally, including this sample allows for an evaluation among a full spectrum of individuals with different involvement levels, ranging from low to high.

A convenience sample of college students was determined adequate for a number of reasons. First, previous brand association research has utilized this type of sample (Aaker, 1997; Braunstein & Ross, 2010; Gwinner & Eaton, 1999; Lee & Cho, 2012; Ross, James, & Vargas, 2006; Ross, 2008). Second, student samples are often used in sport consumer researcher because they are significant consumers of sport and reflect a valued demographic for sport marketers (Braunstein & Ross, 2010; Ross et al., 2006;

Ross, 2008). Third, the group was valuable because many of these individuals were not actively participating in these events, and their insights would describe the view of the non-participant or low-involved individual. They also represented potential consumers, a valuable group for event organizers as they look to continue to grow their sport by attracting new event participants. Additionally, these individuals have the potential to exhibit unhealthy behaviors such as high sedentary lifestyles (Keating, Guan, Pinero, & Bridges, 2005). Last, student samples have been deemed appropriate for theory testing (Yoo & Donthu, 2001; Yoo, Donthu, & Lee, 2000).

For this study, these individuals were recruited from two undergraduate and one graduate sport management course at a public university in the United States Midwest. The undergraduate course included two sections of Organizational Behavior in Sport. These sections had a combined enrollment of 65 students. This course was chosen because it is a core course requirement of the program and typically enrolls second and third year students and does not have duplicate enrollment with each other. One graduate level core course requirement for a masters' degree in Sport Administration, Sport Finance, was also utilized for recruitment. This course had an enrollment of 31 students. In total, 96 students were recruited from this combination of courses. Further, these courses were chosen because they provided the best opportunity to recruit the intended sample with limited possibility for duplication. Should the sample not have reached 64 survey participants from this initial recruitment, students from additional sport management courses would have been recruited until the 64 non-endurance event participant sample criterion was met.

Sport Administration students, as opposed to those enrolled in other program courses, were chosen due to the greater likelihood they are familiar with the endurance sporting events, even if they are not participating. Thus, they may provide informative insight as to why a group of potential consumers, knowledgeable of the product, do not participate in these events. While the choice of undergraduate university students chosen to represent non-endurance event participants may be limited in their demographic profile, past research suggests university student convenience samples are appropriate (Exadaktylos, Espin, & Branäs-Garza, 2013; Host, Regnell, & Wohlin, 2000).

Though it is possible these individuals may have occupied higher levels of endurance sport involvement, they were expected to exhibit low involvement level scores. Any student with results indicating moderate or high levels of involvement, as indicated by their PCM staging, were categorized appropriately for analysis.

Students were asked by their instructor, who was not associated with the study, during class to complete a survey about endurance sports outside of their regularly scheduled class time. The instructor emailed the students a weblink to the questionnaire for the students to complete on their own time after class. It was indicated in the email and during class that participation was completely voluntary. The instructor informed the students that he/she would not know who completed the survey since the survey was confidential and only the research team only. Those willing to participate were able to follow the link provided by the instructor. The hyperlink took them to a questionnaire built in the Qualtrics data management system. The first page of the instrument included a more detailed description of the study, Institutional Review Board (IRB) information, and researcher contact information. Should they wish to continue with the study they

were to agree by “checking” an agreement to continue on to the next page of the questionnaire. Once the survey was completed, a “thank you” page appeared on the link and explained that their participation and their responsibility to the study was concluded. To ensure that no duplication of entries existed, completed surveys were checked by analyzing three demographic points (sex, birth date, and hometown zip code). If duplicates were found, the first completed entry would be retained while all others would be removed from analysis. All survey data were contained on a secure password protected computer, only accessible by the researcher.

Participant biases are possible within any study. Response bias occurs when a respondent answers questionnaire items on some basis other than the specific item content (Paulhus, 1991). To control for this type of bias efforts to assure respondent anonymity and to design a neutral survey with no loaded or leading questions were taken (Paulhus, 1991). To maintain the neutrality of the survey, a group of experts familiar with survey design to evaluate the survey for any potential bias were consulted. Despite efforts made, the researcher accepts that a small level of sampling bias may have been present within the sample selection process. For example, by nature of their involvement in the running club, study participants may have exhibited involvement levels skewed towards the high end of the PCM scale. For this reason, the generalizability of this study was determined by the demographic profile of the study samples. Prior to conducting the study, consultation with other research experts suggested the recruited samples are representative of their populations for the use of this study.

Endurance Event Participants. The next sample group consisted of participants from traditional endurance events. To recruit this group, 11 road running and training

groups in the United States were asked to participate. Running and training groups were chosen because many of these groups are designed to prepare individuals for event participation. Often, the culminating event for a group is a specific event or a collection of endurance events of different distances. These groups are often organized to attract participants from a wide variety of experience and performance levels, from walkers to Olympic athletes (Alexander, 2013; “First Time Here,” n.d.). Experienced runners may join because they find running with the group breaks the monotony of training solo or determine that group coaching may improve their performance. At the same time, new recruits may be encouraged to join the group to stay motivated while training with others running at similar paces or for the social aspects. Altogether, these groups offered different incentives based on the needs of the individual, while still maintaining a common goal, to stay active in endurance activities.

This sample was considered appropriate due to the level of insight they have towards endurance events and event participation. These road running group members were perceived to attract those individuals occupying the middle levels, attraction and attachment, to higher levels, allegiance, of the PCM within a traditional endurance sport context. This sample, combined with the assumed low involved sample recruited from university students was intended to provide a diverse sample of members along all levels of the PCM within traditional endurance events. While high levels of involvement within non-traditional endurance events were not expected, because of their knowledge about endurance events as a whole, these individuals were all thought to have knowledge of and opinions about non-traditional endurance events. Thus, their associations of both event types were used for comparison.

The initial 11 road running and training groups were recruited from various geographical locations across the United States. Due to the potential of low response rates, larger running clubs, as identified by the researcher, were considered. Sizes of these groups could surpass 500 members, while most have an average membership of 150 runners. Should an inadequate amount of participants not have resulted from this recruitment, the researcher would recruit additional survey participants by attending endurance events and distributing surveys and contacting additional road running clubs until 384 endurance event survey participants were surveyed.

Online sampling was deemed appropriate as more research is utilizing social media and online forms of communication to recruit study participants (Clavio, 2011). The researcher sent an introduction email to the leadership of the running groups. Content from this email contained the purpose of the study and the reason for choosing their group to participate (e.g. large membership). The researcher also indicated, should the club participate, an overview of results would be sent to the club leadership upon completion of the study. To participate, each club needed to post the information on its social media sites, such as Facebook and Twitter, as well as send the information out through its newsletter or other methods of frequent correspondence, should the club have such. These posts or messages asked willing study participants to complete a questionnaire about endurance sport participation. They also indicated that participation was completely voluntary. Those wishing to participate needed to follow a provided hyperlink. Those not interested could simply choose to not follow the hyperlink or if already engaged, abandon the study at any point. Once participants reached the questionnaire, contained in Qualtrics, the procedure was identical to that of the student

sample recruitment procedure. Again, participant duplicates were checked by analyzing three demographic points (sex, birth date, and hometown zip code) and, if found, were removed from the data.

In order to reach the recommended sample totals of 384 endurance event participants, a variety of techniques were employed to increase response rate. While online surveys provide certain benefits, they are also known to have low response rates (Dillman, 2007). To accommodate for this disadvantage, the researcher used an incentive and asked the clubs to directly disseminate the study information through a number of channels. The incentive varied by demographic location. The incentive for Central Florida groups was a two complimentary registrations for a 5K event in Orlando. The Louisville Kentucky incentive was a complimentary registration to a local 5K event. For all other endurance groups, the incentive was a complimentary registration to a half marathon event from a nationwide running series in the United States. All survey participants indicating they wanted to be included in the race registration drawing were asked to provide their email address at the end of the survey. This email address was only to be used if their name is drawn as the winner of the race registration, and not to be used for any other purpose. The winners of the registrations were drawn once the researcher determined an adequate amount of survey responses has been collected and no further surveys were being collected.

As mentioned above, a multi-channel announcement was used as a tactic to encourage a higher response rate. The researcher asked the clubs to distribute the announcement through the clubs social media outlets, such as Facebook and Twitter, and any regular correspondence the club has with members, for example, newsletters. The

researcher also asked the club representatives to initiate the call to action, instead of the request coming from an outside non-member such as the researcher. A final measure to solicit a higher response rate was to ask the club representative to send a reminder communication to their membership ten days following the initial announcement. Together, these techniques were used to assist with sample procurement in order to meet the suggested minimums.

Concerns regarding sample representation were addressed by sampling techniques and statistical analysis. A one sample *t*-tests was utilized to compare sample demographics, such as gender and age, with demographics of endurance event finishers in the United States (Running USA, 2013d). To ensure early and late respondents, identified as those responding after the reminder communication, did not differ, a one-way analysis of variance (ANOVA) was conducted to compare the groups (Groves, 2006). These two groups were identified after the data is collected.

Instruments

To encourage maximum likelihood of completed responses, the researcher conducted a field test of the survey instrument. A field test assisted in creating an instrument more likely to be completed by clarifying wording, adjusting instructions to be more understandable, ensuring sufficient detail is provided to the respondent, and addressing issues of survey length (Roberts, 2010).

The questionnaire instrument was administered to undergraduate students who were not a potential sample in the current study in a sport administration course. After completing the questionnaire, they were asked to provide feedback on navigation within the survey, clarity of instructions, item readability, completion time, and general

observations (Roberts, 2010). Specifically, the following questions were asked (Shultz, 2008). 1) Overall, how easy was it for you to access the survey and navigate from page to page? 2) Please describe any technical problems that you encountered while attempting to access or navigate from page to page. 3) Were the directions clear and easy to understand? If not, how can they be made easier? 4) Were there any typographical errors that you discovered? 5) Please share any comments or suggestions you may have that would help make this study more successful.

Following the field test and after suggested survey adjustments were made, sample recruitment began. The two sample groups, university students and running club member, received the same survey instrument. The survey contained three major sections. The first section was comprised of qualifying items to assist with the remainder of the survey. The second section contained variable measures needed to address the research questions. The final survey section held basic demographic items.

Qualifying items in the first survey section included history of event participation. If respondents had no prior endurance event participation history, they were asked if they knew what an endurance event was. Those who indicated they did not know what an endurance event was were finished with the survey and excluded from the results. Those with no participation history but knowledge of their existence were asked to select the likelihood they would participate in a marathon, half marathon, and/or an obstacle course event, even if the likelihood was small. These individuals qualified as occupying the first sample group, non-endurance event participants, and were asked a limited amount of questions in section two of the survey. If respondents indicated they had participated in some type of endurance event, they were asked the qualifying questions including the

likelihood to participate question, then proceeded to the second survey section and completed the demographic questions found in section three.

The second survey section contained the bulk of the questions. This section was used to assess the certain associations survey respondents possessed towards endurance events and measures of important variables contained within the involvement and loyalty process. This portion of the survey contained seven subsections: (a) involvement, (b) attitudinal loyalty, (c) behavioral loyalty, (d) intentions, (e) functional congruity, (f) stereotypical user congruity, and (g) brand personality congruity. Each of these sections is identified in the following text.

The final survey section asked respondents to record their basic demographic information. This included age, sex, marital status, race, number of years participating in endurance events, and previous race participation behavior over the past 12 months. These data were used for descriptive purposes, to determine if the sample was representative to endurance event participant profiles as indicated by Running USA (2013c), and to allow for further analysis of the data.

Involvement. A measure of involvement allowed respondents to be segmented along different levels of the PCM, from awareness (non-event participants or participants with low levels of involvement) to moderate and high levels of involvement. If respondents had not previously participated in an endurance event, as identified in section one of the survey, they were considered to occupy the lowest level of involvement and skipped this section of items.

Laurent and Kapferer's (1985) Consumer Involvement Profile (CIP) was utilized to measure involvement of those respondents with previous endurance event

participation. The original CIP consisted of five involvement components: (a) attraction/pleasure, (b) sign, (c) centrality, (d) risk probability, and (e) risk consequence (Laurent & Kapferer, 1985). Since its creation, the risk components have been debated and removed from multiple studies for practical and conceptual purposes (Beaton et al., 2009; Bodet, 2012; Havitz & Dimanche, 1997; McIntyre & Pigram, 1992). Bodet (2012) suggested the inclusion of risk in the analysis was not appropriate because of its contextual or situational effect. Havitz and Dimanche (1997) identified risk measures as performing poorly in their meta-analysis of leisure involvement. For these reasons, the current study omitted the risk components.

Previous research has supported the validity and reliability of scores from measures based on the CIP. Three studies, in particular, were used to illustrate this in the context of the current study. Beaton et al. (2009) conducted two studies, one with a sample of Australian rugby participants and the second with Greek skiers. In these studies, Beaton et al. (2009) used four items to measure pleasure, sign, centrality, and attitudinal loyalty. While they were unable to test reliability using factor analysis, due to sample size, they did report the correlations between all constructs were weak to moderately positively correlated, indicating they were related but distinct measure (Beaton et al., 2009). The lowest correlation was found in the rugby study, between the pleasure and sign constructs (0.15), while the largest correlation was reported between the centrality and sign constructs (0.71) in the skier study. The Cronbach alpha for each study was as follows; rugby pleasure ($\alpha = 0.62$), rugby centrality ($\alpha = 0.69$), rugby sign ($\alpha = 0.65$), skiing pleasure ($\alpha = 0.75$), skiing centrality ($\alpha = 0.76$), and skiing sign ($\alpha = 0.81$).

Beaton et al. (2011) then modified the measures from four to three items with a sample of over 3,000 runners. Because of this large sample size, Beaton et al. (2011) were able to examine pleasure, sign, and centrality for discriminate and convergent validity. The average variance extracted (AVE) for each construct was above the 0.50 benchmark suggested by Bagozzi and Yi (1998). Pleasure reported an AVE of 0.67, the AVE for sign was 0.57, and the AVE for centrality was 0.55. Also, it was demonstrated that the AVE's for each construct was greater than the square of the correlations between constructs, indicating an appropriate level of discriminate validity has been met. Beaton et al. (2011) also demonstrated the reliability of the three item measures with the following Cronbach alpha's reported well over the 0.70 threshold established by Nunnally and Bernstein (1994); pleasure ($\alpha = 0.86$), sign ($\alpha = 0.86$), and centrality ($\alpha = 0.82$).

Following Beaton et al. (2011), Ridinger et al, (2012) also used the three item measure in their study on 1,190 endurance event runners. The Ridinger et al., (2012) study further suggested appropriate validity and reliability has been established with the three item measures of pleasure, sign, and centrality. Again, the average variance extracted (AVE) for each construct was above the 0.50 benchmark suggested by Bagozzi and Yi (1998). Pleasure reported an AVE of 0.79, the AVE for sign was 0.55, and the AVE for centrality was 0.76. The AVE's for each construct were greater than the square of the correlations between constructs, indicating discriminate validity. Reliability in Ridinger et al. (2012) was also demonstrated with the following Cronbach alphas; pleasure ($\alpha = 0.92$), sign ($\alpha = 0.79$), and centrality ($\alpha = 0.90$).

In the current study, the involvement variables were measured on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) with three items each. The pleasure items were as follows; 1) "I participate in and train for long-distance road running events because I like it." 2) "I really enjoy participating in and/or training for long-distance road running events." 3) "I participate in and/or train for long-distance road running events because I find it pleasurable." These were developed based on Ridinger et al. (2013) and Beaton et al. (2011).

Sign items based on Ridinger et al. (2013) included the following; 1) "A lot of my life is organized around long-distance endurance event participation and/or training;" 2) "Long-distance road running event participation and/or training has a central role in my life;" and 3) "A lot of my time is organized around long distance road running event participation and/or training."

Centrality was measured with three items built from the work of Ridinger et al. (2013) and Beaton et al. (2011). 1) "Being a long-distance road running event participant says a lot about who I am." 2) "You can tell a lot about a person by seeing them participate in/or training for long-distance road running events." 3) "Long-distance road running event participation and/or training gives others a glimpse of the type of person I am."

Mean scores were generated for each of the involvement variables (pleasure, sign, and centrality) to acquire the overall scale score for each. An overall involvement score was not calculated. Instead, each of the scale scores was used to produce the occupancy of an involvement level by using a staging syntax as suggested by Beaton et al. (2009)

and was used in analysis of congruency's role within the involvement process as well as a demographic descriptor.

In their study, Beaton et al. (2009) developed a staging mechanism for PCM with two leisure sport samples. To achieve this, they utilized the scores of the three facets of involvement previously described which, in turn, created individual ranked involvement profiles. The collection of possible involvement profiles were then translated into a staging algorithm to place individuals into one of the four involvement levels. This process was developed to represent the theoretical framework presented by the PCM while providing practical segmentation of leisure activity participants (Beaton et al., 2009).

Attitudinal Loyalty. A measure of attitudinal loyalty, resistance to change, was used to fully connect the involvement/attitude/loyalty process. As indicated by popular leisure activity research (Funk & James, 2001; Iwasaki & Havitz, 1998; 2004), loyalty and commitment were defined as two distinct concepts: (a) attitudinal loyalty and (b) behavioral loyalty. Attitudinal loyalty has been conceptualized as resistance to change and measured using a scale created by Pritchard, Havitz, and Howard (1999) in a travel consumer setting. This measurement has also been verified by Beaton et al. (2009), Iwasaki and Havitz (2004), and Ridinger et al. (2013) in a leisure activity context and was considered appropriate for this study. If respondents showed they had no prior endurance event participation experience, they skipped this section. Those with previous endurance event participation experience were be asked to answer the three items.

Past studies have used both a four item and three item measure of attitudinal loyalty (Beaton et al, 2009; Ridinger et al., 2012). Both the four item measure ($\alpha = 0.79$

and $\alpha = 0.85$) in the Beaton et al. (2009) study and Ridinger et al.'s (2012) three item measure ($\alpha = 0.83$) displayed adequate levels of internal consistency. Ridgner et al. (2012) also suggested the validity of scores from the three item measure of attitudinal loyalty was acceptable, with an AVE (0.66) greater than the square sum of the correlations between constructs.

Three items, each on a seven-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) were used to measure attitudinal loyalty. 1) "My preference for participating in and/or training for long-distance road running events would not willingly change." 2) "It would require major rethinking to change my preference for long-distance road running event participation and/or training." 3) "It would be difficult to change my beliefs about long-distance road running event participation and/or training. A mean attitudinal loyalty score was calculated from the three items."

Behavioral Loyalty. Similar to attitudinal loyalty, a measure of behavioral loyalty was used to fully construct the involvement/attitude/loyalty process. Aside from attitudinal loyalty, behavioral loyalty is an important consumer outcome desired by many organizations. For example, Funk and James (2001) contended that brand loyalty plays a critical role in repeat purchase behavior. Mullin et al. (2014) asserted that understanding how to retain current consumers and moving them to higher brand loyalty levels will result in beneficial financial outcomes for the organization. For this reason, a measure of behavioral intentions was assessed. This component is most similar to intentions within the Theory of Planned Behavior, which Ajzen and Driver (1992) describe as the motivational factors that predicates a behavior.

Rooted in the work of Ajzen's (1991) Theory of Planned Behavior, measures of probability are conceptualized as intentions to perform a behavior. Intentions were measured with two modified items suggested by Ajzen and Driver (1992) along a 7-point Likert-type scale (1 = very unlikely, 7 = very likely). In their study, Ajzen and Driver (1992) measured intentions of five different activities; going to the beach ($\alpha = 0.90$), jogging ($\alpha = 0.95$), mountain climbing ($\alpha = 0.92$), boating ($\alpha = 0.88$), and biking ($\alpha = 0.92$). Each respondent, including both those identified as endurance event participants and non-participants, received items for traditional and non-traditional endurance events based on Ajzen and Driver's (1992) measure of intentions. The two items included, 1) "I plan to engage in long-distance road running training or event participation in the next 12 months," and 2) "I will try to engage in long-distance road running training or events in the next 12 months." The same two items were repeated to ask about obstacle course events participation intention. An intention score was calculated for each event type by calculating the two endurance intention scores for each event type.

Functional Congruity. It has been suggested that consumers make decisions based on both symbolic and utilitarian needs (Aaker, 1996; Keller, 2003). Research has even indicated that in certain situations, the motivations of utilitarian needs, in the form of functional congruity, offer more explanatory power than symbolic needs (Ahn et al., 2013). Therefore, both functional congruity and self-congruity measures were utilized in the current study.

Following the research of Kressman et al. (2006) the current analysis of functional congruity used an ideal-point model evaluating the ability of an activity to fulfill the perceived functional attributes generally expected with endurance event activity

participation. In their study of automobile purchasing, Kressmann et al (2006) measured the functional congruity of the attributes based on previous research. They found a low AVE score (0.329), suggesting possible issues with convergent validity. Still, the AVE score was greater than the squared construct correlation, demonstrating discriminant validity. For measures of internal consistency, Kressmann et al (2006) measured the squared multiple correlations (SMC) of the items. Stevens (1986) recommends SMC values greater than 0.40 as adequate for internal consistency. In Kressmann et al (2006) only three of the five items met this threshold. This indicates further consideration may have been required to collect salient attributes. For this reason, the current study used an exhaustive literature review to find specific functional attributes related to endurance sport participation (Funk et al., 2011; Masters et al., 1993; McDonald et al., 2002; Ogles & Masters, 2000; 2003; Rice, in press; Ridinger et al., 2012; Scanlan et al., 2003; 2013; Summers et al., 1982; 1983). The attributes determined from these studies included: obtaining a sense of achievement, having a fun experience, experiencing a sense of camaraderie, ability to be healthy, and the ability to be in nature.

The functional congruity score were determined by calculating the direct score of the perceived functional associations of a specific endurance event using a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). Survey participants received the following items for the perceived performance of the specific category in the achievement attribute. 1) “Long-distance road running event training and event participation allow me to obtain a sense of achievement.” 2) “Long-distance road running event training and event participation allow me to have a fun experience.” 3) “Long-distance road running event training and event participation provide the

camaraderie I desire.” 4) “Long-distance road running event training and event participation provide me an opportunity to be healthy.” 5) “Long-distance road running event training and event participation satisfy my need to compete.” To produce a total functional congruity score, a mean score from these five difference scores was calculated.

Stereotypical User with Self-Image Congruity. A primary interest of the current study lies within the relationship of the symbolic expressions represented in self-congruency analysis. Hung and Petrick (2011) proposed that both actual and ideal measures of self should be used in an analysis of self-congruity.

The congruency with stereotypical user was measured with two items on a 7-point Likert-type scale (1 = not at all overlapped, 7 = nearly total overlap) and (1 = not at all similar, 7 = nearly total similarity) based on Kang (2002) and Kwak and Kang (2009). Respondents were asked to “Please take a minute to think about the overall image of a typical long-distance road running event participant.” With these pictures in mind, they were asked to please respond to the following items. The first two items were designed to measure actual-self congruity, 1) “How much does your own actual self-image (who you think you actually are) and the perceived overall image of the typical long-distance road running event participant overlap?” and 2) “How similar is your own actual self-image (who you think you actually are) and your perceived overall image of the typical long-distance road running event participant?” Past studies have demonstrated reliable and valid scores using similar measures. In Kang (2002) university students were asked to evaluate measures of self-image congruity for two distinct physical activities. Construct validity was assessed using confirmatory factor analysis. The overall model fit was acceptable [$\chi^2 (29, N = 215) = 79.90, p = 0.00$] and factor loadings for both physical

activities were high (0.86 for the lowest), suggesting discriminant validity. Cronbach alpha levels were also acceptable (actual self-image congruity, $\alpha = 0.88$ and $\alpha = 0.90$ for both activities, and ideal self-image congruity, $\alpha = 0.87$ and $\alpha = 0.91$).

