

Serious Running: Factors that contribute to Awareness, Attraction, Attachment and

Loyalty to Long Distance Running

by

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ABSTRACT

Commitment to an activity is widely studied in leisure research. Serious Leisure Perspective (SLP) describes characteristics a committed activity participant possesses. The Psychological Continuum Model (PCM) describes the psychological process a person goes through to become committed to a leisure activity. Awareness, attraction, attachment and loyalty make of the four stages of PCM. Both perspectives have been used to describe committed leisure activity participants and commitment to organized recreational events. Research on leisure activity has yet to determine how the individual becomes loyal. Therefore, the purpose of this study is to determine the process in which recreation activity participants becomes loyal and to identify who can be labels as serious within the PCM Framework. Data was obtained from an online electronic survey distributed to participants of four U.S. marathon and half marathon events. A total of 579 responses were used in the final analysis. Path analysis determined the process in which a runner becomes committed. MANOVA is used to determine difference between leisure groups in the four stages of PCM. Results indicate that activity participants need to go through all four stages of PCM before becoming loyal. As knowledge increases, individuals are more motivated to participate. When the activity satisfies motives and becomes a reflection of their identity, feelings become stronger which results in loyalty. Socialization is instrumental to the progression through the PCM Framework. Additionally, attachment is the “bottleneck” in which all loyal activity participants my pass through. Differences exist between serious leisure groups in the attachment and loyalty stages. Those that are ‘less serious’ are not as committed to the activity as their counterparts.

Dedication

For Madilyn, Stephen and Tracy

*“And when you dream, dream big
As big as the ocean blue
'Cause when you dream it might come true
When you dream, dream big”*

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Chapter 1

INTRODUCTION

Sport and recreation activity participation fall under the description of leisure activity (Stebbins, 2007). Leisure is defined as un-coerced activity that is engaged in during free time, which people use their abilities and resources in a satisfying and fulfilling way. These are non-work activities where participants have free choice with no obligation to participate (Beard & Ragheb, 1983). They can include activities such as sport, outdoor and social activities, watching television, reading, etc. Within leisure research the serious leisure perspective (SLP) identifies characteristics of highly committed individuals. This form of leisure requires a high level of commitment and dedication to participate in an activity and usually continues over many years (Stebbins, 1992). Serious leisure individuals structure their lives to accommodate their serious leisure pursuits; sacrificing work, family, and social obligations for the activity. The devotion to pursue an activity at this level requires a high level of skill, time, intensity, and cost (Shipway & Jones, 2007).

Serious leisure is a descriptive tool used to illustrate characteristics of individuals that are highly committed to an activity (Getz, 2005). Through research on comedians, athletes, singers and others, Stebbins discovered six qualities possessed by all serious leisure participants: perseverance, leisure career, effort, durable outcomes, ethos and a strong attachment or identification with the activity (Mannell & Kleiber, 1997; Stebbins, 1992).

Perseverance is when the individual sticks with the activity through fear, embarrassment, anxiety, fatigue, etc. to overcome difficulty associated with the activity (Stebbins, 1992). Individuals spend a lot of time working on the activity to make

improvements in their performance (Nash, 1979). This large amount of time dedicated to the activity is in pursuit of their *leisure career*. *Effort* characterizes the knowledge, skill and persistence possessed by the individual (Stebbins, 1992). *Durable outcomes* are anything that can be appealing to the individual that is met through participation in the activity. *Ethos* describes the values or beliefs that are shared by individuals that participate in the activity. Finally, the activity becomes part of the person's personal *identity*. Together, these six qualities create a person that is committed and dedicated to an activity over a long period of time (Mannell & Kleiber, 1997).

Another way of examining commitment to a recreational activity is through the Psychological Continuum Model (PCM) (Funk & James, 2001; 2006). Rather than identifying characteristics of these committed individuals, PCM identifies how connected a person is to an activity (Funk & James, 2001). This framework is made up of four stages that identify the psychological relationship a person can have with an activity: awareness, attraction, attachment and allegiance.

In the awareness stage, a person first finds out about the activity or is introduced to the activity. They are attracted when the person determines that participation in the activity will meet personal and social needs (Funk, 2008). When the activity takes on a personal or internal meaning, they are considered attached. Finally, allegiance is when the person becomes loyal to the activity. The final stage of PCM is desired because loyal participants will continue to associate with the activity over a long period of time.