The next two items addressed stereotypical user congruency and ideal-self congruity by asking 3) “How much does your own ideal self-image (who you want ideally to be) and the perceived overall image of the typical long-distance road running event participant overlap?” and 4) “How similar is your own ideal self-image (who you ideally want to be) and your perceived overall image of the typical long-distance road running event participant?” To produce a stereotypical user congruity score for both ideal and actual self-image, the mean from each set of items for their individual measure of stereotypical user congruity (actual self and ideal self) was calculated.

Brand Personality Congruity. The researcher was also interested in the effect self-image congruity had on the perceived associations of a brand. This is conceptualized as brand personality congruity.

Parker (2009) used brand associations to measure congruence with consumers and brands they used on a regular basis. To overcome issues with using different scales to measure both brand personality and respondent self-image, he utilized Aaker’s (1997) 15-item brand personality scale to measure both. However, research, especially in sport, has consistently criticized Aaker’s scale. In particular, Ross (2008) contended the scale is invalid and not generalizable to the sport setting. Additionally, Caprara et al. (2001) suggested brand personality measures are not synonymous with human personality and that the same association may suggest two entirely different meanings under each circumstance.

To overcome these issues, the current measure of brand personality congruity utilized a direct measure of congruence instead of the difference score technique. This measure is supported by the work of Govers and Schoormans (2005) and Sirgy et al. (1997). Following Govers and Schoormans (2005), the current analysis asked all respondents to first 1) “List the personality traits that first come to mind when thinking about a typical long-distance road running event.” Next they were asked to 2) “List the personality traits that first come to mind when thinking about a typical obstacle course event.” These items represented the associations individuals have with the different endurance event types.

To receive the direct congruency measure, the survey then requested respondents to consider the associations they just provided when answering the following three items on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). 3) “A typical long-distance road running event is like me,” 4) “I identify with my description of a typical long-distance road running event,” and 5) “Considering my own personality and comparing it to the description I just provided for a typical long-distance road running event, I find they are similar.” A total brand personality congruity score was calculated for both event types by calculating the mean score from the three items recorded for each event.

This method of analysis has been used in past studies, demonstrating both reliable and valid scores for the construct (Govers & Schoormans, 2005). In their study of consumer products, using similar items, Govers and Schoormans (2005) study produced an acceptable Cronbach alpha score ($\alpha = 0.91$) for brand personality congruity. Validity of the brand personality congruity scale was examined using a principal component

analysis with varimax rotation, which resulted in a one-factor solution with items loading above 0.80 (Govers & Schoormans, 2005).

Analysis

All analyses in this study were conducted with Microsoft Excel or the Statistical Package for the Social Sciences (SPSS 16.0). Specifically, the content analyses needed for Research Questions 1.1 and 2.1 utilized Microsoft Excel. The remaining research questions were analyzed by descriptive statistics (e.g., frequency), multivariate analysis of variance tests (MANOVA), and Cronbach's alpha coefficients (α) by using SPSS 16.0. The treatment of the data was separated into four parts. First, descriptive statistics including means and standard deviations of all variables and involvement PCM level assignments for respondents were calculated. Second, content analysis of responses from open-ended questions were conducted to address the research questions dealing with event associations. Next, the reliability of the involvement scores (pleasure, sign, and centrality) and congruity scores were assessed by examining their Cronbach's alphas. As recommended by Nunnally and Bernstein (1994), Cronbach's alpha levels greater than .70 will suggest acceptable levels of internal consistency have been met. Finally, a multivariate analysis of variance (MANOVA) was utilized to examine the relationship between participant PCM involvement level and the role of congruity.

Non-Event Participant Associations and Behavior

To address research question 1.1 (What associations do non-endurance event participants have for both non-traditional and traditional endurance events?) the researcher conducted a content analysis of the following two survey items provided to non-endurance event participants: "List the personality traits that come to mind when

thinking about a typical long-distance road running event” and “List the personality traits that come to mind when thinking about a typical obstacle course event.” All responses were transferred to Microsoft Excel. Each specific response was labeled as either: 1) non-endurance event participant/traditional endurance event responses or 2) non-endurance event participant/non-traditional endurance event responses.

Research question 1.1 required only responses from non-endurance event participants to be coded. Because of sample size requirement for qualitative coding analysis, it was not likely data from all survey respondents would be used for analysis. Miles et al. (2014) suggested that a sample size number not be set a priori and should instead be dictated by when the researcher feels no new information on the topics of interest are being developed, and a desirable level of confidence in the analytic generalizations has been satisfied. With the first part of the data treatment, descriptive statistics, already conducted, the researcher categorized the non-endurance event participants into three categories based on their likelihood of event participation; traditional endurance event, non-traditional endurance event, or neutral. These categories were determined by which event type they ranked highest. Should all events equal, they were assigned the neutral category.

Once categorized, the researcher proportionately chose respondents from each of the three categories. This type of multi-case sampling is considered to strengthen the precision and trustworthiness of the findings (Miles et al., 2014). First, the researcher randomly chose the data of both association questions from a single respondent representing the neutral category. Coding was conducted, as described below, on that data and a data set from a respondent representing the traditional endurance event

category was randomly selected, followed by a member of the non-traditional endurance event category. This continued until either the data from category representatives had been exhausted or the results of the data analysis reached an acceptable point of saturation.

The coding process, previously mentioned, underwent a two-cycle process. During first cycle coding, individual traits were coded by the in vivo coding method. In this method, the traits listed became codes. Patterns in the data were evaluated and general themes recorded. Next, a second cycle of coding tagged all first cycle codes with an inductive meta-code, or a second-order tag to enrich the entry. These meta-codes were generated from the first cycle emerged themes. Metacoding is considered appropriate for content analysis when further indexing is required for qualitative purposes (Miles et al., 2014). Analytic memos, providing a narrative of researcher decisions, were kept throughout this process.

To answer research question 1.2 [Which type of endurance event category (traditional road running events versus obstacle course events) are those currently not participating in endurance events more likely to participate?], an analysis of non-endurance event participant responses to the following 7-point Likert scale (1 = not at all likely, 7 = extremely likely) survey item “Select the likelihood you would participate in each type of event in the next 12 months.” was used. Specifically, the mean and standard deviations represented each event type (marathon, half marathon, or obstacle course event) option are presented in Table 4.

Endurance Event Participant Associations and Behavior

Research question 2.1 (What associations do traditional road running endurance event participants have for both non-traditional and traditional endurance events?) was evaluated similar to research question 1.1. A content analysis of two survey items, “List the personality traits that come to mind when thinking about a typical long-distance road running event” and “List the personality traits that come to mind when thinking about a typical obstacle course event,” was conducted. Each response was labeled: (3) endurance event participant/traditional endurance event responses or (4) endurance event participant/non-traditional endurance event responses. A sample selection and two-cycle coding process equivalent to that discussed for the non-endurance event participant survey respondents was conducted with the endurance event participant sample.

Research question 2.2 (How likely are traditional endurance event participants to participant in non-traditional endurance events?) was analyzed by descriptive statistics similar to those used in the analysis of research question 1.2. Descriptive statistics, mean and standard deviations were presented on the 7-point Likert scale (1 = not at all likely, 7 = extremely likely) survey item “Select the likelihood you would register and participate in each type of event in the next 12 months” for a marathon, half marathon, and obstacle course event.

To provide additional description of group characteristics, descriptive statistics of the behavioral loyalty (future traditional endurance event participation) scores were also conducted. Specifically, these items include; 1) “I plan to engage in long-distance road running training and/or event participation in the next 12 months” and 2) “I will try to

engage in long-distance road running training or event participation in the next 12 months.” Mean scores from these items were calculated and presented in Table 4.

Traditional Endurance Event Involvement Level and Congruity Relationship

Research questions 3.1 through 3.4 were analyzed with a between-group multivariate analysis of variance, or MANOVA, test to examine the possible differences found between different involvement levels of the PCM of the traditional endurance participant and different types of congruity. A one-way MANOVA with four levels was considered, rather than an ANOVA, because it is able to accommodate more than one dependent variable while controlling for the correlations among them (Vogt & Johnson, 2011). To examine the differences in the congruity effect between the four PCM involvement level levels, the MANOVA utilized a grouping variable, PCM level, as the independent variable. PCM level was calculated based on the method outlined by Beaton et al (2009). The four different types of congruity (functional congruity, stereotypical user congruity with actual self, stereotypical user congruity with ideal self, and brand personality congruity) served as the dependent variables. Through this analysis the researcher was able to determine which types of congruity are most associated with each participant involvement level.

This analysis demonstrated how the PCM level groups differ along the measure of congruity. A statistically significant MANOVA means there is a difference between the groups along some congruity measure. Post hoc analyses were necessary to parse out any specific differences. Because the study was exploratory, interested in finding and highlighting differences, a univariate post hoc analysis was chosen. This type of follow-up analysis showcased the major differences between the groups, which in turn provided

relevant information for practitioners. For example, if both utilitarian associations (functional congruity) and symbolic associations (stereotypical user and brand personality congruity) were found to be significantly different between the PCM levels, marketing communications should be created and targeted towards these groups to address these differences. If individuals at the lowest PCM level of awareness record low functional congruity scores while higher levels demonstrate incrementally higher scores, marketing communications toward the awareness group may be geared towards educating the group about how the activity may provide these benefits. Likewise, other differences between the groups were analyzed to assess how best to communicate with members of each PCM level in order to obtain the desired outcomes of the message sender.

Before results were confirmed, the researcher checked that all assumptions of an MANOVA were met with the current data. The first assumption evaluated the independence of the responses. This assumption was met because the score from one respondent was unrelated to the scores from any other respondent. The second assumption tested if the scores in the population were normally distributed. This was analyzed by reviewing residuals. A visual inspection of the histogram of standardized residual values provided the first evidence of being normally distributed around a mean of zero. Additionally, inspection of the normal p -plot of regression standardized residual values displayed very little deviation of expected values from the observed values because the assumption was met. The final assumption, homogeneity of variances is met when the variance scores across the four level of the PCM are considered not to be statistically different. This was tested with the Box's test. A non-significant result would

indicate that the dependent variable covariance matrices are equal across all four levels of the independent variable (PCM level).

Summary of Method

In summary, the current study utilized a survey designed to examine the associations individuals from two different samples hold towards specific endurance event types along with measures of involvement, loyalty, and congruity held by current endurance event participants. Specifically, surveys were collected from (a) a sample of non-endurance event participants and (b) traditional endurance event participants. The survey contained three major sections. The first section qualified respondents into the sample groups previously listed. The following section measured variables needed to address the specific research questions. The final survey section contained basic demographic items. The researcher used descriptive statistics and a MANOVA to answer the research questions.

CHAPTER IV

RESULTS

The purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Past research has suggested that an identification of the desires and motivations of sport consumers is a significant determinant of sport involvement (McDonald et al., 2002). Understanding salient drivers of attitudes and behavior will allow sport marketers and public health promoters to not only better understand the market, but also allow them to design specifically targeted marketing communication to different consumer groups based on level of involvement. This should aid in the effort to attract and retain activity participant consumers.

The process a sport participant undergoes from non-involvement to involvement to a state of more predictable behavioral intentions or loyalty was of particular interest. The researcher utilized the PCM to segment participants into four involvement levels: (a) awareness, (b) attraction, (c) attachment, and (d) allegiance (Funk & James, 2001). Those within the awareness level were evaluated for the associations they held towards endurance event activities and the likelihood of behavior (i.e., taking part in an event activity). A further analysis was conducted with actual endurance event participants. Not only were their associations and behaviors recorded but a one-way MANOVA also was utilized to investigate the differences between involvement level groups and the role

of self-image congruity within their evaluation of the functional and symbolic associations held towards these activities.

Research Questions

Non-Event Participant Associations and Behavior

RQ1.1: What associations do non-endurance event participants have for both non-traditional and traditional endurance events?

RQ1.2: Which type of endurance event category (traditional road running events versus obstacle course events) are those currently not participating in endurance events more likely to participate?

Endurance Event Participant Associations and Behavior

RQ2.1: What associations do traditional road running endurance event participants have for both non-traditional and traditional endurance events?

RQ2.2: How likely are traditional road running endurance event participants to participate in non-traditional endurance events?

Traditional Endurance Event Involvement Level and Congruity Relationship

RQ3.1: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the functional congruity of traditional endurance events?

RQ3.2: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their actual self?

RQ3.3: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their ideal self?

RQ3.4: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the brand personality congruity of traditional endurance events?

Quantitative Scale Validation

Two research activities were conducted prior to collecting data to ensure the validity, reliability, and readability of the scales used in the current study. First, a panel of experts in survey design was consulted. This panel included sport administration doctoral students and researchers familiar with leisure sport participation studies. The panel was provided information about the study along with a copy of the electronic survey instrument. Based on their suggestions, some item wording was adjusted, stylistic adjustments such as bold and italics were included to reduce confusion between some items, and additional demographic data items were inserted.

A field test was conducted with a group of undergraduate students ($n = 12$) at a Midwestern university. Field test participants were asked seven distinct questions. 1) Overall, how easy was it for you to access the survey and navigate from page to page? 2) Please describe any technical problems that you encountered while attempting to access or navigate from page to page. 3) Were the directions clear and easy to understand? If not, how can they be made easier? 4) Were there any typographical errors that you discovered? 5) Please share any comments you may have that would help make this study more successful. 6) Please list any specific items you had issues understanding or

answering. 7) Provide details to assist the researcher to make appropriate adjustments. The researcher also conducted a focus group interview with the participants where they were encouraged to speak about their experience with the survey and make suggestions for its improvement.

Following this process, the researcher made additional adjustments to the wording of some items and rearranged some of the item order to assist with flow of the survey. Though the sample size was small, the researcher examined internal consistency scores for each of the variables. The PCM measures of pleasure, sign, and centrality, all with three items each, surpassed the recommended acceptable value of 0.70 (Nunnally & Bernstein, 1994). The values for these measures were $\alpha = 0.993$ for pleasure, $\alpha = 0.982$ for sign, and $\alpha = 0.994$ for centrality. Loyalty scores displayed similar high levels of internal consistency with $\alpha = 0.978$ for attitudinal loyalty and $\alpha = 0.996$ for behavioral loyalty. Three of the four congruity scores were also above the 0.70 threshold (Nunnally & Bernstein, 1994). Congruity scores included $\alpha = 0.998$ for functional congruity, $\alpha = 0.861$ for stereotypical user with actual self-image congruity, $\alpha = 0.615$ for stereotypical user with ideal-image congruity, and $\alpha = 0.985$ for brand personality congruity. Despite having low Cronbach alpha scores during the field test, no items from the stereotypical user congruity measures were removed. Instead, stylistic adjustments were made to reduce the possibility of confusing the measures between the two variables. The complete questionnaire used in the final study is located in Appendix A.

Reliability and Validity of Qualitative Analysis

To strengthen the results of the current research, questions about the reliability and validity of the qualitative analysis were also considered. Tactics to confirm the

findings, as suggested by Miles et al. (2014), included providing a procedural account of research activities, checking for analytic bias, inspecting for representativeness, and triangulating the data. Collectively, these efforts helped to ensure trustworthiness of the qualitative results.

To address the first reliability tactic, the researcher provided a full account of the methods and analysis procedures employed during this study. For example, information about the sample selection and coding process were provided.

Next, the researcher was attentive to the possibility of analytic bias and controlled for common forms such as holistic fallacy, personal bias, and elite bias. Holistic fallacy occurs when inconvenient items that are not congruent with hypotheses or existing theory are removed from the final analysis or results. This “lopping off” of data can create an unfair representation and distort findings. With this in mind, the researcher made every attempt to keep and represent all data. Elimination of qualitative data was only done for redundant items. Otherwise, every response was represented in the results.

The next bias the researcher considered was personal bias, which the researcher may inject into the evaluation of data. Efforts were made to acknowledge this possibility, especially because the researcher is familiar with the general topic and may have had his own opinions. This effect was curtailed first by being aware such bias might exist. Secondly, the researcher made conscious efforts to consistently self-evaluate throughout the data evaluation by confirming research outcomes with peers familiar with endurance event research and second guessing all suspicions. Combined, these attempts helped minimize the effect of personal bias in the current research.

The researcher also tried to avoid the final potential bias, elite bias, which occurs when data from certain sources are given substantially more weight than others (Miles et al., 2014). This may be caused because the status of certain participants is not equal with others and/or those with higher ranking or more articulate answers are represented more frequently than others. To avoid this bias, the researcher included all completed response sets from the non-endurance event participant group and randomly selected endurance event participant responses, through a process discussed below, until a point of saturation was met. Thus, effective efforts were made to adequately represent the sample groups. Together, reducing the effect of holistic fallacy, personal bias, and elite bias, should increase the reliability of the qualitative results provided. In total, these forms of bias were avoided by allowing for even representation of the data, which was double checked by trusting the frequency of data codes for the most representative and never dismissing more infrequent codes and themes.

Next, two techniques were used to improve the validity of the qualitative data. Miles et al. (2014) considered using a representative sample as one method to confirm the validity of qualitative data. In the current research, the non-endurance event participant sample was confirmed by asking respondents about their past endurance event participation. Those assigned to this group were a collection of university students and shorter distance running event participants. The endurance event participant sample group was collected from an assortment of geographical locations, an assortment of previous event experiences, and an assortment of involvement levels within the endurance sport participation context. Additionally, demographic data from this group

were compared with national endurance event participant data (Running USA, 2013a; 2013b). This evaluation demonstrated the representativeness of the sample group.

The next technique to achieve valid results was to generate converging conclusions from an assortment of measures by triangulating the data. For this research study, both data and methodological triangulation were applied. First, the purposive sample provided different views into the research questions. Both the non-endurance event participant sample and participant sample consisted of a range of age groups across different regions of the United States. The participant group also spanned three different levels of sport involvement. When data from this diverse group reached a point of saturation, a fair degree of validity was established to the units of analysis.

Methodological triangulation was conducted by using open-ended survey data, the researcher's personal experiences with endurance events, along with sport participation theory (Funk & James, 2001; Iwasaki & Havitz, 2004; Kyle & Mowen, 2005; McDonald et al., 2002; Pelletier et al., 2013). For example, codes and code categories were considered reasonable not only because of their presence in the data but also by checking researcher assumptions with relative theory. Altogether, the data represented reasonable outcomes.

Sample Descriptive Statistics

Data were collected from members of running groups throughout the United States and undergraduate students at a university in the United States. Specifically, leaders of 11 running groups were provided the questionnaire and asked to distribute it through their normal means of communicating with their respective groups. Students in two undergraduate university courses were also presented an opportunity to participate

from their instructor, not the researcher. In total 650 questionnaires were collected. Of those, 38 contained missing responses to key demographic or variable items were considered incomplete and removed from analysis. Of 612 completed questionnaires, 548 had previously participated in an endurance event and 64 had no previous endurance event participation. The endurance event sample size exceeded the minimum requirement of 384 respondents with past endurance event participation as suggested by Dillman (2007) for a generalization to a population greater than 1 million in size, at a 95% confidence level with less than 5% sampling error. The non-endurance event participant sample size met the conservative suggestion of 64 respondents (Western Michigan State University, n.d.; Gerstman, 2003).

Non-Endurance Event Participant Sample Descriptive Statistics

The non-endurance event participant sample was recruited through both running groups in the United States and undergraduate classes at a university in the United States. Individuals were identified as belonging to this group if they indicated they had not previously participated in a marathon, half marathon, or obstacle course event 5K in length or longer. Of the 650 questionnaires collected, 64 fell into this category. The group was comprised of 36 males (59%) and 25 females (41%), with 3 respondents not indicating their biological sex. Reflecting the university student population, the mean age of this group was 25.6 years ($SD = 8.95$). The age distribution of the non-endurance participant sample was as follows: 74% ($N = 46$) between 18 to 24 years of age, 6% ($N = 4$) between 25 to 34 years of age, 13% ($N = 8$) between 35 to 44 years of age, and 6% ($N = 4$) between 45 to 54 years of age..

The non-endurance event participant sample group predominately identified themselves as white. The overall identified race of the sample was as follows: 63 (69%) respondents identified themselves as White non-Hispanic, 11 (18%) as Black non-Hispanic, 3 (5%) Hispanic or Latino, 1 (2%) Asian or Pacific Islander, 1 (2%) as other, and 3 (5%) as Multiracial/Biracial, while 2 respondents provided no response. A full report of demographic statistics for the non-endurance event participant sample can be found on Table 1.

Table 1
Frequency Distributions for Demographic Variables of Non-Participant Sample

Variable	Percent	Total
Sex		
Male	59%	36
Female	41%	25
No Response		3
Age		
18-24	74%	46
25-34	6%	4
35-44	13%	8
45-54	6%	4
55-64	0%	0
65+	0%	0
No Response		2
Ethnicity		
White (non-Hispanic)	69%	43
Black (non-Hispanic)	18%	11
Hispanic or Latino	5%	3
Asian or Pacific Islander	2%	1
American Indian or Alaskan Native	0%	0
Multiracial / Biracial	5%	3
Other	2%	1
Would rather not answer	0%	0
No Response		2

Endurance Event Participant Sample Descriptive Statistics

The second sample included individuals with previous endurance event participation experience. This sample was recruited through 10 running groups located throughout the United States. Individuals were identified to belong to this group if they indicated they had previously participated in a marathon, half marathon, or obstacle course event 5K in length or longer. In total, 548 respondents fell into this category.

The sample consisted of 116 males (22%) and 418 females (78%). Of the total respondents, 14 did not indicate their biological sex. These characteristics are somewhat similar to that of the typical long-distance road race in the United States suggested by Running USA (2013d) who reported half marathon events are comprised of 39% male and 61% female. The distribution between age groups also suggested that survey respondent demographics are similar to the age group distribution of running events in the United States. In the current study sample, 4% ($N = 19$) were between 18 to 24 years of age, 30% ($N = 161$) between 25 to 34 years of age, 33% ($N = 175$) between 35 to 44 years of age, 24% ($N = 131$) between 45 to 54 years of age, 8% ($N = 43$) between 55 to 64 years of age, and 1% ($N = 6$) 65 years of age or greater. This compares to the distribution of event participants in the United States with 9% between 18 to 24 years of age, 27% between 25 to 34 years of age, 26% between 35 to 44 years of age, 18% between 45 to 54 years of age, 8% between 55 to 64 years of age, and 2% 65 years of age or greater (Running USA, 2013d). A comparison of the study sample and population of event participants, as suggested by Running USA (2013d) is presented in Table 2.

Table 2

Comparison of Sex and Age Distribution for Participant Sample

Sex	Sample Percent	Half Marathon Population
Male	22% (<i>n</i> = 116)	39%
Female	78% (<i>n</i> = 418)	61%
Age	Sample Percent	Population Percent
<18		10%
18-24	4% (<i>n</i> = 19)	9%
25-34	30% (<i>n</i> = 161)	27%
35-44	33% (<i>n</i> = 175)	26%
45-54	24% (<i>n</i> = 131)	18%
55-64	8% (<i>n</i> = 43)	8%
65+	1% (<i>n</i> = 6)	2%

Population Percent is based on Running USA (2013d)

Additional demographic data consisted of identified race, event participation history, and PCM level. The sample group's identified race was broken down as follows: 497 (86%) respondents identified themselves as white-non Hispanic, 24 (4%) as black-non Hispanic, 24 (4%) Hispanic or Latino, 10 (2%) Asian or Pacific Islander, 4 (1%) as other, and 17 (3%) as Multiracial/Biracial, while 7 stated they would rather not answer and 63 surveys provided no response. Half marathon, marathon, and obstacle course event participation history was also collected. Survey responses indicated 232 (32% of total survey responses) respondents had previously participated in a marathon, 494 (76%) had participated in a half marathon, and 111 (17%) had participated an obstacle course event. Based on the staging syntax provided by Beaton et al. (2009), the endurance event participant sample was categorized into each of the four levels of involvement or PCM level: awareness (*N* = 24), attraction (*N* = 32), attachment (*N* = 175), and allegiance (*N* = 317). These additional demographic data statistics are presented in Table 3.