Both SLP and PCM can be used to describe an activity participant that is committed to a leisure activity. In SLP, serious is used to describe participants that are compelled to continuously pursue an activity of interest than non-serious participants (Stebbins, 1982). These individuals usually have a pleasant involvement in the activity and are devoted to developing skill and knowledge offered by the activity for personal

enrichment. In PCM, loyal is used to describe a participant that is highly committed to an activity and is unlikely to change to another activity (Funk & James, 2001). These individuals will be lifelong activity participants as long as the activity continues to meet personal and social needs.

Both SLP and PCM have also been used to describe commitment to organized events related to recreational activities. People with high levels of commitment to an activity may begin a career of traveling to organized events that provide benefits and challenges related to the activity (Lamont & Kennelly, 2011). Serious leisure has been explored with triathletes (Lamont & Kennelly, 2011), football fans (Gibson, Willming & Holdnak, 2002; Jones, 2000), runners (Getz & Andersson, 2010), and kayakers (Kane & Zink, 2007). In each of these studies, participating in organized events increased the participant's personal and social (ethos) identity as well as their behavioral intent towards the activity. Personal and social identity has been found to increase after participation in charity sport events (Filo, Funk & O'Brien, 2009; 2011) and through collegiate and professional football (Funk & James, 2006). While both SLP and PCM have demonstrated commitment to a leisure activity, neither has investigated whether participation in organized events lead to activity loyalty.

Both SLP and PCM have individually demonstrated commitment to a leisure activity. Research continues to show the six characteristics in SLP and four stages of PCM lead to highly active individuals in pursuit of a leisure activity (Barbieri & Sotomayor, 2013; Cohan & Filo, 2013; Funk, 2008; Kaplanidou & Gibson, 2010). While this is important, research has yet to investigate how these individuals become loyal or how event participation influences commitment to a recreational activity. Additionally, research is needed to understand who among them, can be classified as serious leisure participants. Therefore, the purpose of this study is to determine the process in which

recreational activity participants become loyal and to identify who can be labeled as serious in those aspects of PCM. The present study also examines the role organized event participation plays in becoming a committed activity participant.

Research Problem

Research related to serious leisure simply defines individuals as serious leisure participants (Stebbins, 1992) based on their behaviors in pursuit of the activity. They choose to spend their free time participating in the activity or acquiring knowledge and special skills that will improve their ability to perform the activity (Stebbins, 1992). Serious leisure participants are said to be committed to the activity, however understanding their internal connection to the activity has yet to be explored.

Before we can understand this internal connection, an investigation into the factors that make participants aware, attracted, attached and loyal needs to be completed. Research has explored activity motivation (Barrell, Chamberlain, Evans, Holt & MacKean, 1989; Clough, Shepherd & Maughan, 1989; Ogles & Masters, 2003), and reasons to continue with the activity. However, research to determine where people first learn about the activity, the features that attract them and the attitude that a person has towards the activity still needs to be explored. Research has looked at commitment to recreational events (Filo, Funk & O'Brien, 2009; 2011) and sports teams within the PCM framework. However, PCM research has yet to explore the role event participation plays in becoming a loyal activity participant. Thus, understanding these components of participation will help identify how a person becomes loyal.

Both PCM and SLP describe characteristics of a committed participant, however, one is more developmental and the other descriptive. PCM defines the psychological connection a person develops to a recreation activity (Funk & James, 2001; 2006). The

model explains how they develop an internal and emotional connection with the activity. However, SLP is more explanatory (Shipway & Jones, 2007) and describes characteristics a serious leisure person possesses. Neither PCM nor SLP explain why participants “do what they do.” Thus, rather than describing traits recreational participants possess, the present study uses PCM to describe how participants become loyal to the activity and SLP to identify those that can be classified as serious within the four aspects of PCM.

Contribution of the research

The first contribution of the present study is to examine the entire PCM Framework from awareness to loyalty. Previous research has assumed that people participating in an activity are already aware and attracted. Additionally, research on PCM has mostly focused on the attraction and attachment stages with intention to participate in the future. The present study examines all four stages of PCM to identify what happens during the decision making process to determine how recreational activity participants become loyal.

Research has demonstrated that event participation leads to intention to participate in future events (Hallman & Wicker, 2012). However the role that participation in an event plays on attachment and commitment to an activity has yet to be explored. Examining the role that event participation plays on loyalty to one’s serious leisure pursuits helps us to understand what drives participants. This understanding can be used to promote and grow the activity. This type of information can help event producers understand what drives their participants, which can assist with promoting and growing the event. This information can assist marketers with understanding the

factors important to participants, and how those factors can lead people to become loyal participants and consumers.

Finally, SLP and PCM have been used individually to describe committed individuals. However, Havard and Gould (2010) suggest that SLP and PCM could work together to categorize activity participants into different association levels. Therefore the present study links these two individual perspectives to explore differences that may exist between serious and less-serious leisure participants within the four outcomes of PCM.

Justification of the research

PCM has been used to describe the psychological process that occurs within individuals on their way to becoming committed participants to an activity (Funk & James, 2001; 2006). Research on active sport participation needs to move beyond describing participants to providing and understanding why they participate in the activities and events they do (Gibson, 2005; Weed, 2005). Thus, understanding the process in which a person becomes loyal helps expand the field of research to incorporate why or how they became committed activity participants. This research helps to identify why individuals choose to maintain a commitment to specific activities.

Understanding the role that activity related events play in the commitment and participation of the activity is necessary. While event participation has been linked with intention to participate in future events (Hallman & Wicker, 2012; Smith, Costello, Kim & Jahn, 2010; Taylor & Shanka, 2008), the connection between event participation and long-term commitment to an activity has yet to be explored. It has been suggested that participation in activity related events may lead a person to become attached or loyal to the activity (Filo, Funk & O'Brien, 2009; Funk & James, 2001; 2006). Thus research is

necessary to understand if participation in related events allows a person to attach or commit to the activity.

The serious leisure perspective has primarily been used to describe leisure participants and create profiles of those that take their activity seriously. It describes participants rather than understands why they do what they do (Shipway & Jones, 2007). By understanding their psychological connection to an activity, future research can move past describing these serious leisure participants and start examining why they participate in the activities they do and the process they go through to become loyal.

Chapter 2

REVIEW OF LITERATURE

The following review of literature uses long distance runners as an example of recreational activity participants to explore the Psychological Continuum Model and the Serious Leisure Perspective. This review of literature describes characteristics and motivations of long distance runners as an example of serious recreational participants. Long distance runners were chosen for this study due to the increased interest in endurance based activities that has developed since 2000 (RunningUSA, 2012). USA Track and Field suggests 12,000 meters for men and 8,000 meters for women is considered long distance (USATF, 2013) The present study uses 10,000 meters (10K or 6.2 miles) for both males and females as the definition for long distance running. This review of literature provides a description of characteristics about runners and the psychological traits they develop to running through their long distance running (LDR) participation.

Psychological Continuum Model

The Psychological Continuum Model (PCM) is a framework that has been used to show commitment to sports team (Funk & James, 2001; 2006), recreational activities, charity-based endurance events (Filo, Funk & O'Brien, 2009; 2011) and other leisure activities (Kane & Zink, 2007). The PCM can be used to describe how runners progressively develop their commitment and loyalty to long distance running and related events. The four stages in PCM assume that individual and social situational factors work together towards the development of commitment and loyalty in participants (Funk & James, 2006). Each of the four stages in the continuum represents a psychological connection between the individual and the activity (Funk & James, 2001). The four stage

model (Figure 1) (awareness, attraction, attachment and allegiance) starts with how people become aware of an activity and continues through their loyalty and commitment to the activity. The decision making process leading to participation is based on the person's attitude toward the activity and personal, psychological and environmental factors that influence behavior (Beaton & Funk, 2008). PCM has been used to show this relationship in both passive (watching a team on TV) and active (participating in a marathon) sport interaction (Funk & James, 2001; 2006; Filo, Funk & O'Brien, 2011).