Table 3

Frequency Distributions for Demographic Variables of Participant Sample

Variable	Percent	Number
Ethnicity		
White (non-Hispanic)	86%	462
Black (non-Hispanic)	4%	24
Hispanic or Latino	3%	16
Asian or Pacific Islander	2%	10
American Indian or Alaskan Native	0%	2
Multiracial / Biracial	3%	14
Other	1%	3
Would rather not answer		7
No Response		10
Event Participation		
Marathon (past 12 months)	43%	234
Half Marathon (past 12 months)	90%	495
Obstacle Course Event (past 12 months)	20%	111
No Previous Endurance Event Participation	0%	0
PCM Level for Traditional Endurance Events		
Allegiance	58%	317
Attachment	32%	175
Attraction	6%	32
Awareness	4%	24

Response Bias

One final test on the representation of the data was conducted before the full analysis of the research questions. In spite of the efforts by the researcher, such as the use of incentives and follow-up communications, there were a great number of non-respondents--those knowing of the survey's existence but failing to complete the survey--in the current study. A bias exists when the response group differs from the non-response group. For this reason, an analysis of the two groups was needed. Some research has indicated late responders display similar characteristics to non-respondents (Creswell, 2008; Groves, 2006) and may be used as a proxy to examine their

characteristics. In the current study, the researcher conducted analyses between those who responded to the first survey request and those who only completed the survey after reminders. Thus, this group was labeled as “non-responders” because they presumably would have failed to complete the survey if they had not received the reminder. In the current study, four of the 11 endurance event groups solicited for participants were analyzed for response bias. The other groups were excluded from this analysis, as they did not send reminders at the researcher’s request.

A one-way analysis of variance (ANOVA) was conducted to determine whether significant differences existed between the groups. In total, 229 survey respondents were assigned to the initial group and 24 responses were assigned to the non-responder group. The analysis indicated there were no significant differences ($p > 0.05$) between the two groups. Specifically, the analysis indicated there was not a significant difference between the two groups on the pleasure score [$F(1, 220) = 0.990, p = 0.32$], centrality score [$F(1, 214) = 0.359, p = 0.55$], sign score [$F(1, 208) = 3.092, p = 0.08$], attitudinal loyalty score [$F(1, 219) = 0.398, p = 0.53$], behavioral loyalty score [$F(1, 217) = 0.967, p = 0.33$], functional congruity score [$F(1, 206) = 1.908, p = 0.17$], stereotypical user congruity with actual self-image [$F(1, 203) = 0.659, p = 0.42$], stereotypical user congruity with ideal self-image [$F(1, 203) = 0.049, p = 0.83$], and brand personality congruity [$F(1, 200) = 0.317, p = 0.57$]. These results indicate that the survey sample was representative of the population sample, in that, respondents and non-respondents shared no significant differences.

Variable Descriptive Statistics

Survey participants answered items based on their past endurance event participation. The non-endurance event participant sample received items measuring three forms of loyalty (attitudinal loyalty for traditional events, behavioral loyalty for non-traditional events, and behavioral loyalty for traditional events) and four types of congruity with traditional events (functional congruity, stereotypical user with ideal self-image congruity, stereotypical user with actual self-image congruity, and brand personality congruity). In addition to two loyalty and four congruity variables, the endurance event participant sample received items for the three involvement measures (pleasure, sign, and centrality). These involvement measures were used to categorize the sample according to PCM involvement levels: awareness, attraction, attachment, and allegiance.

Loyalty scores indicate the consistency of attitudes toward the activity and behavioral intentions. Each of the loyalty items were measured on a 7-point Likert-type scale, where 1 = strongly disagree and 7 = strongly agree for attitudinal loyalty, and 1 = very unlikely and 7 = very likely for both behavioral loyalty items. The non-participant sample had an attitudinal loyalty for traditional events mean of 4.56 ($SD = 1.61$, $N = 60$) and the participant sample had a mean of 5.48 ($SD = 1.13$, $N = 534$). For the measure of behavioral loyalty for traditional endurance events, the non-participant sample mean of 3.09 ($SD = 2.25$, $N = 64$) and the participant sample had a mean of 6.80 ($SD = 0.78$, $N = 546$). The behavioral loyalty for non-traditional endurance events within the non-participant sample had a mean of 2.76 ($SD = 1.76$, $N = 64$) and the participant sample had a mean of 2.94 ($SD = 2.15$, $N = 528$). These scores are displayed in Table 4.

Four distinct types of congruity with traditional endurance events (functional, stereotypical user congruity with actual self-image, stereotypical user congruity with

ideal self-image, and brand personality congruity) were measured in the current analysis to evaluate the utilitarian and symbolic relationships an individual had with the physical activity of endurance events. Functional congruity was measured with five items on a 7-point Likert-type scale, with 1 = strongly disagree and 7 = strongly agree. The functional congruity for non-endurance event participants yielded a mean = 5.05 ($SD = 1.44$, $N = 60$). The functional congruity for the endurance event participant sample yielded a mean = 6.58 ($SD = 0.55$, $N = 530$). These scores are displayed in Table 4.

The next congruity with traditional endurance events variables measured were the stereotypical user with actual self-image congruity and stereotypical user with ideal self-image congruity. Based on the method utilized by Kang (2002) and Kwak and Kang (2009), each of these measures had two items each on a 5-point Likert-type scale, with 1 = not at all overlapped (similar) and 5 = nearly total overlap (similarity). The stereotypical user with ideal self-image congruity for non-endurance event participants yielded a mean = 2.73 ($SD = 1.13$, $N = 62$). The stereotypical user with ideal self-image congruity for the endurance event participant sample yielded a mean = 3.56 ($SD = 0.87$, $N = 538$). The stereotypical user with actual self-image congruity for non-endurance event participants yielded a mean = 2.36 ($SD = 0.99$, $N = 62$). The stereotypical user with actual self-image congruity for the endurance event participant sample yielded a mean = 3.08 ($SD = 0.86$, $N = 538$). These scores are displayed in Table 4.

The final congruity with traditional events variable analyzed was brand personality congruity. The variable was measured with three items on a 7-point Likert-type scale, with 1 = strongly disagree and 7 = strongly agree. The brand personality congruity for non-endurance event participants yielded a mean = 3.39 ($SD = 1.95$, $N =$

62). The brand personality congruity for the endurance event participant sample yielded a mean = 5.47 ($SD = 1.32$, $N = 536$). These scores are displayed in Table 4.

Involvement measures were only calculated for the endurance event participant sample group. Each of the PCM variables (pleasure, sign, and centrality) were measured with three items on a 7-point Likert-type scale, with 1 = Strongly Disagree and 7 = Strongly Agree. For pleasure, the sample had a mean = 6.31 ($SD = 1.15$, $N = 535$). Sign yielded a mean = 5.48 ($SD = 1.13$, $N = 535$) and centrality resulted in a mean = 5.35 ($SD = 1.45$, $N = 535$). These scores are displayed in Table 4.

Variable Reliability Analysis

The questionnaire contained scales of involvement, loyalty, and congruity shown to be reliable in previous studies, including the pilot study. Still, an internal consistency reliability analysis was conducted with the current data to ensure scale reliability, or the extent to which scale items measure the same construct (DeVillis, 2003). Nunnally and Bernstein (1994) suggested Cronbach's alpha levels of 0.70 or higher as acceptable for internal consistency.

Internal consistency scores were calculated for the three subscales of loyalty, the four congruity subscales, and the three subscales of involvement. The Cronbach's alpha coefficients for the loyalty variables were $\alpha = 0.925$ for attitudinal loyalty for traditional events, $\alpha = 0.987$ for behavioral loyalty for traditional events, and $\alpha = 0.985$ for behavioral loyalty for non-traditional events. The Cronbach's alpha coefficients for the congruity variables were $\alpha = 0.875$ for functional congruity, $\alpha = 0.871$ for stereotypical user with ideal self-image congruity, $\alpha = 0.872$ for stereotypical user with actual self-image congruity, and $\alpha = 0.957$ for brand personality congruity. The Cronbach's alpha for

involvement measures for traditional events were $\alpha = 0.941$ for pleasure, $\alpha = 0.957$ for sign, and $\alpha = 0.876$ for centrality. All Cronbach's alpha scores for the variables were above the recommended threshold of 0.70 suggested by Nunnally and Bernstein (1994) and are displayed in Table 4.

Table 4
Descriptive Statistics of Variables

Variable	Non-Participant Sample			Participant Sample			Total
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	α
Involvement Measures for Traditional Events							
Pleasure				6.31	1.15	535	0.941
Sign				5.48	1.13	535	0.957
Centrality				5.35	1.45	535	0.876
Loyalty							
Attitudinal Loyalty for Traditional Events	4.56	1.61	60	5.48	1.13	534	0.925
Behavioral Loyalty for Traditional Events	3.09	2.25	64	6.80	0.78	546	0.987
Behavioral Loyalty for Non-Traditional Events	2.76	1.76	64	2.94	2.15	528	0.985
Congruity with Traditional Events							
Functional Congruity	5.05	1.44	64	6.58	0.55	530	0.875
Stereotypical User with Ideal Self-Image Congruity*	2.73	1.13	62	3.56	0.87	538	0.871
Stereotypical User with Actual Self-Image Congruity*	2.36	0.99	62	3.08	0.86	538	0.872
Brand Personality Congruity	3.39	1.95	62	5.47	1.32	536	0.957

*5-Point Likert-type scale. All other items 7-Point Likert-type scale.

Data Analysis

In an effort to better understand endurance sport participants and non-endurance event participants, the current study addressed three sets of research questions. The first set analyzed the non-endurance event participants (i.e., individuals with no previous endurance event participation) and their associations held for endurance events and their behavioral intentions. The second set of research questions addressed the associations traditional endurance event participants (i.e., individuals with past endurance event

participation) held towards both traditional and non-traditional events and their likelihood of participating in non-traditional events. The final set of research questions evaluated the relationship between traditional endurance event participant involvement levels and measures of utilitarian and symbolic congruity.

Non-Endurance Event Participant Associations and Behaviors

RQ1.1: What associations do non-endurance event participants have for both non-traditional and traditional endurance events?

The researcher conducted a content analysis of the characteristics that first came to mind when individuals with no previous endurance event experience were asked to think about an endurance event. The questionnaire contained the following items: “List the characteristics that first come to mind when thinking about a typical long-distance road running event (half marathon or marathon)” and “List the characteristics that first come to mind when thinking about a typical obstacle course event (Tough Mudder, Spartan Race, etc.).” To begin data analysis of this research question, the researcher only used responses from those individuals indicating they had no previous participation history in marathons, half marathons, or obstacle course events. Next, the researcher uploaded the non-endurance event participant data from the two questionnaire items from SPSS into a Microsoft Excel document. If individuals did not provide responses for both event types, their data were separated from the full response sets and not analyzed in the initial coding process. This was done to provide balanced data from individuals who only provided responses for both event types. The incomplete data sets were used in later analysis. This initial process provided a total of 36 complete data sets for analysis.

To analyze data from both event types, the researcher utilized a two-cycle process. Saldaña (2013) identified first cycle coding as those codes initially assigned to the data chunks. To begin the first cycle of coding on the traditional endurance event data, the researcher comprehensively read all responses to familiarize himself with the data and to begin making memos about themes and patterns emerging from the data. Next, the researcher used in-vivo coding methods to identify the individual characteristics from the responses. Miles et al. (2014) defined this popular code type, in vivo, as the use of words or short phrases from the respondent's own language. This coding style was chosen in an effort to keep codes as closely connected to the respondent's words as possible. This process produced a total of 101 individual codes non-endurance event participants displayed for traditional endurance events such as long distance road running. Some examples of the most common traditional event codes included dedication, discipline, endurance, exhausting, difficult, and long.

The non-endurance event participant group also produced 86 codes for non-traditional endurance events such as obstacle course events. Two of the most frequent non-traditional event codes were similar to frequent codes found in the traditional group data: dedication and difficult. Also, codes less frequently mentioned in the traditional event data were more common in the non-traditional event data, and included insane, motivation, and fun. Still, some of the most frequently mentioned non-traditional endurance event codes were exclusive to these non-traditional event types: challenging, strong, dirty, messy, and unique.

To ensure all possible codes were accounted for, the researcher reviewed all incomplete data sets, those only providing characteristics for one event type. This

evaluation provided no additional or missing codes from the initial two-cycle analysis. A full list of non-endurance event participant codes is located in Table 5.

From the onset of coding, the researcher kept analytic memos regarding general thoughts about the research. Analytic memos are brief narratives documenting reflections about the data (Miles et al., 2014). Specifically, these memos recorded thoughts pertaining to the data and assisted with theme generation. As more first cycle coding was conducted and analytical insights were recorded, a transition into second cycle coding occurred. Miles et al. (2014) described this shift as occurring when first cycle materials are pulled together into parsimonious groups. This transition allowed the researcher to condense the information into analytic units or themes.

To address the current research question, second cycle coding was conducted at two levels. First, meta-codes were created from the memos taken during the initial reading of the raw data and first cycle coding. The identification of these meta-codes assisted with the organization of the data. While meta-codes could be considered deductive, the next level of second cycle coding, which connected the meta-codes with original first cycle codes, were inductive in nature. During the second level of coding, the connection with individual codes and meta-codes were identified and visually placed under the larger meta-code family. As this process continued, these themes were solidified and confirmed.

A total of nine meta-codes were identified, and included the following: obstacles, physical conditions, demands, mental states, enjoyment, rewards, social, event attributes, and miscellaneous. Non-traditional endurance event data and traditional endurance event data, shared similar meta-codes, these comprised of obstacles, physical conditions,

demands, enjoyment, mental states, and a miscellaneous category. Each data set also exhibited one unique meta-code. While the non-traditional data did have an individual first cycle code for rewards, the traditional endurance event data set contained multiple codes exhibiting reward type recognition from event participation. Thus, the rewards meta-code was assigned to the traditional event data set. The unique meta-codes for the non-traditional endurance event data set included event attributes, such as dirty, muddy, and obstacles. A full list of non-endurance event participant meta-codes is located in Table 5.

By referring to a complete code list and analytic memos, the researcher drafted definitions for each of the meta-codes. Obstacles were defined as the physical, psychological, and social barriers that may block one's efforts or must be overcome to achieve activity participation. Rewards were defined as recognitions received due to activity participation. Demands were defined as the requests to be met in order to achieve activity participation. Physical conditions were the physical demands that may be achieved or required for activity participation. Enjoyment was the possible pleasures found in activity participation. Mental states were the mental conditions exhibited by activity participants. Event attributes were the typical features of the activity, such as dirty, muddy, and obstacles. In an effort to not "lop-off" any data, a miscellaneous meta-code category was created. The miscellaneous category included codes not readily identified under the other themes, such as cool, easy, unique, and confusing.

A complete list of non-endurance event participant codes, meta-codes, and meta-code definitions can be found in Table 5.

Table 5

Meta-Code and Sub-Code Definitions for Non-Endurance Event Participants

Meta-Code	Traditional Codes	Non-Traditional Codes	Meta-Code Definition
Obstacles	difficult* long* painful demanding injury senseless intense miserable tiring training draining	difficult* challenging* expensive intense painful exhausting rough	Physical, psychological, and social barriers that may block one's efforts or must be overcome to achieve activity participation.
Physical Conditions	endurance* exhausting* conditioning grueling lean strength speed	strong* tough physical endurance teamwork	The physical demands which may be achieved or required for activity participation.
Demands	dedication* discipline* commitment determination motivation persistence	dedication* motivation* mental strength will	The requests to be met in order to achieve activity participation.
Mental States	brave insane	crazy*	The mental conditions exhibited by activity participants.
Enjoyment	enjoyable fun	fun* play exciting	Possible pleasures found in activity participation.
Rewards	accomplishment impressive rewarding stress relief	rewarding	The recognitions which may be received due to activity participation.

experience			
Social		social	The feeling of being with others as it related to activity participation.
Event Attributes		dirty* muddy* messy* obstacles long course	Typical features of the activity.
Miscellaneous	extreme intense large crowd gathering	unique* cool easy not a race confusing	Codes not readily identified under the other themes.

*Most commonly referenced codes.

RQ1.2: Which type of endurance event category (traditional road running events versus obstacle course events) are those currently not participating in endurance events more likely to participate?

To address research question 1.2, the researcher evaluated the responses to the item “Select the likelihood you would participate in each type of event in the next 12 months” with a 7-point Likert-type scale (1 = very unlikely, 7 = very likely) of those individuals with no previous endurance event participation. Results indicated that participation in the half marathon event type was most likely to occur within this group of respondents who currently did not participate in endurance events ($n = 66$). This group indicated that they were undecided ($M = 4.12$, $SD = 2.26$) if they would participate in the half marathon in the next 12 months. The second most popular event type was the obstacle course event with a mean of 3.70 ($SD = 1.92$). The least popular event, the marathon, with a mean of 2.15 ($SD = 1.47$) was unlikely to be pursued by this group non-endurance event participants in the next 12 months. Results are presented on Table 6.

Table 6
Descriptive Statistics of Events that Non-Endurance Participants Would Most Likely Participate

Event Type	Mean	SD	N
Half Marathon	4.12	2.26	66
Obstacle Course	3.70	1.92	66
Marathon	2.15	1.47	66

Endurance Event Participant Associations and Behavior

RQ2.1: What associations do traditional road running endurance event participants have for both non-traditional and traditional endurance events?

Research question 2.1 was analyzed in a very similar way to research question 1.1. One difference for the researcher in the question 2.1 analysis was in choosing the sample size. For an individual's response to be eligible for data analysis, two criteria needed to be met. First, in order to address the research question, those responses from individuals with no previous traditional endurance event (marathon and half marathon) participation were removed from consideration. Next, each remaining set of responses for the items "List the characteristics that first come to mind when thinking about a typical long-distance road running event (half marathon or marathon)" and "List the characteristics that first come to mind when thinking about a typical obstacle course event (Tough Mudder, Spartan Race, etc.)" were examined. If an individual did not provide responses for both event types, his or her data set was removed from the initial analysis for this research question. This was done to provide balanced data from

individuals who only provided responses for both event types. The incomplete data sets would be used in later analysis to ensure code lists were complete.

Each remaining data set was assigned a category based on the PCM level of the respondent. In total, 5 awareness level response sets, 11 attraction response sets, 64 attachment response sets, and 126 allegiant responses sets were available for analysis. To ensure representation across all involvement levels, the researcher strategically chose data from each level. Because of their small sample size, all awareness and attraction level responses were included in the analysis. An online random number generator assisted the researcher with randomly selecting response sets from these attachment and allegiant levels until a point of saturation in the data was met.

Data corresponding to the item “List the characteristics that first come to mind when thinking about a typical long-distance road running event (half marathon or marathon)” were moved into one Microsoft Excel document tab, and data corresponding to the item “List the characteristics that first come to mind when thinking about a typical obstacle course event (Tough Mudder, Spartan Race, etc.)” were moved to another tab. All 5 response sets from the awareness level and all 11 response sets from the attraction level were moved out of SPSS and into this Microsoft Excel spreadsheet. The researcher also added 15 response sets from participants in both the attachment and allegiant PCM levels. In total, 46 complete response sets, with answers to both questions, were collected and analyzed.

Similar to the evaluation of research question 1.1, analysis of endurance event participant responses underwent a two-cycle coding process. The first cycle began with the researcher reading the complete collection of all responses. Memos were drafted as

themes began to appear. Next, the researcher utilized in-vivo coding methods to identify the individual characteristics from the responses. This set of 46 responses from the endurance event participant group produced a total of 157 individual codes for the characteristics that first came to mind when thinking about traditional endurance events. A total of 119 codes were produced for non-traditional endurance events. To measure if a point of saturation had been met, the researcher reviewed the response sets not included in the analysis, including incomplete sets. This review indicated that saturation had been met and no additional codes were found in the data to aid analysis of the research question.

The first cycle of codes generated both similar and unique codes between the two event types. Some examples of the most common traditional event codes included challenging, dedication, friends, fun, and social. Challenging and fun were also frequently found to describe non-traditional events. Despite these similarities, the codes also differed. For example, codes such as crazy and strength were less frequently mentioned in the traditional event data while more common in the non-traditional event data. Also, frequently mentioned non-traditional endurance event codes, such as dangerous and dirty, were found exclusively in the non-traditional event type data. A complete list of endurance event participant codes for both event types can be found in Table 7.

After generating individual codes, the researcher reviewed thematic memos and transitioned into second cycle coding. Similar to the technique used for analysis of research question 1.1, meta-codes were created from the themes found throughout the first cycle coding process. For the endurance event participant sample, it was found that

the same meta-codes existed for both the non-traditional endurance event data and traditional endurance event data. These meta-codes included obstacles, physical conditions, demands, mental states, enjoyment, rewards, social, event attributes, and a miscellaneous category. A complete list of endurance event participant codes and meta-codes can be found in Table 7.

Despite having the same meta-codes, the two event types displayed various degrees of similarity and differences under the meta-codes. For example, demands, mental states, and enjoyment all shared similar codes. However, rewards and social meta-codes varied in the number of codes within each meta-code category. Under both meta-codes, the non-traditional codes were also found in the traditional event code list. Nonetheless, the traditional event code list was much more extensive for both meta-codes. For example, codes such as awards, fulfillment, medals, satisfaction, and mental health were found in the traditional code data and not found in the non-traditional data. Similarly, traditional endurance event participants also exhibited more social codes for traditional events than they did for non-traditional events. While fellowship and friends codes were found in both event type data sets, the traditional event data set also included camaraderie, community, and support.

The differences extended to the event attribute and miscellaneous meta-code categories. The traditional event attributes included aid stations, charity, coordination, crowds, and scenic. The non-traditional event data did not share a single individual code with the traditional event. Instead, non-traditional event attributes included codes such as beer, chaotic, cold, dirty, loud, and muddy. Dissimilarities also existed within the miscellaneous meta-code category. The sample of traditional event participant data

suggested characteristics such as sweat, travel, nutrition, and discovery described traditional endurance events. The same sample group viewed non-traditional events differently by providing codes such as adventurous, annoying, cult, egotistical, novelty, and ridiculous to describe non-traditional endurance events.

As done on the analysis of research question 1.1, the researcher drafted definitions for each meta-code. Obstacles were defined as physical, psychological, and social barriers that may block one's efforts or must be overcome to achieve activity participation. Physical conditions are the physical demands which may be achieved or required for activity participation. Demands were defined as the requests needing to be met in order to achieve activity participation. Mental states were the mental conditions exhibited by activity participants. Enjoyment was the possible pleasures found in activity participation. Rewards were defined as recognitions which may be received due to activity participation. Social were the feelings of being with others as they related to activity participation. Event attributes were the typical features of the activity. The miscellaneous category was defined as codes not readily identified under the other themes. A complete list of endurance event participant meta-codes and meta-code definitions can be found in Table 7.