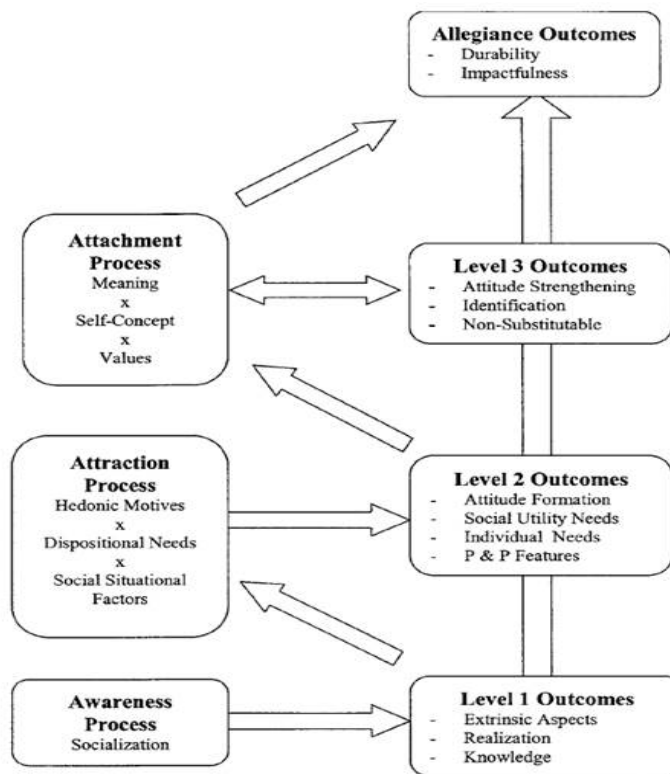


Figure 1: Psychological Continuum Model (Funk & James, 2006)

Awareness

The awareness stage is made up of the awareness process and awareness outcomes. The awareness process focuses on socialization or how a runner finds out about the activity whereas awareness outcomes indicate the knowledge attained about

the activity (Funk & James, 2001; 2006). Runners may find out about the activity through family, friends, media outlets, (Funk & James, 2001; McPherson, 1976), other runners or coaches (James, 2001). Both require the accumulation of additional knowledge or skill related to the activity (Funk & James, 2006; Stebbins, 1992). In awareness outcomes (Level 1), individuals gather information about the activity but may have little commitment or interest in participating. Participation may be low or the person is considering participation in the activity (Funk & James, 2001). The person may say “I know about running” but have not yet participated. The knowledge gained from awareness outcomes and realization an activity exists supports social and psychological needs, drawing a person into the attraction stage (Filo, Funk & Hornby, 2009; Funk & James, 2006).

Attraction

After the person becomes aware of the activity, an attraction begins to form (Funk & James, 2001). Here the person starts to prefer one activity over another. During the attraction stage, the individual acknowledges having a preference based on hedonic (entertainment or excitement) and utilitarian (acceptance and achievement) needs. Psychological and physical features, which can also be regarded as motivations, may generate a preference for participation in the activity (Beaton & Funk, 2008). In this stage, the person may say they “like running” (Funk & James, 2001).

Attraction Process

The attraction process suggests that a positive emotional response is formed after learning an activity can fulfill personal and social needs (Filo, Funk & Hornby, 2009). This attraction may also lead to participation in a long distance running event if the event is perceived to meet the needs of the person. If the features of the event (course,

accomplishment, entertainment, etc.) or activity could lead a person to believe that their needs (faster times, goal accomplishment, be with friends, etc.) will be met, then they are more likely to participate (Filo, Funk & Hornby, 2009). The attraction process focuses on intrinsic and extrinsic motives related to participation in an activity. Internal and external factors have been linked to participation in endurance based events, but not the connection with commitment to the activity (Filo, Funk & O'Brien, 2011; Smith, Costello, Kim & Jahn, 2010). Internal/External Theory, which examines both internal and external motives for participating in an activity, is used to explore the attraction features that lead to committed participation.