Table 7

Meta-Code and Sub-Code Definitions for Endurance Event Participants

Meta-Code	Traditional Codes	Non-Traditional Codes	Meta-Code Definition
Obstacles	challenging* difficult* pain	challenging* difficult* dangerous* tough* fear hazardous injury pain scary uncertainty unpredictable	Physical, psychological, and social barriers that may block one's efforts or must be overcome to achieve activity participation.
Physical Conditions	endurance* exhilarating* adrenaline athletic energy fit hard work healthy independent lean stamina strength training	endurance* strength* athleticism balance exhaustion	The physical demands which may be achieved or required for activity participation.
Demands	dedication* determination* discipline focus perseverance planning self-motivation	determination teamwork will power	The requests to be met in order to achieve activity participation.
Mental States	brave courageous	crazy* mental toughness	The mental conditions

	crazy		exhibited by activity participants.
Enjoyment	fun* celebration	fun* laughing party	Possible pleasures found in activity participation.
Rewards	accomplishment* medal* rewarding* uplifting* awards confidence fulfillment mental health satisfaction	accomplishment rewarding	The recognitions which may be received due to activity participation.
Social	camaraderie* friends* community fellowship support	fellowship friends	The feeling of being with others as it related to activity participation.
Event Attributes	aid stations charity coordination course crowds hydration long scenic weather	dirty* messy* muddy* beer chaotic cold loud obstacle	Typical features of the activity.
Miscellaneous	shoes sweat travel nutrition discovery	adventurous annoying cult egotistical novelty ridiculous silly	Codes not readily identified under the other themes.

*Most commonly referenced codes.

RQ2.2: How likely are traditional road running endurance event participants to participate in non-traditional endurance events?

To address research question 2.2, an assessment of individual responses from those endurance event participants to the items “I plan to engage in obstacle course event training or event participation in the next 12 months” and “I will try to engage in obstacle course event training or event participation in the next 12 months” were evaluated. Results indicated that non-traditional endurance event participation in the near future was not likely with this group of traditional endurance event participants ($N = 528$), with a mean of 2.94 ($SD = 2.15$).

For comparative purposes, the researcher also analyzed the group’s responses to the items “I plan to engage in long-distance road running training or event participation in the next 12 months” and “I will try to engage in long-distance road running training or event participation in the next 12 months.” Scores indicated traditional event participation was more likely than non-traditional event participation for the group ($N = 546$) in the next 12 months ($M = 6.88$, $SD = 0.78$). Comparing the two group means, a paired samples t -test indicated a statistically significant difference, [$t(527) = 37.913$, $p < 0.001$].

Because this sample group could be split into different PCM levels, and past research suggested high PCM involvement levels suggested more loyalty to an object (Funk et al., 2011), the researcher further evaluated behavioral loyalty differences displayed toward non-traditional endurance events between the groups. To this cause, descriptive statistics for each of the endurance event participant groups were calculated.

Results indicated those traditional endurance participants least involved in traditional endurance events, those in the awareness level ($N = 22$), displayed the highest mean score of 4.20 ($SD = 2.22$), indicating they were undecided to somewhat likely to participate in non-traditional endurance events. The next highest mean score of 3.12 ($SD = 2.23$) belonged to the attachment level ($N = 170$). The attraction group ($N = 170$) demonstrated a mean score of 2.56 ($SD = 2.15$) and the allegiance group ($N = 304$) provided a mean score of 2.79 ($SD = 2.07$).

A one-way between subjects ANOVA test was run to compare the relationship of PCM levels within this sample of traditional endurance event participants on their non-traditional endurance event behavioral loyalty scores. Prior to conducting the ANOVA, the statistical assumptions of ANOVA were assessed: independence, normal distribution, and homogeneity of variance. The first assumption, evaluation of the independence of the responses, is met if the score from one respondent is unrelated to the scores from any other respondents. The researcher reviewed the email addresses provided by respondents wishing to be considered for incentive prizes and the IP addresses of all survey responses. Upon inspection, no two completed surveys displayed similar characteristics. Thus, the assumption of independent scores was met.

The second assumption tests if the scores in the population are normally distributed. The assumption of normality states that each of the dependent variables must be normally distributed for each category of the independent variable. To test for normality, the researcher visually inspected the histogram of standardized residual values as well as utilized the Shapiro-Wilk test of normality. Visual inspection of the histograms indicated various degrees of skewness and kurtosis were present in all variables at each

level of involvement, indicating the assumption has not been met. Significant results of Shapiro-Wilk test scores for each of the four involvement levels on measures of functional congruity, behavioral loyalty towards traditional endurance events, and behavioral loyalty towards non-traditional endurance events were all significant. In sum, the assumption of normality has not been satisfied; however, the ANOVA test is generally robust to these violations (“One-way ANOVA,” 2015) and no changes to the data were made before analysis.

The final assumption, homogeneity of variance is concerned with the equal level of variance of congruity scores across involvement levels. This was tested using the Levene’s Test of Equality of Error Variances. Results indicate Levene’s Test was significant for both attitudinal loyalty towards traditional endurance events ($F = 40.97, p < .05$) and behavioral loyalty towards traditional endurance events ($F = 220.11, p < .05$). A non-significant Levene’s Test for behavioral loyalty towards non-traditional endurance events ($F = 1.44, p = 0.23$) indicated this was the only variable meeting the homogeneity of variance assumption. For this reason, the Welch method, which adjusts the degrees of freedom, was utilized (“One-way ANOVA,” 2015).

The analysis indicated there was a significant effect of PCM levels on the non-traditional behavioral loyalty scores, [$F(3, 524) = 3.828, p = 0.01$]. A Tukey’s post host test revealed the likelihood of non-traditional endurance event participation was significantly different at the 0.05 level between two group sets. First, statistically significant differences existed between the awareness level group ($M = 4.20, SD = 2.22$) and the attraction level group ($M = 2.56, SD = 2.15$). Next, statistically significant differences existed between the awareness level group ($M = 4.20, SD = 2.22$) and the

allegiance level group ($M = 2.79$, $SD = 2.07$). A list of group means can be found on Table 8.

Table 8
Means and Standard Deviations of Non-Traditional Endurance Event Behavioral Loyalty from a Traditional Endurance Event Participant Sample

Traditional Endurance Event PCM Level	Mean	SD	N
Allegiance	2.79 ¹	2.07	304
Attachment	3.12	2.23	170
Attraction	2.56 ¹	2.15	32
Awareness	4.20 ^{2,3}	2.22	22

¹ $p < 0.05$ with Awareness

² $p < 0.05$ with Attraction

³ $p < 0.05$ with Allegiance

The researcher also investigated the attitudinal loyalty and behavioral loyalty the traditional endurance event sample held for traditional events. Results indicated those traditional endurance participants occupying the highest involvement level of traditional endurance events, the allegiance level ($N = 317$), displayed the highest mean score of 6.93 ($SD = 0.54$), indicating they were very likely to participate in traditional endurance events. The next highest mean score of 6.80 ($SD = 0.71$) belonged to the attachment level ($N = 175$). The attraction group ($N = 32$) demonstrated a mean score of 6.70 ($SD = 0.67$) and the awareness group ($N = 86$) provided a mean score of 3.62 ($SD = 2.35$).

A one-way between subjects ANOVA test was run to compare the relationship of PCM levels within this sample of traditional endurance event participants on their traditional endurance event behavioral loyalty scores. The analysis indicated there was a significant effect of PCM levels on the behavioral loyalty scores, [$F(3, 606) = 238.83$, $p < 0.01$]. A Tukey's post host test revealed the likelihood of traditional endurance event participation was significantly different at the 0.05 level between the awareness level and

all other levels. No other significant differences between scores were found. A list of group means can be found on Table 9.

Table 9
Means and Standard Deviations of Traditional Endurance Event Behavioral Loyalty from a Traditional Endurance Event Participant Sample

Traditional Endurance Event PCM Level	Mean	SD	N
Allegiance	6.93 ¹	0.54	317
Attachment	6.80 ¹	0.71	175
Attraction	6.70 ¹	0.67	32
Awareness	3.62 ^{2,3,4}	2.35	86

¹ $p < 0.05$ with Awareness

² $p < 0.05$ with Attraction

³ $p < 0.05$ with Attachment

⁴ $p < 0.05$ with Allegiance

As mentioned, the researcher also investigated the attitudinal loyalty traditional endurance event participants held for traditional events. Results indicated those traditional endurance participants occupying the highest involvement level of traditional endurance events, the allegiance level ($N = 317$), displayed the highest mean score of 6.24 ($SD = 0.54$), indicating they agreed that they were not likely to resist changing their preference for participating in traditional endurance events. The next highest mean score of 5.56 ($SD = 0.85$) belonged to the attachment level ($N = 173$). The attraction group ($N = 32$) demonstrated a mean score of 4.79 ($SD = 1.65$) and the awareness group ($N = 82$) provided a mean score of 4.28 ($SD = 1.67$).

A one-way between subjects ANOVA test was run to compare the relationship of PCM levels within this sample of traditional endurance event participants on their traditional endurance event attitudinal loyalty scores. The analysis indicated there was a significant effect of PCM levels on the behavioral loyalty scores, [$F(3, 600) = 95.89, p < 0.01$]. A Tukey's post host test revealed the likelihood of traditional endurance event

participation was significantly different at the 0.05 level between the allegiant level and all other levels with additional differences between the attachment level and all other levels. A list of group means can be found on Table 10.

Table 10
Means and Standard Deviations of Traditional Endurance Event Attitudinal Loyalty from a Traditional Endurance Event Participant Sample

Traditional Endurance Event PCM Level	Mean	SD	N
Allegiance	6.24 ^{1,2,3}	0.85	317
Attachment	5.56 ^{1,2,4}	0.99	173
Attraction	4.79 ^{3,4}	1.65	32
Awareness	4.28 ^{3,4}	1.67	82

¹ $p < 0.05$ with Awareness

² $p < 0.05$ with Attraction

³ $p < 0.05$ with Attachment

⁴ $p < 0.05$ with Allegiance

Endurance Event Involvement Level and Congruity Relationship

RQ3.1: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the functional congruity of traditional endurance events?

RQ3.2: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their actual self?

RQ3.3: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the stereotypical user congruity of traditional endurance events with their ideal self?

RQ3.4: Is there a significant association between different levels of traditional endurance event involvement (PCM levels) and the brand personality congruity of traditional endurance events?

Research questions 3.1 through 3.4 examined the possible differences between the four involvement levels of the PCM and four types of congruity. To investigate the association between involvement level and congruity, the researcher performed a one-way MANOVA. For this analysis, a grouping variable of PCM level (awareness, attraction, attachment, and allegiance) was utilized as the independent variable. The dependent variables were the four types of congruity: functional congruity, stereotypical user congruity with actual self, stereotypical congruity with ideal self, and brand personality congruity.

MANOVA Assumptions. Prior to running the MANOVA, the assumptions of independent scores, normality of the data, and homogeneity of the variances were verified. For analysis to proceed, Stevens (2009) suggested the responses must be independent from one another, the dependent variables must be normally distributed, and homogeneity of variance assumption must be met. The first assumption, evaluation of the independence of the responses, is met if the score from one respondent is unrelated to the scores from any other respondents. The researcher considered this a possibility with the inclusion of the incentive because respondents may have completed multiple surveys in an attempt to gain additional opportunities to win the incentive prizes. The researcher policed this behavior by reviewing the email addresses provided by respondents wishing to be considered for incentive prizes along with the IP addresses of all survey responses.

Upon inspection, no two completed surveys displayed similar characteristics. Thus, the assumption of independent scores was met.

The second assumption tests if the scores in the population are normally distributed. This was analyzed by reviewing residuals and outliers of the four dependent variables: functional congruity, stereotypical user congruity with actual self-image, stereotypical user congruity with ideal self-image, and brand personality congruity. A visual inspection of the histogram of standardized residual values provided evidence of negative skewness for each variable. Additionally, inspection of the normal p -plot of regression standardized residual values displayed some deviation of expected values from the observed values for the functional congruity and brand personality congruity scores. Stevens (2009) suggested that skewness has only a slight effect on the level of significance in both univariate and multivariate tests. The only exception may be when the distribution follows a platykurtic design, which was not the case with the current data. The effect of the Central Limit Theorem has been considered to extend to multivariate analysis (Rimarcik, 2015), even when sample sizes are as low as 20 observations. Thus, the current analysis, while violating the normality assumption, was considered to be robust and had a negligible effect on the interpretation of results.

The final assumption, homogeneity of variance, is met when the variance scores across the four levels of the PCM are not statistically different. First, this assumption was tested using the Box's M test. A significant result [$F(7.36, 30) = 226.96, p < 0.01$] indicated the dependent variable covariance matrices were not equal across all four levels of the independent variable (PCM level). The Box's M test is heavily influenced by sample size and measures of normality. The current sample displayed non-equal

distribution between the PCM groups and where the variables normally distributed. For this reason, the researcher also inspected the inter-item covariance matrix. This further confirmed that many of the variables displayed differences across the PCM levels. Thus, the assumption of equality of covariance matrices was not met. Stevens (2009) implied that meeting this assumption is very unlikely in practice. Despite this suggestion, some caution was used during evaluation. Stevens (2009) suggested that if the groups with the larger sample sizes display larger variances, as in the current study, the chance of Type I error is reduced and Type II error risk is increased, thus producing larger p values. Because of this violation of the assumption and the unbalanced design, unequal sizes of the PCM level groups, the researcher decided to use the most conservative measure of the Pillai's Trace criterion in the current analysis (Rimarcik, 2015; Stevens, 2009).

MANOVA Analysis. Results from the MANOVA test revealed significant differences in the different types of congruity scores to the different levels of endurance event involvement, where Pillai's Trace = 0.974, $F(4, 583) = 5432.15$, $p < 0.001$. The multivariate partial η^2 was 0.974, suggesting 97.4% of the variance in the dependent variables was accounted for by the levels of involvement. Results of the MANOVA test can be found in Table 11.

Table 11
MANOVA: Congruity Scores by Involvement Levels

Source	DV	SS	df	MS	F	p	η^2
Involvement Levels	Functional Congruity	126.98	3	42.33	82.32	<0.01	0.300
	Stereotypical User with Ideal Self-Image Congruity	62.89	3	20.96	26.82	<0.01	0.121
	Stereotypical User with Actual Self-Image Congruity	64.59	3	21.53	31.21	<0.01	0.134
	Brand Personality Congruity	337.44	3	112.48	62.66	<0.01	0.243
Error	Functional Congruity	301.30	586	0.51			
	Stereotypical User with Ideal Self-Image Congruity	458.00	586	0.78			
	Stereotypical User with Actual Self-Image Congruity	417.61	586	0.71			
	Brand Personality Congruity	1051.92	586	1.80			
Total	Functional Congruity	428.28	590				
	Stereotypical User with Ideal Self-Image Congruity	520.89	590				
	Stereotypical User with Actual Self-Image Congruity	482.20	590				
	Brand Personality Congruity	1389.36	590				

The MANOVA test is an omnibus test and cannot isolate the differences between groups (Swanson & Holton, 2005). In order to determine which specific groups were different from each other, a univariate analysis was needed. The follow-up between groups univariate tests revealed multiple significant differences between the PCM levels and measures of congruity. Specifically, analyzing research question 3.1, a Tukey post hoc analysis revealed significant differences of functional congruity scores between the PCM levels. As the PCM level escalated functional congruity scores also increased: awareness ($M = 5.28$, $SD = 1.38$), attraction ($M = 6.30$, $SD = 0.58$), attachment ($M = 6.44$, $SD = 0.54$), and allegiance ($M = 6.68$, $SD = 0.54$). Differences at the 0.01 alpha level existed between the awareness level and all other levels. Additionally, significant differences occurred between the attraction and allegiance levels ($\alpha < 0.05$) as well as

between the attachment and allegiance levels ($\alpha < 0.01$). There was no significant difference between the attraction and attachment levels along measures of functional congruity. A complete list of functional congruity means and dispersion are found in Table 12.

To analyze research question 3.2, a univariate post hoc analysis for differences between the stereotypical user congruity with ideal self-image scores and involvement level groups was conducted. Results revealed some significant differences between the groups existed. Similar to the functional congruity analysis, scores of stereotypical user congruity with actual self-image increased with PCM level: awareness ($M = 2.91$, $SD = 1.08$), attraction ($M = 2.98$, $SD = 0.86$), attachment ($M = 3.33$, $SD = 0.92$), and allegiance ($M = 3.75$, $SD = 0.81$). Again, multiple significant differences between the scores were present at the 0.01 alpha level. Differences existed between the highest PCM level of allegiance and all other levels. An additional difference, at the 0.01 level, also existed between the awareness and attachment levels. No significant differences were found between the awareness and attachment levels, and no significant differences were found between the attachment and attraction levels. A complete list of stereotypical user congruity with ideal self-image means and dispersion are found in Table 12.

To analyze research question 3.3, a univariate post hoc analysis was conducted to examine potential differences between the involvement groups and scores of stereotypical user congruity of respondent's actual self-image. The PCM level escalated in tandem with the stereotypical user congruity with actual self-image: awareness ($M = 2.38$, $SD = 0.98$), attraction ($M = 2.53$, $SD = 0.80$), attachment ($M = 2.85$, $SD = 0.80$), and allegiance ($M = 3.30$, $SD = 0.84$). The significant test results of stereotypical user congruity with

ideal self-image mirrored that of actual self-image. Differences existed between the highest PCM level of allegiance and all other levels at the 0.01 alpha level. An additional difference existed between the awareness and attachment levels at the 0.01 alpha level. No significant differences were found between the awareness and attachment levels, and no significant differences were found between the attachment and attraction levels. A complete list of stereotypical user congruity with actual self-image means and dispersion are found in Table 12.

Investigation of the final research question 3.4 also required a univariate post hoc analysis to examine potential differences between the brand personality congruity scores and involvement level groups. Once again, the PCM level escalated in tandem with the brand personality congruity scores: awareness ($M = 3.53$, $SD = 1.87$), attraction ($M = 4.85$, $SD = 1.21$), attachment ($M = 5.18$, $SD = 1.32$), and allegiance ($M = 5.79$, $SD = 1.18$). Analysis revealed significant differences did exist between all but one of the group combinations. Only the scores between attraction and attachment were not statistically significant at the 0.01 alpha level. Every other level combination exhibited a significant difference at the 0.01 alpha level. A complete list of brand personality congruity means and dispersion are found in Table 12.

Table 12
Descriptive Statistics for Univariate Analysis

Involvement Level	Functional Congruity		Stereotypical User with Ideal Self-Image Congruity		Stereotypical User with Actual Self-Image Congruity		Brand Personality Congruity	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Allegiance	6.68 ^{1,3,5}	0.54	3.76 ^{1,2,3}	0.81	3.30 ^{1,2,3}	0.84	5.79 ^{1,2,3}	1.18
Attachment	6.44 ^{1,4}	0.54	3.33 ^{1,4}	0.91	2.85 ^{1,4}	0.79	5.18 ^{1,4}	1.32
Attraction	6.30 ^{1,6}	0.58	2.98 ⁴	0.86	2.53 ⁴	0.80	4.85 ^{1,4}	1.21
Awareness	5.28 ^{2,3,4}	1.38	2.90 ^{3,4}	1.07	2.42 ^{3,4}	0.98	3.53 ^{2,3,4}	1.87

¹ $p < 0.01$ with Awareness

² $p < 0.01$ with Attraction

³ $p < 0.01$ with Attachment

⁴ $p < 0.01$ with Allegiance

⁵ $p < 0.05$ with Attraction

⁶ $p < 0.05$ with Allegiance

Summary of Results

To examine the research questions of this study, both quantitative and qualitative analyses were utilized. Specifically, a content analysis was conducted to determine what associations both non-participants and participants of traditional endurance events held for two different types of endurance events: traditional and non-traditional. Also, a quantitative analysis of future behavioral likelihood and intentions for both non-participants and participants of traditional endurance events was conducted. Further quantitative analysis was used to determine if significant differences existed between individuals occupying various endurance event involvement levels and four different types of congruity.

The qualitative analysis revealed that non-endurance event participants viewed traditional and non-traditional endurance events with similar and distinct associations. Both event types were considered to share obstacles to participation and required the participant to demonstrate an array of physical and mental demands, while still finding

sources of enjoyment for participation. The group also acknowledged the potential to receive rewards and recognition from traditional endurance event participation, while no such rewards were mentioned for non-traditional events. Conversely, this non-endurance event participant group was able to recall a number of event features for the non-traditional event category, such as dirty and obstacles, while zero event attributes were mentioned for traditional endurance events.

Analysis of the qualitative data for the traditional endurance event participant group revealed that differences and similarities between how they viewed each event type also existed. The associations provided by the group fell into nine metacode thematic categories: obstacles, physical conditions, demands, mental states, enjoyment, rewards, social, event attributes, and miscellaneous. Overall, this traditional endurance event participant group held a greater number of associations with traditional endurance events than with non-traditional events. This was most noticeable within the physical conditions, demands, rewards, and social thematic categories. Despite this, the obstacles category displayed far more associations for the non-traditional event type than for traditional events. While both event types were considered to be challenging and difficult, non-traditional events were also thought to be dangerous and unpredictable.

The quantitative analysis began by reviewing behavioral loyalty towards endurance event participation from both those individuals with previous endurance event experience and those with no experience. Descriptive statistics revealed that individuals not currently participating in endurance events would more likely participate in half marathons before either obstacle course events or marathons. The marathon was the least likely of these events to be chosen by current non-participants. A second analysis

reviewed the behavioral intentions of current traditional endurance event participants. Results indicated the group displayed high levels of loyal behavior towards traditional endurance events, while their likelihood of non-traditional endurance event participation was not very high.

A MANOVA was used to determine if differences existed in four different types of congruity based on level of traditional endurance event involvement. Results indicated significant differences were present in each of the four types of congruity (functional congruity, stereotypical user congruity with ideal self, stereotypical congruity with actual self, and brand personality congruity) based on level of endurance event involvement. Overall, scores of congruity grew in coordination with the PCM level of the individual. Specifically, those within the highest involvement level, allegiance, displayed significant differences, at the 0.01 level, between all other levels along each congruity score. No significant differences existed between those occupying the attraction and attachment levels within each congruity measure.

CHAPTER V

DISCUSSION

The purpose of this study was to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role self-congruity between individuals and their functional and symbolic associations perceived with the activity plays in this process. Additionally, a construct of self-congruity with functional and symbolic associations perceived with an endurance event was analyzed as to how was associated with different levels of involvement. To investigate this involvement process, along with the attitudes and behaviors of endurance event participants and non-participants, three sets of research questions were devised to guide the study: non-event participant associations and behavior, endurance event participant associations and behavior, and traditional endurance event involvement level and congruity relationship. Qualitative and quantitative analyses of the results were conducted to produce implications relative to the study topic.

Analyses of Results

A number of interesting findings were presented in the current study. The following sections will identify important results affiliated with each research question and explanation of these results. After this brief review of results, theoretical and managerial implications will be presented. Suggested examples of managerial implications in action will be provided where appropriate. Together, this process should highlight relevant information found in the study pertaining to the process of endurance event activity involvement.

Non-Event Participant Associations

Research Question 1.1 was concerned with the associations non-endurance event participants have for both non-traditional and traditional endurance events. Results indicated these individuals held a variety of associations for both event types. The two event types shared a considerable amount of associations, while unique associations were also present. Non-endurance event participants expressed associations such as fun yet difficult and challenging for both event types. However, they only suggested rewarding outcomes for participation in traditional endurance events.

Similarities between event types. Both event types were considered to be enjoyable yet demanding with multiple obstacles to overcome for participation. Specifically, this group of non-endurance event participants considered both event types to be fun. One common association found between the two event types, considered a benefit of activity participation, was in the enjoyment perceived by activity participation. The current findings align with past research suggesting endurance event participants participate for hedonic pleasure (Masters et al., 1993; Ogles & Masters, 2003; Rice, in press; Ridinger et al., 2012). Both events types are encouraged to continue highlighting elements of play, excitement, and social aspects of their events in marketing communications aimed towards non-participant populations.

Still, the large number of possibly negative associations found for the events overshadowed this single similarity. These conceivably undesirable associations included a certain amount of dedication, strength, and endurance thought to be required for participation. The events were also considered to be difficult, challenging, and painful. It is possible these requirements and demands should be considered constraints to

activity participation. These constraints could be the key to understanding more about the reasons this group does not participate in endurance event activity. While the study questionnaire did not specifically ask for these reasons it is very likely inferences from the current analysis of associations can generate details about their non-participation. Crawford, Jackson, and Godbey (1991) suggested these constraints play an important role on activity choices, while Hubbard and Mannell (2001) advocated for the development of constraint negotiation to minimize or remove their influence.

Past research has indicated the influence constraints may have in limiting participation in leisure sport activities (Jackson, 1988; Jackson, Crawford, & Godbey, 1993), which may explain the non-participant nature of the current group. The current results found event associations with constraint qualities affiliated with the intrapersonal and structural constraints suggested by Crawford et al. (1991). Intrapersonal constraints were said to include the existence of perceived physical limitations or skills of the individuals (Crawford et al., 1991). The current study found non-endurance event participants perceived both events types to be challenging, difficult, potentially painful, and exhausting. Less present was the structural constraints of resources required for participation, as non-traditional events were considered expensive and could possibly limit activity participation.

To reduce their influence, constraints need to be negotiated or minimized to a point where they may be overcome or managed to a point as to not to interfere with participation. Because constraints in the current analysis are derived from results of brand association recall, the current discussion focuses its efforts on constraint negotiation within a model describing how brand association are generated. Plummer

(2000) suggested that a brand's presentation to consumers is interpreted through many different filters, experiences, perceptions, and value systems. Ross (2006) contended that brand associations are a direct result of three categories of antecedents: those which are organization induced, experience induced, and market induced. Organization induced elements are those which are directly produced by the organization. Conversely, market induced antecedents are generally uncontrollable by the organization, as they are sources of information the consumer uses to obtain information which are not created by the organization, such as word of mouth. Experience induced elements are those directly related to the service experience of the consumer. The current study did not investigate this process and the effects of each antecedent in full, but results did present outcomes of this process in the form of negative and positive brand associations.

Should program or event producers wish to adjust held associations, they should attempt to do so through these three avenues. However, practitioners have varying degrees of control over each of these categories. Due to the unpredictable nature of market induced and experience induced antecedents, organizational induced antecedents, or those elements of the marketing mix directly produced and controlled by the organization, are considered particularly important in the present discussion.

Based on these brand association antecedents, practitioners are encouraged to develop marketing communications or programs addressing negative associations, such as constraints and concerns of non-participants. For example, long-distance running event managers should continue to develop training programs and information sessions with local running stores and corporate wellness programs. Information sessions should address the inclusive broad appeal of the event by highlighting the diversity of event

participants. Particular focus could be given to the wide range of ages, shapes, and sizes of participants. Additional information can be provided about typical training programs for the event type as well as past success stories and completion rates of such programs. These tactics should assist with mitigating the influence of these intrapersonal constraints perceived by non-participants.

To address the financial constraint suggested by the study, event producers are urged to develop creative pricing strategies targeted to different non-participant groups. For example, student and retired populations are often living under fixed or reduced incomes and may be affected by financial constraints. Managers should produce discounts programs and creative pricing strategies aimed at these groups. For example, students may be enticed to participate in word-of-mouth referral programs if they can obtain registration fee discounts. Likewise, discount programs should be created for lower-income level neighborhoods to attract individuals who may otherwise be priced-out of participating in the activity. These programs may use a variety of local resources available. Local, regional, or even national grants may be garnered to subsidize program costs or activity registration fees.

Differences between event types. Despite the event types sharing these similar constraints, different associations non-participants held between the two event types were also present. The group acknowledged the potential to receive benefits from activity participation. The benefits included rewards and recognition from traditional endurance event participation, such as a feeling of accomplishment and stress relief. Interestingly, no such rewards were mentioned for non-traditional events. Similar associations have been used to describe motivations for endurance participation in past research and are

considered to be main sources of motivation for participants (Rice, in press). As suggested by Ross (2006), brand associations are produced by a variety of antecedents. Practitioners should utilize multiple marketing strategies to develop intended brand associations.

Traditional event managers are encouraged to continue to produce opportunities for participants to feel they have accomplished something and have been provided an experience. As previously mentioned, marketing communications may be utilized to influence organizational induced antecedents for brand associations. Using words such as accomplishment, achievement, and experience in marketing communications may assist with this endeavor. Experience based antecedents are also suggested to effect brand associations. Extending a single event into a unique race weekend may change the experience by providing greater opportunities for accomplishment and experiences for participants. Shorter runs, such as 5K or 10K events, can be added to the event schedule. Individuals who participate in all events may be provided additional medals. Families or couples who participate together may also receive unique acknowledgement awards and post-event recognition from race officials. In effect, these techniques may also influence the most elusive brand association antecedent (Ross, 2006), the market induced.

Conversely, non-traditional endurance events are challenged to increase awareness about the rewards affiliated with participating in their events. Colloquially, marathons are known as “an everyman’s Everest” and half marathon completion is also considered an accomplishment by many, but non-traditional events do not have a distinct image of accomplishment in the minds of non-participants. The source of this image was not investigated in the current research. However, it is important to consider why these

perceptions exist and how managers may deal with them. The lack of reward associations affiliated with non-traditional endurance events may be due to their inconsistent nature. Events such as mud runs and obstacle course events vary in length, format, number of course obstacles, types of course obstacles, and a variety of other event attributes. Without a uniform set of event characteristics, it may be difficult for consumers to generate associations for the entire category. For this reason, it is suggested that non-traditional endurance events need to build a brand identity for the category. The term “mud run” or “obstacle course event” is considered too generic and should not be used by these events. Instead, more descriptive categories should be created and used by these event types. For example, long-distance events such as Tough Mudder are suggested to adopt terms such as tactical, distance, endurance, and similar descriptive expressions to express their event category. This should also create separation from shorter mud runs which may cause confusion in the mind of non-participants when thinking about the category.

Non-Event Participant Behavior

A quantitative analysis was used to understand non-endurance event participant potential behaviors, Research Question 1.2. Descriptive statistics revealed that behavioral intention scores from this group were higher for the half-marathon compared with those scores representing participation intention in either obstacle course events or marathons. Still, these scores did not indicate future participation was likely. Individuals not currently participating in any endurance events stated they were undecided about their participation in half-marathons and obstacle course events, while the group indicated they were unlikely to participate in a marathon within the next 12 months.

This result is interesting because of recent growth trends in non-traditional endurance event participation (Branch, 2010). As previously discussed, this group of non-participants considered both event types to not only be fun, but to also have similar negative associations affiliated with them. While both events faced similar physical requirements, demands, obstacles, and constraints for participation, these non-participants may be more likely to participate in half marathons for two reasons. First, the analysis of brand associations revealed the group indicated greater rewards for traditional endurance event participation. Past research has held this is a common motivation for leisure sport activity participation (McDonald et al., 2002; Ogles & Master, 2003; Rice, in press; Ryan & Deci, 2000) and could be the deciding factor for this group. Second, distance of events could also be taken into consideration. Half marathons by definition are 13.1 miles in length. The full marathon is double the distance, and the event this group of non-participants is least likely to participate. Obstacle course event distances vary in length, between 5 kilometers and 26 kilometers (or 13.1 miles). It could be study respondents would be more willing to commit to a 13.1 mile traditional road race as opposed to an undisclosed distance for an obstacle course event.

Understanding this result is important to a number of individuals. One motivation of the current study was to continue to explore the utilization of mass participatory events to aid in producing health interventions in the United States. Past research has discovered that mass participant endurance events have the potential to promote positive attitudes towards exercise and strengthen activity interest across a range of fitness levels (Funk, Jordan, et al., 2011). The current research investigated the potential non-endurance event participants would chose to participate in three different endurance event

types. This group demonstrated they were not likely to participate in marathon events or obstacle course events in the near future. However, they were undecided about their participation in half marathons. Despite the tremendous growth of the obstacle event category (Branch, 2010) and marathons (Running USA, 2013a), public health practitioners and researchers interested in developing programs or research on this topic should focus their efforts on shorter distance endurance events such as half marathons.

Combining the results of RQ1.1 and RQ1.2 with past research suggesting more long-term approaches in generating positive health outcomes are needed (McLeroy et al., 1988), the half marathon is proposed as the endurance event mostly likely to have the potential to produce positive results within an ecological approach. The social ecological model approach is considered to be a behavioral framework evaluating the complex interplay between five levels influencing an individual's decision making: intrapersonal, interpersonal and primary groups, institutional factors, community factors, and public policy (McLeroy et al., 1988). While the infrastructure built into and around endurance sport participation may positively influence each level of the ecological model (Alexander, 2013; "Alumni," 2014; Masters et al., 1993; Ogles & Masters, 2000) the current results applied mostly to influence at the intrapersonal level.

This ground level of influence within the social ecological model contains the traits of the individual such as knowledge, attitudes, self-concept, and developmental history (McLeroy et al., 1988). Results of this study indicated the non-endurance event participant group holds many constraints toward endurance event participation. Practitioners wishing to reach this group and encourage activity participation should utilize the brand association antecedent tactics based on Ross' (2006) brand equity

model, expressed above, within a half marathon event setting. Because non-event participants have limited experience and interaction with the event itself, efforts should be focused on organizational induced antecedents. This would include developing marketing communications along with education and training programs aimed to reduce constraints around half marathon participation. As an effect, experiences need to be aligned with these marketing communications. For example, should a campaign targeted to the recruitment of new participants focus on the safety of event participation, extra efforts will need to be made to ensure the events are safe. Positive messaging followed by a positive experience has the potential to create positive market induced antecedents.

Endurance Event Participant Associations

In Research Question 2.1, the examination of endurance event associations and behaviors was extended to those currently participating in traditional endurance events. An analysis of associations held by endurance event participants towards both event types suggested the group held similarities and differences between the events. Yet, these similarities and differences were distinctive from those found with the non-participant group. The associations were similar in that the traditional endurance event participant group provided a much greater assortment of associations for traditional events. Still, common associations such as challenging, difficult, pain, endurance, strength, determination, crazy, fun, accomplishment, and friends to describe both event types. The event type associations differed in the amount and diversity of codes provided for each thematic meta-code category, especially for traditional endurance events. Unique codes were also found within the participant data, compared with the non-participant results.

Similarities between event types. Traditional endurance event participants suggested both event types provided an opportunity to have an enjoyable experience at a cost. Despite the ability for both event types to be fun while also providing a social outlet and opportunity to feel a sense of accomplishment, associations such as challenging, difficult, pain, endurance, strength, determination, and crazy were also suggested for the events. The current results confirm past research suggesting participation is a result of motivations such as social facilitation, enjoyment, and sense of achievement (McDonald et al., 2002; Ogles & Master, 2003; Rice, in press; Ryan & Deci, 2000). Additionally, as discussed within the analysis of Research Question 1.1, constraints, found to hinder participation unless they are managed or minimalized (Jackson, 1988; Jackson, et al., 1993), exist within the participant data.

Traditional endurance event participants indicate their awareness of certain constraints for both event types. These events are considered to be both challenging and difficult, requiring certain amounts of strength and endurance, and demand dedication and motivation to participate in the activity. Interestingly, these constraints are similar to those found within the non-participant group, yet they have not inhibited this group from participating in traditional endurance events. This suggests that constraints may be rather neutral in their lasting effect. The current results supply indirect support for Hubbard and Mannell's (2001) claim that constraint negotiation may have the ability to minimize or remove constraint influence and Funk and James (2001) assertion that higher involvement levels demonstrate higher levels of loyalty and constraint management. It seems these traditional endurance event participants do not allow these constraints, especially of the physical requirements certain demands, to dictate their participation in

these events. However, the group indicated a unique list of obstacles which may prevent them from participating in non-traditional endurance events. These differences are covered in the following section.

Common association found between the two event types, and mentioned as motivations for activity participation in past research (Masters et al., 1993; Ogles & Masters, 2003; Rice, in press; Ridinger et al., 2012), are the benefits associated with participation. These included enjoyment, social facilitation, and sense of accomplishment found in participating in both event types. Differences between the two event types, which are discussed in the following section, were noted in the amount of depths of associations provided for each category. Both events types are encouraged to continue highlighting the beneficial elements of participation. Traditional endurance events should remind participants why they engage in the activity and specific events may focus on how they differ along these associations from other events within the category. Non-traditional endurance events should use these commonalties to their advantage. Because of their limited presence, it could be that many endurance participants do not perceive these same benefits within non-traditional endurance events. For this reason, these non-traditional events continue to feature these benefits in marketing communications while minimizing the effect of more debilitating constraints, as is discussed in the following section.

Differences between event types. Despite sharing many similarities between the event types, and also with non-endurance event participant data, a number of differences in perceived associations from the endurance event participant data did exist. Most notable and as might be expected, due to their familiarity with the event, this group of

endurance event participants held a greater number of associations for traditional endurance events than for non-traditional events. While each thematic meta-code category was represented in both event types, it was evident more codes were present within the physical conditions, demands, rewards, and social categories for the traditional endurance event types. The only meta-code category containing more codes for non-traditional events than traditional events was the obstacle category. There were also unique perceptions exemplifying the negative attitudes some traditional endurance event participants held for non-traditional events.

Constraint differences. As previously noted, possible constraints such as challenging, difficult, endurance, strength, and determination were noted for both event types. However it seems the traditional endurance event group, because of their participation, has demonstrated the ability to negotiate these constraints. Still, differences in constraints and benefits, which may inhibit activity participation, were found between the two event types.

The most common obstacle codes for both event types were that they were challenging and difficult. While the event types shared these associations, and were still able to negotiate them for traditional endurance event participation, the group held a greater number of obstacles for non-traditional events. These new obstacles, not affiliated with traditional endurance events, were that the group commonly perceived non-traditional endurance events to be dangerous and tough were commonly expressed. Less frequently mentioned, but unique to non-traditional events were associations such as scary and unpredictable. It could be that these unique associations are the difference between participating in the event and not participating. It is possible that traditional

endurance event participations choose events such as marathons and half marathons because of their rather conventional nature. Most traditional events are transparent in that they provide course maps with exact locations of aid stations, mile markers, and elevation profiles. Most of these events are also standardized in the medical support which is provided and race day event schedule. However, obstacles course events may surprise participants with new obstacles on event-day and each event is different based on the unique elements offered by the event location. It is possible, these unknown factors cause anxiety and distrust in traditional event participants.

A few unique associations within the miscellaneous meta-code category are worth mentioning. Traditional endurance event participants perceived non-traditional events to be annoying, ridiculous, annoying, and have cultish behaviors. These are rather severe associations and clash with other positive associations, such as rewarding, enjoyable, and social, also found to describe non-traditional endurance events. This dichotomy may be caused by two things. First, traditional endurance event participants may be projecting negative associations onto these events to protect their own image within the traditional endurance event community. They may wish to uphold traditional events dominant role by criticizing these events. Second, they may be ignorant about these events and adopt unwarranted associations held by others. Either way, the existence of such negative associations should cause concern and be addressed by non-traditional endurance event producers.

In order to overcome such negative associations it is important to understand how they were formed. Because of their level of endurance conditioning, traditional endurance event participants may be more physically adept to participate in these events

than many non-participants. Thus, they represent attractive prospects as future non-endurance event participants, and may help maintain recent growth trends within the non-traditional endurance event market. However, research on constraints have indicated they may have a role in limiting participation in leisure sport activities (Jackson, 1988; Jackson, et al., 1993).

As previously discussed, Ross (2006) suggested associations are produced by three categories of antecedents: those which are induced by the organization, experience induced, or market induced. Thus, these associations have been generated from a combination of these influences to produce a rather negative association. Practitioners should first focus efforts on adjusting or creating associations through the market induced antecedent, which they have greater control. To minimize the fear and instability associations found in traditional endurance event participants, non-traditional event producers should produce marketing strategies aimed towards educating traditional endurance event participants about the rigorous safety measures and procedures they provide their events. Additionally, in an attempt to protect the category brand, non-traditional endurance event producers should work together to establish a national organization to accredit courses which meet high safety standards and have a proven history of being safe. These activities may protect the category brand by producing events standards which, because of their exposure, may eliminate smaller and less vigilant event producers from contaminating or sullyng the category brand. As a result, the unpredictable and dangerous associations held by this valuable group of prospective participants should be positively mitigated.

Rewards category differences. Major differences in the amount of codes were also found within the rewards and social meta-code categories. The rewards meta-code category is important because of its ability to motivate participation. Past sport consumption scales, such as Ryan and Deci's (2000) Sport Motivation Scale, suggested individuals were intrinsically motivated to activity participation because they had a need to seek out challenges, exercise their own capabilities, and explore. Similarly, the Sport Consumption Motivation Scale (McDonald et al., 2002) posited that activity participants may fulfill self-esteem needs by elements of competition and achievement found in participation. Using the Motivations of Marathoners Scale (MOMS), Ogles and Master (2003) found some of the most important motives for running were the ability to achieve a personal goal, to feel proud of themselves, and to feel more confident.

In line with past research, the current results indicate traditional events were most commonly considered to offer a number of rewards for participation, including accomplishment, medal, rewarding, and uplifting. Less common rewards included awards, confidence, and fulfillment. The only associations shared with the non-traditional event type were accomplishment and rewarding, even though these were not commonly mentioned by the study respondents. These results echo the associations provided by the non-participant group. Because of their prevalence in past research (McDonald et al., 2002; Ogles & Master, 2003; Ryan & Deci, 2000) and the current results, as previously discussed, both event producers should continue to produce opportunities for participant accomplishments through additional challenges and recognition. Both event types should produce a variety of distinct medals, which seem to be important to event participants.

Finisher medals and finisher clothing not only allow the participants to remember their activity achievement but also advertise such achievements to others.

Non-traditional endurance events are also encouraged to demonstrate additional positive benefits of activity participation. Traditional endurance event participants indicated they associated feelings of fulfillment, accomplishment, and confidence from traditional endurance event participation. Non-traditional event managers produce marketing communications which focus on the positive benefits their participants experience from participation. While results of the current study did not provide this information, it is possible that non-traditional endurance event participants feel a similar sense of accomplishment and fulfillment. It is suggested that non-traditional endurance events produce marketing campaigns which communicate how rewards of non-traditional endurance event participation may be similar to the rewards they experience with traditional endurance events. This would allow non-traditional events to bridge this gap and differentiate themselves on other characteristics.

Social category differences. Another association meta-code category found in past research (McDonald et al., 2002; Ogles & Masters, 2003) as well as the current results, which was more diverse for traditional events, was the social category. Based on Maslow's (1943) grand motivational theory of human needs, McDonald et al. (2002) offered social facilitation as a motivator for sport participation. The MOMS has also demonstrated the influence of social affiliation in an endurance sport setting (Ogles & Masters, 2000).

The current results support these past suggestions, while also providing analysis between two event types within the endurance event category. Both event types were

considered to offer fellowship and friends, while the traditional endurance event participants also mentioned camaraderie and support existed in traditional endurance event activity and not with non-traditional events. Again, traditional events are encouraged to maintain these positive associations through marketing communications highlighting the social aspects of participation. They should also continue to build running communities through local and national running clubs, charitable organizations, and other training groups. It is recommended that non-traditional events follow the tactics of traditional endurance events by creating partnerships with complimentary groups, such as cross-fit gyms and other cross-training programs, as well as charitable organizations such as the Wounded Warrior Foundation, Team RWB, and other organizations which share characteristics with non-traditional endurance events. Together, these activities should assist each event type in continuing to develop positive associations and benefits with their events.

Sponsorship benefits. An extension of the practical use of endurance brand associations is in how sponsorship and endorsement decisions may be made in accordance with these assessments. Past research has utilized brand associations and characteristic assessments with sponsor matching (Dean et al., 2003; Lee & Cho, 2009; Musante & Milne, 1998). As suggested by Ross (2006), marketing mix activities such as sponsorship selection has an impact on the brand associations held by consumers. This is also supported by the work of Musante and Milne (1998), who posited brands could utilize sport sponsorship to enhance the image of their brand.

Sponsors wishing to transfer an image from an activity, event, person, or organization to their brand may do so through sponsorship (Keller, 1993). However, past

research has indicated that certain conditions must exist before image transfer is possible. For example, Dean et al. (2003) suggested that some level of fit between the sponsor and the event must be present for image transfer to occur. Should this relationship not currently exist, they suggested the sponsor to take a long-term approach to the relationship to allow the transfer to occur over time and that additional promotional efforts should be created to identify the fit between sponsor and event. Lee and Cho (2009) suggested the result of brand congruence between a sponsor and a sporting event resulted in favorable attitudes toward the sponsor's products and higher purchase intentions.

The current research supported the notion that leisure and sporting activities have distinct brand associations. Based on previous research (Deane et al., 2003), sponsors should assess the associations of their potential partners to determine their fit with the events of interests. Should no fit exist, additional marketing strategies will need to be conducted to aid this process. If a fit does exist, image transfer has the potential to occur (Deane et al., 2003) and the more fit perceived by the consumer the more likely positive outcomes, such as purchase behavior, could occur for the sponsor (Lee & Cho, 2009).

The current study suggested consumers' projected attributes such as fun, crazy, dedicated, challenging, and achievement onto endurance events. Brands wishing to align with these traits may find success in sponsoring these events. Conversely, brands wishing to display conflicting associations with these traits may wish to sponsor activities more aligned to their desired description. For example, the California Milk Processor Board may be evaluating potential sponsorship opportunities to promote consumption of skim milk as a standard item in a person's diet and healthy form of calcium for families

with children. The California Milk Processor Board may not find great success in this relationship. First, it seems they may not have an existing fit with the event brand and additional costly marketing efforts may be needed to create this fit. Additionally, they may desire brand associations such as family, safe, and stable as outcomes from the relationship. In this case, sponsorship with endurance events may not be the perfect match. However, Nestle's Nesquick chocolate milk powder may see benefits from aligning with fun and crazy activities such as endurance events. They may also receive positive transfer effects from the partnership, as individuals viewing endurance events as healthy activities may consider Nesquick to also be healthy.

Sponsor matching. As suggested by Lee and Cho (2009), event organizers may also benefit from understanding their brand associations and utilizing them to find matching sponsors. They suggested the more connection a consumer can make between a sponsor and event, the more likely they are to produce positive attitudes about the sponsor, which could lead to purchasing behavior. Providing information about the brand, such as consumer held brand associations, may have the ability to strengthen sponsorship proposals. Events may also be encouraged to seek sponsors which may assist them create their brand. For example, a new obstacle course event may increase their credibility with the general U.S. public if they are able to sign a sponsorship with the up-and-coming brand of Under Armour.

Likewise, this non-traditional endurance event may be able to persuade traditional endurance event participants to try their event if they are able to generate positive associations and reduce negative associations. Results from the study indicated that traditional endurance event participants occupying the lowest involvement level of

traditional endurance events show potential intentions towards obstacle course event participation. However, traditional event participants also demonstrated they thought these non-traditional events were dangerous and unpredictable. Should a consortium of non-traditional endurance event producers create an accrediting association, as suggested, and sign a major sponsor such as Under Armour, negative associations held by traditional endurance event participants may be mitigated and the potential for participation from this group, especially those within lower levels of involvement, may increase.