Internal/External Theory

Individuals are driven to engage in leisure for a number of different reasons (Beard & Ragbeh, 1983). Internal/External Theory (IET) states that people participate in recreation activities because they are pushed by their internal motives and pulled by external elements related to the activity (Zhang & Lam, 1999). Internal motivators drive a person to do something (Uysal & Jurowski, 1994). In travel- related research, internal factors such as escape, rest, relaxation, prestige, health and fitness, accomplishment, and social interaction have been found to drive travel behavior. Klenosky (2002) found individuals travel to escape everyday life, rest, relax, to seek adventure and health and fitness. These factors act as the initial reasons for participating in an activity and can prompt many people to choose the same activity for different reasons (Crompton, 1979).

External factors influence a person to select one activity over another. In travel research, external factors include the location, shopping opportunities, family activities, etc. (Zhang & Lam, 1999). These factors, or destination attributes, help tourists select a specific destination that will meet their needs (i.e. close to the beach, close to family,

plenty of family activities). Although this theory has mostly been used in travel research, it can be applied to recreational activity participation as well. For example, a female might be interested in being more active and meeting other women her age that are also active. She has always wanted to run a half marathon and thinks that by running and training she can meet other like-minded women. Meeting new people and being active meet her internal motives and registering for a half marathon and training group meet her external needs.

Until recently, most of the research about running has dealt with motivation (Ogles & Master, 2003) or the internal factors surrounding participation (Gladden & Funk, 2004, Filo, Funk & O'Brien, 2011). In addition to the factors mentioned previously for travel, there are some internal factors relevant to sporting events. Supporting a charity through event participation, spending time with friends and helping others were found as main reasons for participating in charity-based endurance events (Filo, Funk & O'Brien, 2011). Filo (2008) found that advancing a charity towards success and improving the charities ability to execute its mission were reasons for participating in a charity cycling event. Researching the internal and external factors of serious activity participation is needed to better understand what attracts participants to the activity. The present study examines both to determine their role in choosing the activity and their link to becoming loyal activity participants.

Attraction Outcomes

Without actually participating in the activity, people can only get a sense of whether or not their needs would be satisfied through participation. Through participation in the activity, a person forms an initial attitude about the activity. This attitude is based on whether they feel as though the activity meets their social, individual

and hedonic motives (Funk & James, 2006). These could include escape from daily life, entertainment or excitement (Filo, Funk & O'Brien, 2011). In this stage, the person's positive attitude toward the activity can be linked to future participation (Funk, 2002). Motives met (from Level 2 outcomes) through participation contribute to the next stages of PCM, attachment and loyalty (Filo, Funk & O' Brien, 2011).

Attachment

The attachment process creates a connection between the individual and the activity (Funk & James, 2001). It refers to the degree to which the psychological (internal) and physical (external) features (from the attraction process) of the activity take on an internal and deeper meaning for the individual. During this stage a person may identify themselves as a runner or state to others "I am a runner." Preference for the activity is strengthened during this phase when the consumer finds meaning and value in it. Meanings are the intangible attractions attributed to an activity (Bloch & Richins, 1983) whereas values are the beliefs that a person has to influence decision making related to goals or outcomes (Schwartz & Bilsky, 1987). Meaning, values and self-concept join together to form an attachment to the activity. Attachment has been examined in a series of charity-based sporting events and found camaraderie, cause and competency (awareness about the charity) were found, qualitatively, to be the three values leading to attachment in these events.

Attachment Process

The attachment process is made up of self-concept and value constructs (Funk & James, 2006). These factors interact to influence attitude toward an activity (Perkins & Reynolds, 1988). Self-concept explains how a person feels about themselves, which leads to the creation of identity (self and social). Values and self-concept have not been

explored much in the literature related to their role in forming an attachment to an activity (Filo, Funk, & O'Brien, 2009) or their role on attitude. Therefore the present study uses identity expression (derived from Identity Theory) to describe self-concept.

Identity Theory

Identity Theory (IT) can be used to describe the values associated with an activity and the boost in self-concept that is a result from participation. IT is based on the assumption that a person's self-concept is composed of different identities (parent, sister, student, runner, etc.) and those identities are organized into a hierarchy of importance (Stryker, 1987; Mannell & Kleiber, 1997). The more influence that an identity has on a person's self-concept, the more likely the person will seek out opportunities to employ that identity. For example, if being a student does not enhance a person's self-concept, but running does, the student is more likely to engage in activities that relate or are centered on running.