Endurance Event Participant Behavior

Research Question 2.2 was interested in the future intentions of the traditional endurance event participant. Results indicated this group was very likely to participate in traditional endurance events within the next 12 months, while they were somewhat unlikely to participate in non-traditional endurance events within the same time frame. Because sample groups could be split into different involvement levels, further investigation was conducted between these levels. Results revealed those individuals occupying lower levels of traditional endurance event involvement were significantly more likely to participate in non-traditional events than those in higher levels of involvement. Likewise, those within the lowest involvement level, awareness, were found to have significantly lower behavioral loyalty and attitudinal loyalty scores for traditional events than the highest involvement levels.

These results indicated, as suggested by past research (Iwasaki & Havitz, 1998; Funk & James, 2001), that individuals occupying higher levels of involvement are more resistant to changing their behavior as they become more loyal. It may be that as individuals have more personal investments, time or money, with an activity they create

and protect reasons to stay involved with the existing activity while generating reasons to not participate in other similar activities. This protects not only their investment but also their self-schema, which has been built to align themselves with the activity of choice. A part of this protection may be not to introduce new behaviors or activities, which may conflict with their current behavior and ideas of self. Individuals occupying lower involvement levels may not have produced concrete self-schemas related to the activity. Thus, they may be more open to new opportunities and try different event types.

This investigation of different involvement levels and desired outcomes, such as attitudinal and behavioral loyalty, offer multiple theoretical and managerial implications. The first key finding is support of the notion of involvement as a multifaceted construct. Next, partial support is provided for the ability of the involvement construct to classify individuals into distinct levels. Last, it is suggested that moving an individual from the lowest involvement level of awareness to the next involvement level, attraction, may result in the most dramatic transformations in behavioral loyalty, while the most dramatic transformation in attitudinal loyalty occurs between the middle two levels, attraction and attachment.

Involvement as a multifaceted construct. The first key theoretical finding offers extended support to the notion that involvement is a multifaceted construct. Past research has suggested activity involvement is more than a simple reflection of frequency of participation or evaluation of personal importance with an activity and is better represented by a total combination of attitudinal and psychological preferences with desired outcomes such as attitudinal and behavioral loyalty (Beaton et al., 2011; Iwasaki & Havitz, 1998). How to evaluate these involvement differences has varied over time.

For example, Sherif and Cantril (1947) suggested personal relevance or importance of the product influences involvement decisions. Allport (1949) maintained that hedonic pleasures also contribute to this process. Based on these theoretical foundations and the work of Laurent and Kapferer's (1985) Consumer Involvement Profile (CIP), Iwasaki and Havitz (1998) measured activity involvement with three distinct components: pleasure, sign, and centrality. These three components are suggested to build involvement profiles of individual's participating in an activity.

The current study offers continued support for past research utilizing this multifaceted involvement measure as opposed to measuring involvement as a simple reflection of frequency of past participation or evaluation of personal importance with an activity. Unique to this study is its holistic approach, including all involvement levels and multiple outcomes, to view the process. Beaton et al. (2009) utilized this multifaceted involvement measure but only focused on a single outcome, attitudinal loyalty. Their two-study approach, with team rugby participants and recreational skiers, also failed to record any study respondents in the awareness level. Subsequently, evaluation of the full process was limited in their study. Funk et al. (2011) attempted to address these issues with a study of leisure golfers by examining attitudinal loyalty, behavioral intentions, attitudinal engagement, and behavioral engagement. Their results indicated significant incremental increases in all three outcomes across all four involvement levels.

Similarly, results from the current research offered examination across all four involvement levels in two outcomes, attitudinal and behavioral loyalty measures. Results of the current study found significant attitudinal loyalty differences existed between all

but one level pairing, awareness and attraction. These findings reflect those of Funk et al. (2011), suggesting attitudinal loyalty “is a valuable psychological characteristic to differentiate patrons” (Funk et al., 2011, p. 282). Despite this similarity, the two studies vary in results of a behavioral loyalty measure.

While Funk et al. (2011) indicted significant differences in future behavioral intentions between all involvement levels, the current study found the only significant behavioral intention scores were demonstrated between awareness and all other levels. No difference was found between all other level combinations. Of note is the significant increase in behavioral intentions between the lower two levels, while increases between the remaining levels were non-significant. This finding suggested attitudinal loyalty formation and behavioral intentions may not have the corresponding relationship with involvement as suggested by Funk et al. (2011). With significant increases in behavioral intention scores only between the awareness and attraction levels, and a plateauing effect between all other levels, it may be that individuals more easily adopt behavioral intentions than attitudinal formation. If this is the case, attitudinal formation may perform a decreased role in behavioral intentions as suggested by some who have asserted that attitude formation actually plays a significant role in determining behavior (Ajzen, 1991). In the least, the current results suggested that the majority of the effect exists only within the initial levels of involvement.

Distinct classification into levels of involvement. The second major finding of this research partially extended support for the ability of the involvement construct to classify individuals into distinct levels. Following the work of Beaton et al. (2009), a staging mechanism utilized individual ranked involvement profiles, based on measures of

pleasure, sign, and centrality, to place individuals into one of four involvement levels. As previously mentioned, past research has suggested that as involvement levels increase, loyalty measures also increase (Funk et al., 2011; Iwasaki & Havitz, 1998). The current research partially confirms this assumption with measures of attitudinal and behavioral loyalty in an endurance sport activity setting.

As expected, scores of both loyalty measures increased in association with the involvement levels of traditional endurance event participants. However, significant differences were not present between all levels. This is in conflict with past research, suggesting distinct differences in outcomes should be present between all levels (Funk et al., 2011). One measured outcome, attitudinal loyalty, followed the findings of past research. Significant differences were found in a measure of attitudinal loyalty between all but one pair of involvement levels. These findings align with those of Funk et al. (2011). In measuring the attitudinal loyalty of recreational golfers, they found attitudinal loyalty differences significantly increased between each level, suggesting distinct groups.

The results of the current study deviated from Funk et al. (2011) in behavioral intention measures. While Funk et al. (2011) indicated significant differences in behavioral intentions between all involvement levels, the current study only found a difference between one set of involvement levels. Despite progressive increases between the levels, the only significantly different scores existed between awareness and all other levels. These results diverge from Funk et al. (2011) and suggest not all groups are distinct among a measure of behavioral intention.

To increase the practical relevancy of the PCM and other models utilizing this measure of involvement, further exploration into the relationship between involvement

and desired outcomes was necessary. Funk et al. (2011) suggest the PCM framework “offers a psychological and behavioral basis for discussing the nature of escalating participation” (p. 271). Yet, the current study found the model lacked in distinguishing the involvement levels between both psychological and behavioral measures. The current results suggested the PCM provides gradient increases in attitudinal loyalty providing descriptive results between the levels, while behavioral intention differences lack such ability and merely describe a dichotomy. Because repeat behavior is a desired outcome for sport and leisure activity managers (Funk & James, 2001), future investigation of the relationship between a process of involvement and behavioral intentions is warranted.

Loyalty transformations. The final important implication suggested by these findings is where, on the involvement scale, dramatic transformations in behavioral and attitudinal loyalty are experienced. Results showed that individuals moving from the lowest involvement level of awareness to the next level, attraction, experienced a noticeable transformations in behavioral loyalty. Similarly, the main transformation in attitudinal loyalty occurs between the middle two levels, attraction and attachment. This is important for practitioners responsible for increasing consumer loyalty. Once an individual occupies the second involvement level, attraction, they are very likely to participate in traditional events within the next 12 months. While attitudinal loyalty is not fully formed at this level, individuals occupying the next level, attachment, were shown to resist changing their preference for traditional endurance event activity. For this reason, understanding how individuals move between involvement levels becomes increasingly important. Once mechanisms and explanatory differences between the groups are determined, managers may develop marketing communication to assist with

movement to these desired levels. The next section explores this process in more detail and provides greater insights.

Endurance Event Involvement Level and Congruity Relationship

The final set of research questions, RQ3.1 through RQ3.4, examined the differences between the four involvement levels of traditional endurance events and four types of congruity: functional congruity, stereotypical user congruity with actual self, stereotypical congruity with ideal self, and brand personality congruity. Results indicated that all congruity scores increased in coordination with increases of involvement level. Specifically, those within the highest involvement level, allegiance, displayed significant differences between all other levels along each congruity score and no significant differences existed between those occupying the middle involvement levels, attraction and attachment, within each congruity measure. This signifies that individuals at the two ends of the involvement level scale are distinct in the way they perceive traditional endurance event activity aligning with their self-image and functional expectations of endurance events.

It is possible these results are a direct reflection of the lasting effects of actual activity experience. It could be that traditional marketing tactics, such as advertisements, are limited in their power to create permanent connections which drive endurance event activity participation. Instead, it may be the importance of the experience, as expressed by Ross (2006) and Berry (2000), which allows the individual to make stronger and lasting connections based on their personal experience. It is possible these experiences encourage the individual to create their own connections, and that these connections are

more robust than the ephemeral connections created through secondary experiences such as those found in consumption of typical marketing communications.

This is interesting for a couple of reasons. First, it means consumers differ in their perception of the activity based upon their psychological involvement with it. This relationship is valuable to practitioners interested in moving individuals between involvement levels. If practitioners are able to tap into the congruity process it is likely they will be rewarded with the ability to assist in this movement between them, which, in turn, produced beneficial outcomes such as repeat purchase behavior and brand loyalty. Second, differences in congruity measures may be aligned with differences in brand associations to generate a rich description of these unique market segments. Together, these results build unique profiles, based on difference involvement levels, which may be used to produce effective marketing strategies. The following sections discuss these relationship and their implications.

Consumer segmentation by involvement level. An important implication extracted from the differences found between involvement levels is the ability to create unique consumer segments based on involvement level. A common task for marketing managers is to establish effective consumer segmentations (Mullin et al., 2014). Researchers have suggested segmentation based on psychological variables provides a more useful means of characterizing participants than segmentations based on mere demographic attributes (Beaton et al., 2011; Havitz et al., 2013; Iwasaki & Havitz, 2004; Rohm et al., 2006). The current results extended the work of Beaton et al. (2011) by suggesting a valuable segmentation strategy along involvement levels produces distinct consumer groups. These results indicated significant differences were present in each of

the four types of congruity (functional congruity, stereotypical user congruity with ideal self, stereotypical congruity with actual self, and brand personality congruity) based on level of endurance event involvement. Specifically, those within the highest involvement level, allegiance, displayed significant differences between all other levels along each congruity score.

The appeal of segmenting consumers along involvement levels over demographic characteristics is the linear relationship the levels have with desirable outcomes. In the case of endurance event participants, current results showed attitudinal and behavioral loyalty each increased as involvement level increased. In contrast, past research has shown demographic segmentation to be less consistent when measuring desirable outcomes compared to the consistency of psychological segmentation (Beaton et al., 2011). Also, demographic measures are categorical in nature and often represent a state or characteristic, over which the individual has limited control. For example, while individuals with the same sex or age may demonstrate a degree of similar characteristics, their assignment does not consider cognitive human characteristics which may have greater influence on behavior and decision making. However, segments built on the current measure of involvement are assigned based on psychological factors, representing the hedonic and symbolic relationship an individual has with an object. In fact, they are a direct reflection of the internal process an individual undergoes while making decisions. Also important, unlike demographic characteristics, individuals may move between involvement levels and limited temporal restraints are present. For this reason, involvement level segmentation is suggested to evaluate progressions an individual may have with the object.

This evaluation of progressions between different involvement levels may reveal motivating factors which contribute to level movement. Once identified, managers may develop marketing communications designed to trigger these factors. As previously mentioned, dramatic changes in desirable outcomes occur between the lowest two involvement levels for behavioral loyalty and the middle levels for attitudinal loyalty. Therefore, it is suggested movement between these two levels may hold the greatest impact and marketing communications should attempt to move individuals between these two sets of levels.

Specifically addressing functional congruity, individuals occupying the awareness level displayed the lowest functional congruity scores. This suggests that those in this level did not feel traditional endurance events provided them with the level of functional attributes found in higher involvement levels, including the attraction level. Past research has suggested individuals hold functional expectations from event participation such as experiencing a certain level of fun or enjoyment, having the ability to compete, creating socialization opportunities, proving positive health outcomes, and feeling a sense of achievement (Funk et al., 2011; Masters et al., 1993; McDonald et al., 2002; Ogles & Masters, 2000; 2003; Rice, in press; Ridinger et al., 2012; Scanlan et al., 2003; 2013; Summers et al., 1982; 1983). A marketing campaign targeted to those in the awareness level could be designed to include all functional elements of activity participation. As an individual feels traditional endurance events provide them with an enjoyable social experience, an opportunity to be healthy, and acquire a needed sense of achievement, it could be that they may move on to higher levels of involvement.

Marketing communications should also be produced to increase other types of congruity suggested in this study, such as stereotypical user with self-image congruities and brand personality congruity. Results suggested that those occupying the attraction involvement level experienced significantly difference scores between how they perceived the match between traditional endurance events and their own self-images and personality. As individuals moved to higher involvement levels, they were shown to demonstrate increases in both stereotypical user congruity and brand personality congruity. This may signal the existence of additional triggers within the involvement development process. Marketing communications should be designed to address these differences and increase self-image and brand personality congruity.

Results of the current study have identified connections with these congruity measures and the involvement process, but the current research is limited by only providing characteristics for endurance event activity and not for the participant's self-image. For this reason, further information about how consumers or prospects view themselves is needed before an application of these results may effectively be pursued.

Assessment of consumer profiles. Another key outcome of the study is how combinations of involvement, brand association, and congruity profiles may assist managers with assessing how consumers view the brand of an activity. This assessment may benefit managers in a variety of ways. Aaker (1996) described that an enriched understanding of how a consumer views the brand may assist with guiding communications, supporting valuable differentiation tactics, and creating general brand equity. Without this foundation of knowledge, managers may be driven by false claims or fallacious intuition.

Study results indicated multiple points of differentiation existed between members of different involvement levels, including non-endurance event participants and those with higher involvement levels. These different views held by segments may help managers develop effective communications to target audiences. For example, public health practitioners may benefit from marketing communications tailored to specific segments such as inactive non-endurance event participants occupying the awareness level of endurance event involvement. The first step is to understand the views held by consumer segments.

Consumer brand association profiles. Qualitative results from the current study may assist this process. A meta-code category where non-participants and traditional endurance event participants differed was in the characteristics they assigned to endurance events. While the two groups shared certain obstacles towards activity participation, such as their challenging nature and difficulty, the non-participant group indicated they perceived more obstacles such as possible injuries from participation, the senseless nature of the activity, the length of training required, and the expenses incurred with participation. These differences may provide guidance to managers across an array of positions, including public health practitioners and event marketers.

Mirroring the recommendations formerly provided, practitioners should develop marketing communications or programs addressing injury concerns, training requirements, and the senseless nature of the activity. For example, the development and communication of training programs, in coordination with producing information sessions with local running stores and corporate wellness programs, should begin to address issues of injury concerns and training requirements. Additionally, information

sessions and other marketing communications should highlight the diversity of event participant's range of ages, shapes, and sizes and reasons for participation. To address the financial concerns of activity participation, practitioners are encouraged develop creative pricing strategies targeted at specific segments.

Results also provided different associations held by the two groups in the rewards and social meta-code categories. While the non-participant group acknowledged the potential to receive rewards and recognition from traditional endurance event participation, such as accomplishment and stress relief, endurance event participants displayed a greater array of rewards, including confidence, satisfaction, and an uplifting feeling. Traditional events are encouraged to continue producing opportunities for participants earn rewards from participation. As previously suggested, using words such as accomplishment, achievement, and experience in marketing communications may reinforce these associations with event participants in addition to creating awareness around these associations for non-participants.

Furthermore, extending a single event into a unique race weekend may also provide greater opportunities for exposure, accomplishments, and experiences for both groups. Shorter distance events, such as 5K or 10K runs, can be added to the program. This may provide multiple advantages. Non-participants may be encouraged to experience the weekend through shorter distance event participation, where they may be introduced to and become more familiar with longer distance event participants and services such as training programs. This exposure may also allow them to envision their long-distance participation in future years. At the same time, extended benefits will be available to past participants. Those participating in the event for multiple consecutive

years should be acknowledgement through special awards or post-event recognition on official event websites and social media outlets. All of these efforts are aimed at maintaining and developing perceptions of rewards earned from activity participation.

Another area the two groups differed was in how they viewed the social nature of traditional endurance event participation. The non-participant group provided no social attributes for event participation, while the participant group described the activity as a source of camaraderie and friendship where friends come together to support each other. Non-participants may not be familiar with the social nature of activity participation. For example, they may be unaware of the number of training programs available throughout the country. Many training programs are available to encourage them to move from a more sedentary couch lifestyle to 5K participation as well as half-marathon, or full marathon training (Luff, 2014; Rei, 2014). Often, these programs encourage social interaction with other participants and actually bring likeminded individuals together around a social cause, such as raising awareness for a common disease.

Consumer congruity profiles. An additional contribution of the current study is the estimation of the congruity an individual has with a brand. Not only should managers guide communications based on assessed brand characteristics, but they may also design marketing strategies constructed around the images consumers hold about themselves and how well they align with the brand. Results from the study suggested that all congruity measures had a linear relationship with involvement, where involvement level increases scores in measures of congruity also increased.

As involvement levels increased between awareness, attraction, attachment, and allegiance, the congruity measures of functional congruity, stereotypical user with ideal-

self congruity, stereotypical user with actual-self congruity, and brand personality congruity also escalated. Functional congruity may be highlighted in ways previously discussed in regards to communicating the enjoyment, social aspects, and rewards of event participation. Stereotypical user with ideal self-congruity may be highlighted in marketing communications by creating images which make a connection with who the consumer ideally wishes to be and a typical activity participant. Similarly, actual self-image congruity may be evoked by linking who the consumers believe they really are with that of a typical activity participant. For example, half marathon event managers may ask non-participants to describe themselves, the type of person they would like to be, and the typical half marathon participant. An individual may identify the following characteristics with themselves: mother, out of shape, outdoor enthusiast, and tattooed. They may believe the stereotypical half marathon participant is a thin Ethiopian male champion with a mustache. Marketing communications may be used to reshape this image if they are considered to be different, as in this example, or be used to bridge concepts which are more closely related. Once images are aligned within the individual, activity participation may be more likely to occur. Making and communicating these connections may assist with increasing activity involvement.

Role of congruity measures within the involvement process. Another key finding of the research was the convergence of involvement levels with measures of congruity. Beaton et al. (2011) suggested efforts should be made to explore the facilitation of movement between involvement levels. It has been suggested, “the design of such research should incorporate existing theories and frameworks to allow for a more

complete and detailed picture” (Beaton et al., 2009, p. 198). The current research answered this call by including measures of congruity into its design.

Conceptually, the role of congruity seemed to have a natural fit within the involvement process. Past research has indicated activity involvement is only present when an individual perceives both hedonic and symbolic value in the behavior (Allport, 1945; Beaton et al., 2011). Similarly, consumer behavior researchers have suggested individuals are motivated to consume products based on functional congruity (Kressmann et al., 2006) and symbolic congruity (Aguirre-Rodriguez, Bosnjak & Sirgy, 2012; Pritchard 1999). Functional congruity has been defined as “the match between a consumer’s ideal expectations of utilitarian brand features and their perceptions of how the product is perceived along the same features” (Kressmann et al., 2006, p. 955). Symbolic congruency occurs when a consumer’s behavior is, in part, driven by a perceived match between a consumer’s self-concept and that of a particular brand or stereotypical user (Aguirre-Rodriguez et al., 2012).

Results indicated measures of congruity may, in the least, have the ability to bring greater description to involvement levels. It is also suggested that involvement measures found within the PCM measurement should move beyond mere hedonistic and symbolic descriptions. The presence of multiple congruity measures signals interesting possibilities in the role of congruity on the conceptualization of involvement in a sport or leisure activity. Involvement has been specifically defined as “a multifaceted construct that represents the degree to which participation in a sport activity becomes a central component of a person’s life and provides both hedonic and symbolic value” (Beaton et al., 2011; p. 136). However, this definition may limit the scope of involvement into the

three components of pleasure, sign, and centrality. The results of the current study warrant further investigation into the role functional attribute assessments and outcomes play in the process of activity involvement.

Past research has suggested consumers make decisions based on symbolic and functional meanings (Hung & Petrick, 2011; Kressmann et al., 2006; Sirgy et al., 1997; Sirgy & Su, 2000). If functional congruity measurements correspond with hedonic and symbolic measures, while also contributing additional explanatory power, their inclusion into involvement measures could provide additional beneficial information. For this reason, the current research adopted Havitz and Dimanche's (1997) definition of involvement, as a state of interest or motivation to partake in an activity or to consume a product, and suggests others to adopt the more general definition in an effort to not limit our conceptualization of the involvement process.

Another interesting result of the current study is the departure from past research suggesting a dramatic change occurs between attraction and attachment levels (Funk & James, 2006). Instead the current data found major changes occurred between the attachment and allegiance levels. This outcome does not signify problems in the measurement of the congruity constructs, but rather hints at possible conceptualization issues within the PCM framework. As this is the first study to indicate these results, further investigation is needed to fully understand how involvement levels, as measured by the PCM, differ.

To fully understand the role of congruity measures within the involvement process further investigation into levels developed by Funk and James' (2001) PCM is required. As a level based construct, the PCM relies on transitions between levels of

involvement. Past researchers have hypothesized that each level has its own set of mechanisms initiating movement between levels (Beaton et al., 2009; 2011). The current research shed light onto this process by identifying and discussing differences between involvement levels by measures of congruity.

Awareness. The lowest involvement level, awareness, is characterized by external influences such as socializing agents and social-situational barriers to participation (Beaton et al., 2009). Within this level the consumer may not be participating in the activity or display trial or exploratory behavior (Funk et al., 2011). No study has attempted to investigate measures of congruity in awareness level occupants. Results of the current study suggested these individuals exhibited medium amounts of functional and symbolic congruity. Functional congruity scores implied they somewhat agreed that a match between perceived performances of traditional endurance event activity and their ideal performance of an endurance event was present. Symbolic congruity scores from the awareness level group indicated they found a slight match between their perceived image of traditional endurance events and stereotypical users and their own self-image.

The current results are important because of the lack of conceptual and descriptive understanding of individuals in the awareness level. While past research considered awareness occupants to have a limited relationship with the activity (Funk et al., 2011), the current results indicated the presence of psychological processes, such as evaluations of congruity, were present within the group. For example, scores suggested these individuals considered characteristics of the stereotypical traditional endurance event participant to somewhat overlapped with their ideal-self. They also indicated traditional

endurance events would allow them to acquire certain functional attributes typical of endurance events. These scores may allude to the presence of congruity at this low involvement level, but, as will be discussed, higher scores were recorded for other levels of involvement.

Awareness to attraction. Funk et al. (2011) suggested individuals moved between the awareness and attraction levels based on personal and psychological determinants. Results of the current study lend partial support to this theory. Personal determinants were suggested to include demographic characteristics and perceived constraints to perform the activity, which were discussed in the analyses of RQ1.1 and RQ2.1. In regards to personal determinants, no significant differences existed between the levels on measures of stereotypical user with self-image congruity. This indicated noticeable changes between the groups did not occur as suggested by past research (Funk & James, 2001; Funk et al., 2011). However, there was a significant difference between the levels on a measure of brand personality congruity. Individuals in the two groups did differ in how similar they perceived the characteristics of endurance event activity and themselves. Thus, these results lend partial support for differences suggested between involvement levels in an evaluation of personal determinants.

The current results did support past research suggesting differences in psychological determinants such as needs, similar to those found within the measure of functional congruity, were found between the lower two involvement levels (Funk et al., 2011). Should an individual in the attraction level experience sociological forces, which Funk et al. (2011) suggested triggers the desire to meet a need or seek a benefit from participation, results of the current study indicate they are likely to find satisfaction from

traditional endurance activity participation. These results provided additional support for the suggestion that behavior is designed to satisfy needs and suggested a distinct positive difference is present between the two groups in how they perceived the functional use of traditional endurance events, which include the hedonic needs identified by Funk and James (2001).

Attraction to attachment and allegiance. Moving out of attraction into the next two levels, attachment and allegiance, has been said to require the individual to internalize the relationship, resulting in a more stable connection between the participant and the event (Funk & James, 2001). Entering into the attachment level is believed to “bring increased complexity to the individual-activity connection” (Beaton et al., 2009, p. 181) which includes an analysis of self-identity where the activity develops greater personal meaning and importance (Beaton et al., 2009). Funk and James (2006) suggested this level introduces a development of assigned functional and symbolic meaning to associations linked to participation. The current results do not demonstrate such a dramatic shift from the attraction level to attachment. While all functional congruity measures continued to increase, there were no significant differences between the levels among all four measures of congruity. This indicates, that should a shift from extrinsic to intrinsic motivations occur between the attraction and attachment levels, they are not represented in the functional and symbolic congruity measures identified in the current study.

Despite the lack of significant difference between the attachment and attraction levels, there were significant differences between the attachment and allegiance levels. The allegiance level was thought to continue this relationship of assigning and

developing functional and symbolic meaning to the activity (Funk & James, 2001). The relationship should be characterized by individuals seeing the activity as representing their own core values and beliefs (Beaton et al., 2009). In the current study, traditional endurance event participants occupying the allegiance level demonstrated the highest scores on all congruity measures. Additionally, all allegiance level scores were significantly different from all other level scores. This result corresponds with Beaton et al. (2009) who alleged the individuals occupying this level are distinct from all other levels in how they view themselves with their activity of choice.

Analyses of results summary. In regards to the relationship between traditional endurance event involvement level and measures of congruity, a number of theoretical and managerial implications can be drawn from the current research. These include the convergence of involvement levels with measures of congruity in the results. Additional implications comprised of involvement levels ability to produce effective segmentation of consumers and the ability of these involvement level segments, in combination with measures of congruity and brand association profiles, to help managers assess consumers' view of the leisure activity brand. These results should impact decisions of public health practitioners, event marketers, and other invested parties.

Summary of Managerial Implications

In sum, four key managerial implications were found within the current research. First, a segmentation strategy utilizing involvement level produced valuable and descriptive points of differentiation between the segments, which may be used to generate effective marketing strategies. Second, constraints to activity participation should be minimized through marketing efforts to encourage involvement level elevation.

Third, highlighting the benefits of activity participation should be used to encourage involvement level elevation. Finally, efforts to increase the overlap of how an individual perceives the activity with their own self-image and the benefits of activity participation should assist with involvement elevation. Two secondary implications were also provided. First, non-endurance event participants were more likely to participate in half marathons than obstacle course event or marathons. Second, key transitions in behavioral and attitudinal loyalty occur between the awareness-attraction involvement levels and the attraction-attachment involvement levels, respectively.

Produce Valuable Consumer Segments

The current results suggested a valuable segmentation strategy along involvement levels produces distinct consumer groups. Significant differences were present in each of the four types of congruity (functional congruity, stereotypical user congruity with ideal self, stereotypical congruity with actual self, and brand personality congruity) based on level of endurance event involvement. Specifically, those within the highest involvement level, allegiance, displayed significant differences between all other levels along each congruity score. Important to note is that key transitions in behavioral loyalty occurred between the awareness-attraction involvement levels and significant transitions in attitudinal loyalty occurred between the attraction-attachment involvement levels, or as individuals move between behavioral and attitudinal preferences common to non-participants to actual activity participation. This signals the development of salient psychological processes take place between these levels. The current results suggested marketing communications aimed at level junctions may assist with movement to higher involvement levels, thus resulting in more desirable outcomes for activity managers.

For example, in an effort to motivate movement between two important levels, marketing communications for a half marathon may be targeted at the awareness level, which contain non-participants. This group is targeted because important behavioral differences exist between this level and the next, attraction. As individuals occupying the attraction level were much more loyal to their behavior than those in the attraction level, a significant difference between how an individual perceives the benefits of activity participation also occurs between these lower levels of involvement. Two main perceptions were that non-participants perceive a greater number of constraints towards participation and they identify social opportunities than those in higher involvement levels. For this reason, half marathon program managers were encouraged to create campaigns designed to diminish or help non-participants navigate their perceived constraints, while continuing to highlight the benefits they hold in addition to educating them about benefits they may not assign to half marathon participation.

Highlights of the campaign should include reminders that half marathon participation provides the ability to feel a unique sense of accomplish and reach health goals, all in an enjoyable environment. Social aspects of participation can also be emphasized by providing images of friends and families participating together. At the same time, campaigns and supplemental services or partnerships should be created to target constraints of non-participants. These should specifically concentrate on the difficulty non-participants perceive.

Messaging tailored to non-participants could also be used to address the lack of similarities perceived between non-participant's own self-image and the activity or stereotypical half marathon participants. A campaign to address this could feature a

public service announcement or “did you know” theme, where statistical facts are presented with visual representations. For instance, a 20-second video advertisement could be produced in the spirit of a public service announcement. An everyday individual, purposely chosen to not look like a professional runner, could be filmed on a studio set addressing the audience with statements such as, “Did you know running can be fun and social?” Scenes of finish line celebration, group taking photos of themselves, and post-race parties could be cut into the shot. A final image of the individual nodding their head in agreement with a fade into some statistics on race participation may solidify the point. Together, these dramatic images should increase knowledge and understanding about the benefits of participating in running events such as half marathons and their affiliated programs.

Address Constraints

A second key managerial outcome of the study is that constraints to activity participation should be minimized through marketing efforts to encourage involvement level elevation. Utilizing segmentations built from involvement levels may assist managers with producing targeted marketing communications to groups displaying specific constraints. The current research identified differences between non-endurance event participants, occupying the awareness involvement level, and traditional endurance event participants occupying the attraction, attachment, and allegiance levels for both traditional and non-traditional events.

Both non-endurance event participants and endurance event participants displayed a variety of constraints for both events types. Both event types were considered to be challenging, difficult, potentially painful, and exhausting. The events were also thought

to require dedication and discipline. Plus, non-endurance event participants found the traditional endurance events to be senseless, miserable, and potentially harmful to the body. This group also considered non-traditional event to be expensive. Endurance event participants considered non-traditional events to be potentially dangerous, causing injury, and unpredictable. Practitioners should develop marketing communications or programs addressing these concerns to assist with mitigating their influence on activity participation.

Both event types were suggested to develop marketing communications or programs addressing constraints. For example, training programs and information sessions with local running stores (for traditional event), Crossfit gyms (for non-traditional events) and corporate wellness programs must be developed. Information sessions should address the diversity of event participants. In an attempt to match individuals with event participants and minimize ideas about how difficult or painful participation could be for them, particular focus needs to be given to the wide range of ages, shapes, and sizes of individuals participating in these events. This will allow prospective participants to match themselves with actual participants, thus decreasing the impact of these constraints. To reduce additional concerns about the difficulty and demands present in activity participation, additional information should be provided about a typical training program for the event type, past success stories, and program completion rates. These tactics should assist with alleviating the influence of constraints.

Considering that non-participants felt non-traditional endurance events were expensive, additional attention should be paid to this constraint. Event producers were encouraged to develop creative pricing strategies for targeted to this potential consumer

group. For example, students are often living under fixed or reduced incomes. Program or event managers should produce discounts and creative pricing strategies targeted directly to students. Discount referral programs should not only diminish the effect of this constraint but also produce word-of-mouth advertising.

Additionally, non-participant groups considered traditional events to not only be potentially harmful but also to be miserable and senseless. Therefore, traditional events have a need to educate potential participants about ways to reduce possible injury and the benefits which may be experienced by participating in their events. Marketing communications targeted at non-participants should highlight the social benefits, rewards, and enjoyment experienced by participants. Marketing campaigns could actually be designed around the relationship of the misery and reward of the event. For example, advertisements could suggest the misery is only temporary while the satisfaction gained from event completion is permanent.

Traditional endurance event participants considered non-traditional events to be dangerous and unpredictable with the potential for injury. It is recommended that non-traditional event producers produce marketing strategies aimed towards educating the endurance market about the rigorous safety measures they undertake for their events. Additionally, non-traditional event producers should work together to establish a national organization to accredit courses which meet high safety standards. This effort should assist with protecting the non-endurance event category brand. Together, these activities may produce events standards, which in turn may ease the unpredictable and dangerous associations held by this valuable group of prospective participants.

Highlight Benefits

The third managerial implication extends the idea of highlighting the benefits associated with activity participation to encourage involvement level elevation. Both non-participants and traditional endurance event participants held associations of the enjoyment which could be derived from participating in both event types. Managers were encouraged to reinforce these associations with marketing strategies highlighting the exciting atmosphere and celebration surrounding their events and the fun participants have with the activity. While both groups held these positive associations for both event types, certain benefits were demonstrated by some groups and events and not others.

Non-participants suggested very limited social associations for both event types. Rewards for participation were also nonexistent when non-participants were asked to recall associations describing non-traditional events. The traditional endurance event participant group similarly indicated limited social outcomes and rewards from non-traditional event participation. Therefore, non-traditional events were encouraged to produce greater opportunities for participants to feel rewarded and communicate these to both non-participants and traditional endurance event participants. These opportunities may include extending the event weekend to include additional events which may provide participants with opportunities to earn additional medals and rewards. Marketing communications should also use words such as accomplishment, achievement, and experience to assist with generating the perception of benefits gained from participating in their events.

Increase Congruity

Finally, efforts to increase measures of congruity between an individual's self-image and a brand and stereotypical user should assist with involvement elevation. It was suggested that actual self-image congruity may be evoked by linking who the consumers believe they really are with that of a typical activity participant or brand associations. For example, half marathon event managers may ask non-participants to describe themselves, describe the type of person they would like to be, describe the typical half marathon participant, and describe a typical half marathon. An individual may identify the following characteristics with themselves: mother, out of shape, outdoor enthusiast, and tattooed. They may describe their ideal self a role model for their children. In turn, they could believe the stereotypical half marathon participant is a thin Ethiopian male champion with a mustache and that running a half marathon is impossible for mothers because of the training. Marketing communications may be used to reshape these images if they are considered to be different, as in this instance, or be used to bridge concepts which are more closely related. For example, marketing communications aimed at this individual may downplay the competitive elements of the event and highlight the diversity of participants, the ability to be in nature, the family atmosphere of event day, and female training programs available to novice participants. Once positive images are more aligned within the individual, activity participation is more likely to occur.

Future Research

The current study was designed to investigate the process individuals undergo while becoming involved in a leisure endurance sport activity and the role of congruity within this process. While results produced insight into the associations held by

consumers and the endurance event involvement process, multiple research opportunities are presented as extensions of the current study. These include the creation of a brand association scale for participatory leisure sport activities, further investigation of the involvement process, and the influence of congruity measures on consumers.

An assessment of brand associations was important, in the current study, to understand how consumers perceive endurance events. The practical use of brand association and brand personality measures has been suggested to hold practical uses within the sport consumer behavior setting (Braunstein & Ross, 2010; Carlson & Donavan, 2013; Dean et al., 2003; Musante & Milne, 1998). While a direct measure of brand personality congruity was appropriate to address the congruity an individual may possess with an endurance event within the current study, this method is limited in its applicability and scope in other research settings and production of a more generalizable scale is recommended.

A valid and reliable brand association scale may prove more beneficial to the field of sport management research than direct measures. Foremost, direct measures are cumbersome and time-consuming to execute, thus reducing their practical use. Comparing direct measures of one brand with another produces a lot of data and an interpretation of content analysis of recorded responses is required. If the methodology is not reliable, interpretations may vary between researchers. For these reasons, this technique is not considered suitable for practical purposes. Likewise, the ability to compare research data is limited. For example, sponsor matching has been considered to be a common use of brand personality scales (Carlson & Donavan, 2013; Dean et al., 2003; Musante & Milne, 1998), but these sponsorship matches are based on the same, or

at least similar, scales. Direct measures may contain too much individual inference and interpretation, where a valid and reliable scale could be utilized in multiple settings.

Currently, no current brand association or brand personality scale has been developed to adequately measure general sport brands, much less leisure sport activity brands. Aaker (1997) proposed the most widely used consumer brand personality scale; however, researchers have indicated multiple issues with the scale in consumer products (Austin et al., 2003; Caprara et al., 2001; Azoulay & Kapferer, 2003) and within sport (Braunstein & Ross, 2006). Future research should attempt to create brand association scales adequate for use with sport consumer and service products. The current study offers a foundational exercise in establishing attributes consumers hold towards leisure sport activity. Further investigation may follow the advice of Churchill (1979) in developing the complete scale.

Additionally, the current discussion of results identified limitations of the current studies ability to develop self-image profiles for current consumers and prospects. Future research may be conducted to create these profiles. Once these profiles are created, more specific practical implications may follow. For example, differences between non-participants self-image and their perceptions of traditional endurance event participants may guide marketing communications attempting to bridge these associations and encourage activity participation.

Further investigation should be focused on the involvement process of leisure activity participants. While the current study provides information about this process, its cross-sectional nature limits the ability to fully understand the triggers for level movement. This analysis would be aided by longitudinal studies focused on identifying

why participants move between levels. Results from these studies may help to complete our understanding of the involvement process and produce multiple practical benefits.

Involvement levels should also be evaluated in terms of practical outcomes, such as purchasing behavior and social influence. The current study revealed attitudinal and behavioral increases in accordance with involvement increases. However, future analysis could measure the relationships between involvement level and multiple consumption behaviors. These behaviors could include direct event consumption such as when the individual typically registers for an event (early discounted registration versus waiting till the last minute) or complimentary product consumption such as magazine, books, apparel, or other running equipment. Other helpful descriptions of the involvement levels such as likelihood to recommend the event to a friend or possibility of volunteering at an event could assist practitioners.

While longitudinal studies and analysis of practical outcomes of involvement levels are beneficial, the current research found potential issues with the prescribed staging of involvement levels. Individuals occupying the lowest involvement level, awareness, are suggested to have limited attitude formation, unplanned or random behavior, and limited knowledge or experience with the activity (Funk et al., 2011). Nevertheless, the current research found multiple awareness level participants with extensive endurance activity in recent months. These characteristics seem to be in direct conflict with this conceptualization of the awareness level. Further investigation into these involvement levels is needed to appropriately assign participants.

A final area of suggested future research extends the influence of congruity measures on consumers. Specifically, an analysis in the role congruity plays with

endurance event destination choice may extend the use of congruity measures. This suggestion stems from the source of congruity measures used in the current study. Hung and Petrick (2011) and Sirgy and Su (2000) both reported on the influence of self-image congruency on the destination choices of travelers. Hung and Petrick (2011) suggested that people are more likely to travel to destinations with higher levels of symbolic congruity, locations congruent with their own self-image, and functional congruity, locations perceived to be congruent with a perfect destination. Future research could extend their work and evaluate this influence of self-image congruence on endurance event destination choice. This type of analysis should provide a clearer image of how endurance event participants choose their races.

Study Summary

The current study was interested in reviewing the process individuals undergo while becoming involved in a leisure endurance sport activity and the role of congruity within this process. To achieve this goal, both qualitative and quantitative approaches were utilized. Attributes of both non-traditional and traditional endurance events held by non-endurance event participants and endurance event participants were investigated to enrich our understanding of how the two groups viewed the different events. An analysis of behavioral intentions was conducted on both groups to examine attraction to an event type and loyalty. Further, the process of endurance event involvement was explored through measures of congruity with traditional endurance events.

Results indicated the non-endurance event participant group and the endurance event participant group displayed both similar and unique codes between the two event types, non-traditional and traditional endurance events. The events were similar in that

both groups considered them to be enjoyable despite requiring a number of physical and mental demands which may present obstacles for participation. The event types varied in that traditional events were considered to provide a more rewarding experience. It may be for these reasons that both current participants and non-participants indicated they are most likely to participate in traditional events in the near future. While current traditional event participants were not expected to show high levels of non-traditional event intentions, those with lower traditional event involvement levels were more predisposed to non-traditional event participation. The non-endurance event participant group indicated they would be more likely to try half-marathon events before obstacles course events or marathons.

Investigation into the role of congruity within the involvement process found significant differences were present in each of the four types of congruity (functional congruity, stereotypical user congruity with ideal self, stereotypical congruity with actual self, and brand personality congruity) based on level of endurance event involvement. Specifically, all congruity scores increased as involvement level increased. Those within the highest involvement level, allegiance, displayed significant differences between all other levels. No significant differences for each congruity measure existed between those occupying the middle levels, attraction and attachment.

In sum, this study provides multiple theoretical and managerial implications. Involvement, defined as a state of interest or motivation to partake in an activity or to consume a product (Havitz & Dimanche, 1997), has been validated as a multifaceted construct. Past studies have utilized hedonic and symbolic concepts to measure involvement (Beaton et al., 2011; Iwasaki and Havitz, 1998); however, the use of

functional congruity measures in the current study suggest additional consideration should be given to understanding the role functional evaluations play in the involvement process. Results also reveal the ability to segment sport activity consumers based on psychological descriptions, such as involvement level. Results suggest perceived similarities and differences of endurance events are present in individuals occupying low and high levels of involvement and between different event types. Managers may utilize this information to position their event or create effective sponsorship deals through image matching. Overall, the study presents a fuller understanding of endurance event consumers, which may assist managers with developing effective marketing strategies and communications.

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APPENDIX A

Dear Participant:

You are being invited to participate in a research study by answering the attached survey about endurance event participation. There are no known risks for your participation in this research study. The information collected may not benefit you directly. The information learned in this study may be helpful to others. The information you provide will help understand why people choose to participate in physical activity. Your completed survey will be stored at the University of Louisville in the Department of Health and Sport Sciences in a secured office. The survey will take approximately 20 minutes time to complete. Individuals from the Department of Health and Sport Sciences, the Institutional Review Board (IRB), the Human Subjects Protection Program Office (HSPPO), and other regulatory agencies may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed. Taking part in this study is voluntary. By completing this survey you agree to take part in this research study. You do not have to answer any questions that make you uncomfortable. You may choose not to take part at all. If you decide to be in this study you may stop taking part at any time. If you decide not to be in this study or if you stop taking part at any time, you will not lose any benefits for which you may qualify. If you have any questions, concerns, or complaints about the research study, please contact Jason Rice at (502) 419-1038. If you have any questions about your rights as a research subject, you may call the Human Subjects Protection Program Office at (502) 852-5188. You can discuss any questions about your rights as a research subject, in private, with a member of the Institutional Review Board (IRB). You may also call this number if you have other questions about the research, and you cannot reach the research staff, or want to talk to someone else. The IRB is an independent committee made up of people from the University community, staff of the institutions, as well as people from the community not connected with these institutions. The IRB has reviewed this research study. If you have concerns or complaints about the research or research staff and you do not wish to give

your name, you may call 1-877-852-1167. This is a 24-hour hotline answered by people who do not work at the University of Louisville.

Sincerely,

T. Christopher Greenwell, PhD

Jason A. Rice, MS

After having read the information above, would you like to participate in this study?

- Yes, please proceed to the survey.
- No, thanks.

(QUALIFYING QUESTIONS)

Which of these events have you previously participated? (Select as many as apply)

- Marathon
- Half Marathon
- Obstacle Course Events (Spartan Race, Tough Mudder, Warrior Dash, etc.)
- None of the above
- I do not know

Do you know what a running marathon event is?

- Yes
- No

Do you know what an obstacle course event is?

- Yes
- No

Select the likelihood you would participate in each event type sometime in the next 12 months.

	Not at all likely			Undecided			Extremely likely
Marathon (a road running event covering 26.1 miles; Chicago Marathon, Kentucky Derby Festival Marathon, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Half marathon (a road running event covering 13.1 miles; Rock 'n' Roll Half Marathon Series, Kentucky Derby Festival minMarathon, 500 Festival Mini-Marathon, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obstacle course event (an event requiring participants to overcome various physical obstacles similar to what one might expect in military training and should be at least 3.1 miles in length; Spartan Race, Tough Mudder, Warrior Dash, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(PLEASURE)

Please respond to the following statements to describe ONLY your involvement with long-distance road running events such as half-marathons and marathons.

	Strongly Disagree			Neutral			Strongly Agree
I participate in and/or train for long-distance road running events because I like it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really enjoy participating in and/or training for long-distance road running events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I participate in and/or training for long-distance road running events because I find it pleasurable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(SIGN)

Please respond to the following statements to describe ONLY your involvement with long-distance road running events such as half-marathons and marathons.

	Strongly Disagree			Neutral			Strongly Agree
A lot of my life is organized around long-distance road running event participation and/or training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running event participation and/or training has a central role in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lot of my time is organized around long-distance road running event participation and/or training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(CENTRALITY)

Please respond to the following statements to describe ONLY your involvement with long-distance road running events such as half-marathons and marathons.

	Strongly Disagree			Neutral			Strongly Agree
Being a long-distance road running event participant says a lot about who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You can tell a lot about a person by seeing them participate in and/or training for long-distance road running events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running event participation and/or training gives others a glimpse of the type of person I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(ATTITUDINAL LOYALTY)

Please respond to the following statements to describe ONLY your involvement with long-distance road running events such as half-marathons and marathons.

	Strongly Disagree			Neutral			Strongly Agree
My preference for participating in and/or training for long-distance road running events would not willingly change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would require major rethinking to change my preference for long-distance road running event participation and/or training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be difficult to change my beliefs about long-distance road running event participation and/or training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(BEHAVIORAL LOYALTY – PROPORTION)

On average, how many times a year do you participate in endurance events (i.e. pay registration fee for road-running event 15K in length or greater, or an obstacle course event 5K in length or greater)?

- 0
- 1 ... 41

How many hours in a typical week do you spend training (includes running, swimming, biking, weight training, or other activities designed to increase event performance) for or participating in endurance events?

- 0
- 1 ... 71 or more

Including the hours you spending training for or participating in endurance events, how many hours in total do you participate in recreational and social activities in a typical week?

- 0
- 1 ... 71 or more

(BEHAVIORAL INTENTIONS – TRADITIONAL EVENTS)

Please answer the below questions **ONLY** regarding long-distance road running events such as marathons or half marathons.

	Very Unlikely			Neutral				Very Likely
I plan to engage in long-distance road running training or event participation in the next 12 months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will try to engage in long-distance road running training or event participation in the next 12 months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(BEHAVIORAL INTENTIONS – NON-TRADITIONAL EVENTS)

Please answer the below questions ONLY regarding obstacle course endurance events.

	Very Unlikely			Neutral			Very Likely
I plan to engage in obstacle course training or event participation in the next 12 months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will try to engage in obstacle course event training or event participation in the next 12 months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(FUNCTIONAL CONGRUITY)

Use your opinions of long-distance road running events (marathons or half marathons) to evaluate the following questions

	Strongly Disagree			Neutral			Strongly Agree
Long-distance road running training and events allow me to obtain a sense of achievement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running training and events allow me to have a fun experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running training and events provide the camaraderie I desire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running training and events provide me an opportunity to be healthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-distance road running training and events allow me to be out in nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(STEREOTYPICAL USER CONGRUITY)

Please take a minute to think about the overall image of a typical long-distance road running event participant. With these pictures in mind please respond to the following.