Identities are a symbolic reflection of personality (Burke & Reitzes, 1981). Interactions with others increase the meaning a person places on an activity or that identity. Identity is a result of social relationships and self. This means that a person who wants to enhance their 'identity' will need to act like and adopt the characteristics of the desired 'identity'. When individuals develop ideals, values and beliefs, they can distinguish themselves as a 'runner'. For example, if a person wants to be a runner, they will adopt the values that are expressed by other runners. This person will act like other runners to take on that specific identity. When the person sees themselves as a runner, they will be more self-assured and will receive a positive response from the group (fellow runners). This will confirm their identity as a runner, thus enhancing their self-concept. These behaviors are also a form of expression of the person's running identity as defined

by PCM. Shipway and Jones (2008) suggest that people do an identity ‘transformation’ when they are at running events and as soon as the event is over they switch to a different identity (mother, sister or student).

Identity Expressiveness

Identity expressiveness, derived from IT, is a person’s perception of an activity’s ability to express social and personal needs (Thorbjornsen, Pedersen & Nysveen, 2007). In other words, participating in an activity is a reflection of who they are or who they want to be. It is also a strong determinant of intention and behavior, which is examined in the loyalty stage of PCM. Identity expression has two components: self-identity expression (SIE) and social identity expression (SoIE).

SIE is the behavior a person carries out to display their identity (Pagani, Hofacker & Goldsmith, 2011). There is a causal link between SIE, intention, behavior and attitude formation. SIE refers to the ways in which a person’s use of running displays and reconfirms their self-identity to themselves and others. For example, wearing a finisher t-shirt would express that they are a runner who participated in a running event. On the other hand, SoIE is being able to effectively communicate with others in social situations (Thorbjornsen, Pedersen & Nysveen, 2007). This form of expression examines how people use different forms of messaging to impress or influence others. This could be done face to face, on social media outlets, text messaging or other social networking sites. For example, if a person were to wear their t-shirt out to the mall, it would not send a message to other mall goers that do not know what the t-shirt symbolizes. If another runner were to see this person in the t-shirt, it would be seen as a sign of accomplishment that this person completed a specific race. It is a code to other runners,

that the wearer is equal to other finishers and runners. By simply wearing the t-shirt, the person is communicating to others “I am a runner.”

Identity expressiveness is used to explain the self-concept component that serves as an input in the attachment process of PCM. Thus, SIE and SoIE is examined, under identity theory, to explain how a person views themselves as a runner and how participating in running and long distance running events enhance their self-concept.

Attachment Outcomes

Finding meaning and value in activity participation is established during the attachment stage (Funk & James, 2001). Attachment outcomes are represented by the strengthening of the individual’s attitude (formed in attraction) toward a specific activity, which occurs when values interact with self-concept and attraction outcomes. At this point, the activity takes on an emotional, functional and symbolic meaning (Funk & James, 2006), which is defined as attachment (Level 3) outcomes. This could occur through motives that are satisfied and values that are met through participation. Values, from the attachment process, help researchers understand an individual’s motivations and attitudes toward an activity (Kahle, Beatty & Homer, 1986). When the activity extracts a response from the person that enhances the link between the activity and the person’s values, attachment has developed (Funk & James, 2001).

These participants will have a stable level of attachment or a deeper connection to the activity and will devote more time and energy into activities related to the activity than in previous stages (Funk & James, 2001). Even though the connection may be stable, people can slip back to the attraction stage if the activity stops providing a tie to increased self-concept. Attitude strength is one way to gauge the strength of a person’s attitude toward the activity in this stage of PCM.

Strength of Attitudes

In attachment outcomes, the initial attitude formation (from attraction outcomes) takes on a greater psychological meaning, which is reflected toward the activity. PCM utilizes three measurements to determine the strength of an attitude in level 3 outcomes: knowledge, importance and affect. Knowledge is the amount of information that a person has about the activity (Krosnick, Boninger, Chuang, Berent & Carnot, 1993). This can be measured by asking people to report how much they know in quiz-like questions (Krosnick & Smith, 1994). Importance is the dimension that measures the extent to which an individual cares for something and is personally vested. It can be measured by asking the person how important the activity is or how much they care about it. Affect evaluates the emotion elicited by the activity (Funk & James, 2001) and can be determined by asking how participation in the activity makes them feel.