	Not at all overlapped			Somewhat overlap			Nearly total overlap
How much does your own actual self-image (who you think you actually are) and the perceived overall image of the typical long-distance road running event participant overlap?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much does your own ideal self-image (who you ideally want to be) and the perceived overall image of the typical long-distance road running event participant overlap?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all similar			Somewhat similar			Nearly total similarity
How similar is your own actual self-image (who you think you actually are) and your perceived overall image of the typical long-distance road running event participant??	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How similar is your own ideal self-image (who you ideally want to be) and your perceived overall image of the typical long-distance road running event participant?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(BRAND ASSOCIATIONS – TRADITIONAL EVENT)

List the characteristics that first come to mind when thinking about a typical long-distance road running event.

Definition: A typical long-distance road running event is considered to be any non-trail or multi-surface running event which takes place on a paved surface and is at least 13.1 miles in length. This includes half-marathons and marathons.

(BRAND ASSOCIATION CONGRUITY – TRADITIONAL EVENT)

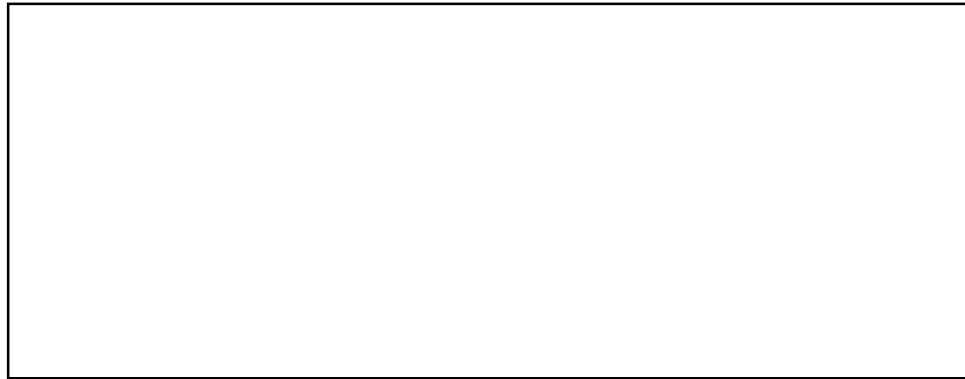
Consider the traits you just provided for a typical long-distance road running event to answer the following questions

	Strongly Disagree			Neutral			Strongly Agree
A typical long-distance road running event is like me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with my description of a typical long-distance road running event.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A typical long-distance road running event matches me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Considering my own personality and comparing it to the description I just provided for a typical long-distance road running event, I find they are similar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(BRAND ASSOCIATIONS – NON-TRADITIONAL EVENT)

List the characteristics that first come to mind when thinking about a typical obstacle course event.

Definition: A typical long-distance road running event is considered to be any non-trail or multi-surface running event which takes place on a paved surface and is at least 13.1 miles in length. This includes half-marathons and marathons.



(DEMOGRAPHICS)

Which of these events are you currently training for? (Select as many as apply)

- Marathon
- Half Marathon
- Triathlon (sprint or longer distances)
- Obstacle Course Events (Spartan Race, Tough Mudder, Warrior Dash, etc.)
- Themed Runs (Color Run, Glo Run, Zombie Run, etc.)
- 5K – 15K road-running events
- Ultra distance trail run
- None of the above
- Other

How many marathons have you participated in the past 12 months?

How many half marathons have you participated in the past 12 months?

How many of each obstacle events have you completed in the past 24 months? 0 – 10 times

Spartan Race

Warrior Dash

Other (please provide event name)

Other (please provide event name)

What is your current age?

What is your sex?

- Male
- Female

How do you usually describe yourself? (mark all that apply)

- White- non Hispanic (includes Middle Eastern)
- Black- non Hispanic
- Hispanic or Latino
- Asian or Pacific Islander
- American Indian or Alaskan Native
- Other
- I would rather not answer

If you wish to participate in a drawing for one registration to a Vacation Races event (including the Grand Canyon Half, Yellowstone Half, Rocky Mountain Half, Great Smoky Mountains Half, etc.) Please provide your email address below.

The email address will only be used to contact the winner and not for any other purposes.

Thank you for participating in our study.

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EDUCATION

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Dissertation: *“The Role of Congruency within the Participant Sport Involvement/Commitment Process.”*

Co-Chairs: T. Christopher Greenwell, PhD & Marion Hambrick, Ph.D. Readers: Namok Choi, PhD; Kristi M. King, PhD.

M.S. Sport Administration

University of Louisville, Louisville, Kentucky

December 2002

B.A. Business Administration - Marketing

Transylvania University, Lexington, Kentucky

August 1999

PROFESSIONAL ACADEMIC EXPERIENCE

University of Louisville, Louisville, KY

Instructor

August 2014 – June 2015

- Prepare and deliver all course materials, including lectures, presentation slides, exams, assignments, case studies, and Blackboard course design for the following courses:

SPAD 383	Sport Marketing	Fall 2014
SPAD 490	Senior Seminar	Spring 2015

University of Louisville, Louisville, KY
Graduate Research Assistant

January 2013 – June 2015

- Data: data management for over 1,700 subjects in a physical activity health intervention project, including oversight of a transition to a new data management system, and collating data from four different sources.
- Writing: preparing abstracts, manuscripts and national grant reports; assisting undergraduate students outline and develop reports for class projects; and writing correspondence with state and community leaders.
- Research: assisted with study design development, created and distributed online and paper surveys to sample populations, designed Institutional Internal Review Board protocols, reviewed compliance and progress of studies, managed research and writing manuscripts using Endnote, and analyzed results using SPSS and other statistical software.
- Presentations: presented results of studies at conferences and academic meetings.

University of Louisville, Louisville, KY
Guest Presentations

March 2013 – June 2015

- Prepare and deliver class materials for the following courses:
SPAD 604 Sport Finance “Entrepreneurship”
SPAD 703 Sport Consumer Research Seminar “Brand Equity”
SPAD 703 Sport Consumer Research Seminar “Sport Participation”
ELFH 710 Doctoral Seminar in Educational Leadership “Literature Reviews”
ELFH 602 Survey Research and Attitude Measures “Using Online Surveys”
SPAD 661 Sporting Marketing “Public Relations”
SPAD 525 Sport Event Management “Crisis Management”

Wuhan Sport University, Wuhan, China
Instructor

May 2010 – July 2011

- Instructor at one of China’s leading sport studies institutions. Class sizes range from 30-50 bachelor and master degree candidate students.
- Contributed to the development of the 3+1 Program to prepare students to transition from China to study abroad to complete their Sport Management degree.

BUS 300	Sport Marketing	Spring 2011
ENG 202	Second Year Oral English II	Spring 2011
ENG 303	First Year Sport English Writing II	Spring 2011
ENG 602	Graduate Oral English I	Spring 2011
BUS 300	Sport Marketing	Fall 2010
ENG 201	Second Year Oral English I	Fall 2010
ENG 250	IELTS Preparation	Fall 2010
ENG 302	First Year Sport English Writing I	Fall 2010

PROFESSIONAL INDUSTRY EXPERIENCE

JAR of photos, Freelance

Owner and Photographer

April 2006 - Present

- Specialize in sporting event and caused based photography and video media. Projects have included: PEPY Ride, I Heart Van Art, ING New York City Marathon, NYC Half Marathon, Ironman China, Ironman World Championship, Tough Mudder, and Dallas White Rock Marathon.
- Coordinated and managed on-site photographers and videographers for the University of North Carolina Rams Club 2008 Final Four Tour in San Antonio, Texas. Hired photographers, synchronized tour and staff schedules, determined key photo locations, assigned key photo opportunities, organized e-commerce store, promoted services to guests, created pricing and all financials affiliated with online sales.
- Designed layout and created webpage (JARofphotos.com) with Adobe Dreamweaver and Wordpress.

New York Road Runners, New York, NY

NYC Marathon Media Credentialing Manager September 2009 – November 2013

- Reviewed procedures and protocols for over 700 domestic and international media credential applications.
- Coordinated expectations and delivery of online media credentialing system provided by an outside vendor.
- Monitor online credentialing system throughout a four-month window prior to marathon.
- Communicate with all media outlets applying for credentials.
- Screen all incoming media credential applications and determine appropriate zone passages.
- Distribute credentials and media information on-site.

Anthony Travel Inc., Dallas, Texas

Event and Business Consultant

September 2009 – January 2010

Director of Endurance Events

May 2007 – September 2009

Senior Events Manager

May 2003 – May 2007

- Created and consulted on special projects such as customer satisfaction quality control and analysis, new business opportunities and strategies, advanced technology potential, and competitive analysis for specific business groups.
- Worked alongside event development and execution teams during pre-programming and on-site for programs.
- Managed the promotion, sale, and service operations of over \$3M in sales of travel services for approximately 15 annual Endurance Team events (marathons, triathlons, Olympic festivals, etc).
- Member of Anthony Travel Dallas Executive Committee.
- Endurance Team Leader (direct reports: two event managers and two event coordinators and cross-functional reports: sales associates, marketing, and accounting).
- Financials: created budgets, analyzed forecasts and actuals for Endurance Team events.
- Marketing and Promotions: developed marketing strategies and programs for Endurance Team while leading direct reports and cross-functional team members to deliver on established goals.

- Sales: organized effective sales practices and methods to maximize efficiency while retaining the highest standard of guest experience.
- Negotiations: participated in contact negotiations for hotel room blocks (from 10 rooms to 1,000 rooms on peak night), charter air service, food and beverage, special event space, and event service agreements.
- Client and Customer Relationships: clear understanding of the importance of creating and maintaining mutually beneficial relationships between our organization, staff, clients, and customers.
- Growth: 300% sales growth in Endurance Team Events and Endurance Team from one to five team members.
- Member of International Association of Travel Agents Network.

Relay Sport Marketing, Chicago, Illinois

Budweiser Winter Olympic Club Bud Assistant,

February 2010

- Assisted with all event operations of Club Bud's five nights of individually themed and sponsored parties at the Commodore Ballroom during the 2010 Winter Olympic Games.
- Event day operations included: set-up, tear-down, event schedule control, security, sponsor activation, etc.

Disney Sports Attractions, Lake Buena Vista, Florida

Disney Endurance Series Intern,

June 2002 – May 2003

- Assisted and consulted on Disney Endurance Series events at Walt Disney World Resort.
- Events included: Walt Disney World Marathon Weekend, Disney's Inline Marathon Weekend, Danskin Women's Triathlon Series, and TriAmerica Triathlon Series Finale.
- Main contact for internal and external partners for transportation and credentialing during the Walt Disney World Marathon Weekend. Organization, route planning, and responsibility for over 300 charter buses throughout weekend. Designed and distributed over 4,000 race weekend credentials for media, staff, volunteers, medical and, VIPs.
- Primary contact and organizer for Disney's All Star Kid's Classic and Awards Ceremony during Disney's Inline Marathon Weekend. Team Leader for Olympic Distance Triathlon course evaluation and redesign to address logistic, guest, and internal partner (theme park and resort) challenges present during previous year.

Kentucky Derby Festival, Louisville, KY

Events Program Intern,

March 2002 – May 2002

- Provided assistance with coordination and facilitation of over more than 20 events occurring during the two weeks preceding the Kentucky Derby.
- Supported Thunder Over Louisville, Great Balloon Race / Glow, Derby Marathon, and mini-Marathon.

University of Louisville Athletic Department, Louisville, KY

Athletic Marketing Assistant,

September 2000 – December 2001

- Assisted in coordinating season-long marketing strategy for women's basketball and volleyball.
- Prepare game public address scripts, synchronize and execute corporate sponsored game-time promotional events for all home football, women's volleyball, men's and women's basketball contests.

Relay Sport Marketing, Chicago, Illinois
Budweiser Sport Event Specialists,

May 2001 – September 2001

- Implemented contiguous United States and Major League Baseball's 2001 All Star Game promotions for Budweiser's inaugural Long Ball Challenge tour.
- Established weekly and daily Budweiser on-premise account contacts for the execution of nightly promotions.
- Set-up, execution and break-down of Long Ball promotion. Included POP placement, distribution of give-away items, and marketing data collection.
- Filed individual event synopsis and legal affidavit, weekly expense reports, time-logs, and performed equipment maintenance.

RESEARCH

REFEREED PUBLICATIONS

Rice, J. A. (in press). A Generational Cohort Comparison of Sport Participant Involvement. *Journal of Applied Sport Management*.

King, K. M., & **Rice, J. A.** (in press). Kentucky Teen Institute: Results of a one-year, health advocacy training intervention for youth. *Health Promotion Practice*.

Rice, J. A. (2015). Integrated sport marketing communications. In G. Bernstein (Ed), *Introduction to Sport Marketing*. Urbana, Illinois: Sagamore Publishing

Todd, A. J., **Rice, J. A.**, & King, K. M. (2013). Meade Activity Center: Increasing physical activity opportunities for rural, low-income children. *Kentucky Association for Health, Physical Education, Recreation and Dance Journal*, 51(1), 65-72.

REFEREED PUBLICATIONS IN REVIEW

Aicher, T., **Rice, J. A.**, & Hambrick, M. E., (in review). Understanding sport involvement motivations and sport event evaluation meanings as factors influencing marathon participation. *Journal of Sport Management*.

Hambrick, M. E., **Rice, J. A.**, & Aicher, T. (in review). "Share the good news and share the benefits": Examining the use of negotiation-efficacy by African American endurance runners. *Leisure Sciences*.

King, K. M., & **Rice, J. A.**, Ha, J. P., Mahoney, T. (in review). Points of attachment in physical activity (PAI-PA) scale development for community-based physical activity promotion. *Rural Society Journal*.

Kang, S. J., **Rice, J. A.**, & Hambrick, M. E. (in review). CrossFit across platforms: Using social media to navigate niche sport challenges. *International Journal of Sports Marketing and Sponsorship*.

REPORTS

King, K. M., & Rice, J. A. (2014, August). *Year 3 Annual Report of Meade Activity Center Project*. Prepared for the Meade Activity Center, Brandenburg, KY.

King, K. M., & Rice, J. A. (2014, July). *Youth Health Leaders of Kentucky – Program Evaluation*. Prepared for the Kentucky Teen Institute, Louisville, Kentucky.

Hambrick, M. E., Rice, J. A., Aicher, T., & Rosely, M. (2014, April). *Endurance runner survey results*. Prepared for the National Black Marathoners Association, Dallas, Texas.

King, K. M., & Rice, J. A. (2013, September). *Youth Health Leaders of Kentucky – Preliminary Findings of the Pre-test Evaluation*. Prepared for the Kentucky Teen Institute, Louisville, Kentucky.

King, K. M., & Rice, J. A. (2013, August). *Year 2 Annual Report of Meade Activity Center Project*. Prepared for the Meade Activity Center, Brandenburg, KY.

King, K. M., Rice, J. A., & Carrico, K. (2013, May). *Project BALANCE: Beneficial Activity Levels and Nutritional Choices Everyday*. Prepared for the Ohio Valley Educational Cooperative, Shelbyville, KY.

SCHOLARLY PRESENTATIONS

Rice, J. A. & Du, J. (2015, October). Bridging the academic-practice divide: Developing and validating a participatory sport brand association scale. Sport Marketing Association Conference, Atlanta, GA.

King, K. M. & Rice, J. A. (2015, October). A rural community coalition's movement toward sustainable, community-wide, physical activity programming and places. American Public Health Association Conference, Chicago, IL.

Rice, J. A. (2015, March). Protecting sport event copyright material in a new digital environment. Sport and Recreation Law Association Conference, Charlotte, NC.

Rice, J. A., Aicher, T., Hambrick, M. E., & Rosely, M. (2014, October). A stage comparison of two popular sport motivation scales using an underrepresented endurance event population. Poster presentation at the Sport Marketing Association Conference, Philadelphia, PA.

Rice, J. A., Hambrick, M. E., Aicher, T., & Rosely, M. (2014, May). Motivations and barriers to endurance sport participation within an underrepresented population. Poster presentation at the North American Society for Sport Management Conference, Pittsburgh, PA.

Rice, J. A., Hambrick, M. E., Aicher, T., & Rosely, M. (2014, April). Motivations, cultural expectations, and negotiation-efficacy as factors influencing marathon participation in an underrepresented population. University of Louisville Graduate Research Symposium, Louisville, KY.

Rice, J. A., Hambrick, M. E., Aicher, T., & Rosely, M. (2014, April). Motivations, cultural expectations, and negotiation-efficacy as factors influencing marathon participation in an underrepresented population. Spring Research Conference, Cincinnati, OH.

Rice, J. A., Hambrick, M. E., Aicher, T., & Rosely, M. (2014, March) Utilizing event choice motivations to organize participant commitment and self-determination. Southern Sport Management Conference, Nashville, TN.

Todd, A. J., **Rice, J. A.**, & King, K. M. (2014, February). Meade Activity Center Project. Atlantic Coast Conference Meeting of the Minds, Pittsburgh, PA.

Todd, A. J., **Rice, J. A.**, & King, K. M. (2014, February). Meade Activity Center: Increasing physical activity opportunities for rural, low-income children. Poster presentation at Posters at the Capitol annual research presentation, Frankfort, KY.

Todd, A. J., Rice, J. A., & King, K. M. (2013, July). Meade Activity Center: Increasing physical activity opportunities for rural, low-income children. Poster presentation at annual Summer Research Opportunity Program, University of Louisville, Louisville, KY.

Todd, A. J., **Rice, J. A.**, & King, K. M. (2013, October). Meade Activity Center: Increasing physical activity opportunities for rural, low-income children. Poster presentation at College of Education Research Office, Louisville, KY.

Rice, J. A., & Hambrick, M. E. (2013, October). Generation Y sport participant behavior. Sport Marketing Association Annual Conference, Albuquerque, NM.

Kang, S. J., **Rice, J. A.**, & Hambrick, M. E. (2013, October). Overcoming niche sport disadvantages with social media. Sport Marketing Association Annual Conference, Albuquerque, NM.

FUNDING ACTIVITIES

Rice, J. A. (2014). Travel to Philadelphia, PA for the *2014 Sport Marketing Association annual conference*. Funded by the University of Louisville Graduate School Council in the amount of \$250.

Rice, J. A. (2014). Motivations, cultural expectations, and negotiation-efficacy as factors influencing sport participation in an underrepresented population. Funded by the University of Louisville President's Commission on Diversity and Racial Equality

Graduate Research Grant in the amount of \$750.

Rice, J. A. (2014). Travel to Nashville, TN for the *2014 Southern Sport Management annual conference*. Funded by the University of Louisville Graduate School Council in the amount of \$250.

Rice, J. A., (2014). Understanding sport motivations and sport event evaluation meanings as factors influencing marathon participation. Funded by the University of Louisville Graduate School Council Research Fund in the amount of \$300.

Rice, J. A. (2012). University of Louisville Samuels Scholarship in the amount of \$5,137

RESEARCH GRANT ACTIVITIES

Meade Activity Center (MAC) Project.

January 2012 – June 2014

Role: Graduate Research Assistant

Description: Rural, low socioeconomic community's grassroots efforts to address health and physical activity disparities through individual, social, environmental, and policy interventions.

Principal Investigator/External Evaluator: Kristi King

Funding Source: CFDA#94.019. Corporation for National and Community Service, Foundation for a Healthy Kentucky, Meade Activity Center, Inc.

Funding Amount: \$750,000.00 to MAC while MAC provides a \$750,000.00 match

Total to UofL: \$82,662.48

YMCA Kentucky Teen Institute

June

2013 – May 2014

Role: Graduate Research Assistant

Description: Pilot program for high school students in Kentucky to develop, implement, evaluate, and advocate for community-based health promotion programming.

Principal Investigator/External Evaluator: Kristi King

Funding Source: Greater Kentucky YMCA

Funding Amount: \$1300.00

Total to UofL: \$1300.00

Project BALANCE

January

2012 – September 2014

Role: Graduate Research Assistant

Description: Rural, multi-site, low socioeconomic status intervention to enhance physical activity and nutrition behaviors of elementary school children and communities.

Principal Investigator/External Evaluator: Kristi King

Funding Source: CFDA# 84.215F. United States Department of Education's Office of Safe and Drug Free Schools; Carol M. White Physical Education Program (PEP) awarded to Ohio Valley Educational Cooperative (OVEC). Funding Amount: \$1,400,000.00 to OVEC school district from October 2010 to September 2014
Total to UofL: \$118,509.02

NON-REFEREED PUBLICATIONS

Rice, J. A. (2010, November 29). Asian Games report ¥3 Billion in sponsorship revenues [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/11/asian-games-sponsorship/>

Rice, J. A. (2010, November 24). Bird's Nest to host 2015 IAAF Championship, Water Cube becomes Happy Magic Water Park. [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/11/happy-magic-water-park/>

Rice, J. A. (2010, November 17). Sold out with empty seats at Asian Games [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/11/sold-out-with-empty-seats-at-asian-games/>

Rice, J. A. (2010, October 20). Chinese shoe companies growing [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/10/chinese-shoe-company/>

Rice, J. A. (2010, October 1). Kobe Bryant jersey number one in China. [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/10/kobe-bryant-nba-jersey-china/>

Rice, J. A. (2010, September 16). Why Allen Iverson will not go to China [Web post]. Retrieved from <http://sportsbusinessdigest.com/2010/09/allen-iverson-china/>

HONORS and AWARDS

Graduate Student Spotlight, (2014, July). University of Louisville, Louisville, KY.

Runner-up best presentation. For **Rice, J. A.**, Hambrick, M. E., Aicher, T., & Rosely, M. (2014, April). Motivations, cultural expectations, and negotiation-efficacy as factors influencing marathon participation in an underrepresented population. University of Louisville Graduate Research Symposium, Louisville, KY.

MEMBERSHIPS

North American Society for Sport Management	February 2014 - Present
Southern Sport Management Association	February 2014 - Present
Sport Marketing Association	September 2013 - Present

VOLUNTEER EXPERIENCE

Global Gurus

Tour Guide

March 2014

- Served as primary tour guide for the Ohio State University Jazz Ensemble 2014 China Tour.
- Organized ground tour contacts in Beijing, Xinxiang, Wuhan, and Shanghai to assist with daily tours and educational programming.
- Verified and organized jazz performances with CD Blues Club (Beijing), Henan Normal University (Xinxiang), Wuhan Conservatory of Music and Wuhan University.

Shanghai Fingers Baseball Club, Shanghai, China

Pitching Coach

March 2012 – July 2012

- Organized and lead pitching training drills for university club organization's weekly practice.

Wuhan University, Wuhan, China

Assistant Baseball Coach

June 2010 - June 2011

- Organized overall practice and training drills for university club organization. Weekly practices consisted of hitting, fielding, running and pitching exercises. Guidance was provided mostly in English but also in Mandarin.

COMPUTER SKILLS

Microsoft Office

Adobe Photoshop CS5

Adobe Dreamweaver

Sony Vegas Pro

Wordpress

SPSS

Blackboard

NVIVO

Qualtrics

LANGUAGE SKILLS

English as first language.

Early intermediate Mandarin Chinese.

OTHER CERTIFICATES

University of Louisville:

Entrepreneurship Academy, December 2014

Coursera Certificates:

Chinese for Beginners, **Peking University**, June 2015

Maps and the Geospatial Revolution, **Pennsylvania State University**, June 2014

An Introduction to Marketing, **Wharton University of Pennsylvania**, Jan. 2014

A New History for a New China, **Hong Kong University of Science and Tech.**,
August 2013

The Global Business of Sports, **Wharton University of Pennsylvania**, June 2013

Sports and Society, **Duke University**, June 2013

Computer Science 101, **Stanford University**, June 2012