These three measures of attitude strength have all been independently linked with commitment and loyalty to an activity or sport (Funk & James, 2006). However, the three measures together best predict resistance to change and attitudinal loyalty as required in this stage. One measure may not provide a worthy representation of the person's overall attitude (Krosnick & Smith, 1994), thus using all three guarantees the overall strength of the person's attitude.

Allegiance

If attitude becomes stronger, it may eventually lead to activity loyalty (Funk & James, 2001). Attachment to an activity ultimately leads to the final stage in the PCM framework, loyalty (Filo, Funk, O'Brien, 2009 & James, 2008). This stage represents a strong connection between the activity and consumers, resulting in consistent commitment and dedication to the activity (Funk & James, 2001). Loyalty outcomes test

the strength and effect of the attachment process and outcomes in the participant (Funk & James, 2006).

Loyalty is created when responses and tendencies of the activity are strengthened and become persistent and resistant to counter persuasion and influences (Funk & James, 2001). Attitudinal and behavioral outcomes in this stage test the strength and effect of attachment outcomes on the participant (Funk & James, 2006). The attitudinal component shows the psychological commitment to an activity and explains why it is valued and meaningful. This can be measured by asking the participant if they consider themselves a committed participant or if they are likely to change their loyalty from once activity to another. The behavioral outcome includes repeat behavior and intention to participate in the future. This can be measured by asking the participant if they intend on participating in the activity in the future.

According to PCM, as the psychological connection, formed in the attraction and attachment stage increases, loyalty becomes more durable and impactful (Funk & James, 2006). Durability is the stability of the connection in terms of persistence and resistance. It is the ability of the attitude to withstand personal, psychological, and environmental threats. Durability is thought to be the underlying factor leading to commitment. Based on this research, loyal participants are more likely to maintain their beliefs even when presented with negative information about the activity.

Serious Leisure

Another way to look at committed activity participation is through the serious leisure perspective (SLP). Serious leisure is a term used to describe a form of leisure with people that take sports and hobbies seriously (Getz, 2005). It has been defined as the “systematic pursuit of an amateur, hobbyist or volunteer activity that is substantial and fulfilling where participants find a career in acquiring and expressing skills, knowledge

and experience related to the activity” (Stebbins, 1992, p.3). It describes lifelong interests illustrated by the attainment of specific knowledge and skills, perseverance, amateurism, enhancement, self-image, self-actualization and self-gratification (Getz, 2005).

Runners have been described as serious leisure participants due to their high level of commitment and dedication to the activity (Stebbins, 1982). They may reject other behaviors or activities that do not fall in line with their interests. These runners accept the norms and values as set by the running community and running becomes central in their life. These individuals view the benefits of participation as outweighing the costs associated with participation.

Long distance runners have been categorized as hobbyist serious leisure participants, meaning that they exhibit commitment to the activity (Buchanan, 1985). Hobbyist participants develop skills and knowledge for personal enrichment in pursuit of their chosen activity over a long period of time. Typically, hobbyist participants participate in activities that are rule based and non-competitive with no professional counterparts (Stebbins, 2007). However, when the pursuit becomes competitive these individuals can be classified as “players” of the sport or game (Stebbins, 1982). For example, runners that participate in races to compete against other runners can be labeled: player. This is different from the activity participant that runs for pleasure, exercise and further develops running skills.

Serious runners are satisfied through personal and social rewards obtained through participation in the activity. On a personal level, serious leisure participants strive for self-actualization by developing skills and an improved ability to perform the activity (Stebbins, 2001). Socially, participation in the activity is viewed as a form of self-expression. Runners are able to demonstrate their acquired skills and knowledge about running to others in and out of their group. Participation links the runner with other

serious runners by providing a sense of belonging and identity with those that share similar values and beliefs (Stebbins, 1992). As a person continues to participate in the activity and develop a commitment to it, their sense of identity becomes stronger as well. Characteristics of serious runners demonstrate commitment to long distance running as described by the SLP.

Six Characteristics of Serious Leisure

Runners that fall into the category of 'serious runners' exhibit six characteristics: the need to persevere at the activity; availability of a leisure career; putting forth effort to gain skill and knowledge; realization of various special benefits; unique ethos and social world; and an attractive personal and social identity (Stebbins, 2007).

- Perseverance: the ability of the participant to occasionally stick with the activity through times of fright, embarrassment, anxiety, fatigue and injury (Stebbins, 1992). People may be persistent towards a goal-related activity over time (Gould, Moore, McGuire & Stebbins, 2008).
- Career: people that make a career out of the activity and spend a lot of time working on it over a long period of time. It is a staple in the person's life and they may notice improvements in their training over time (Nash, 1979). This quality is characterized by stages of development, turning points and improvements (Goff, Fick & Oppliger, 1997) that reflect changing patterns of skill, knowledge and ability (Stebbins, 2001).
- Effort: people need to put forth a significant amount of work to increase their knowledge, training, experience and skill related to the activity (Stebbins, 1992). Knowledge and skill can be obtained in a formal educational setting

(Carpenter, Patterson & Pritchard, 1990) whereas training and experience need to come from actual participation in the activity.

- Durable Outcomes: determining the cost and benefits of participating in the activity (Gould, Moore, McGuire & Stebbins, 2008). These benefits can include anything that is physically, socially, and psychologically attractive to the person. This characteristic includes seven personal and three social outcomes:
 - Personal outcomes: (* outcomes indicate a strong reward for participation)
 - *self-actualization- full use and realization of talents (Stebbins, 2001)
 - *self-enrichment- increasing intellectual or spiritual resources from participation (Stebbins, 1992)
 - self-expression- expression of their skills, knowledge and abilities to reflect their individuality (Stebbins, 2001)
 - renewal of self- creating a new sense of self due to participation
 - increased self-image- perception of self that is enhanced due to participation (Gould, Moore, McGuire & Stebbins, 2008)
 - *self- gratification – satisfaction of desires or fulfillment from participation (Stebbins, 2001)
 - financial return – compensation for products or knowledge from participation (weakest reward for participation)
 - Social outcomes (Stebbins, 2001):

- group attraction- outcomes resulting from associating with other participants
 - group accomplishment – outcomes from the group effort to complete a project or goal
 - group maintenance- efforts by the participants to ensure the group continues to develop and function as a unit
- Ethos: the participant demonstrates shared attitudes, practices, values, beliefs and goals of other activity participants (Goff, Fick & Oppliger, 1997; Stebbins, 2001). They express who they are through participation in the activity, attitudes, beliefs and values.
 - Identity: person identifies with their chosen activity and their identity is driven by participation in the activity (Stebbins, 1992). They will speak proudly, excitedly, and often about their activity (Goff, Fick & Oppliger, 1997; Stebbins, 1982) and may even present themselves in terms of the activity or say “I am a runner” (Funk & James, 2001).

Summary

PCM provides a theoretical framework to examine the psychological process in which people become serious leisure participants. The PCM framework provides an understanding of how participants find out about an activity, what attracts them, the meaning one place's on it and reasons they continue to participate over long periods of time. SLP identifies six characteristics of people that are committed to a specific activity. SLP also describes qualities and outcomes of individuals that participate in leisure activities. The present study: examines the psychological process a person goes through to become loyal, determines if event participation effects commitment to the activity, and

explores the differences between 'more serious' and 'less serious' runners in terms of their psychological connection to the activity.

Chapter 3

CONCEPTUAL FRAMEWORK AND HYPOTHESES

The presented research is divided into two parts. The first determines the psychological process a person goes through to become a loyal long distance runner. This part also identifies the role event participation plays in becoming a loyal runner. The second explores how serious and less-serious leisure classifications are different within the four aspects of PCM. The following chapter outlines the hypotheses and conceptual framework for this study.

Part 1

Funk and James (2006) created the revised PCM framework that includes process and outcome measures for each of the four stages of the model. Each stage has inputs (process) and outputs (outcomes) that lead to the next stage and ultimately to loyalty and intention to participate. Based on the PCM framework, Figure 2 depicts the proposed adapted model for this part to determine how a runner becomes loyal and the relationships between each stage of the model, inclusive of the theoretical constructs discussed previously. Long distance runners are used as the sample and example of recreational activity participants for the present study.

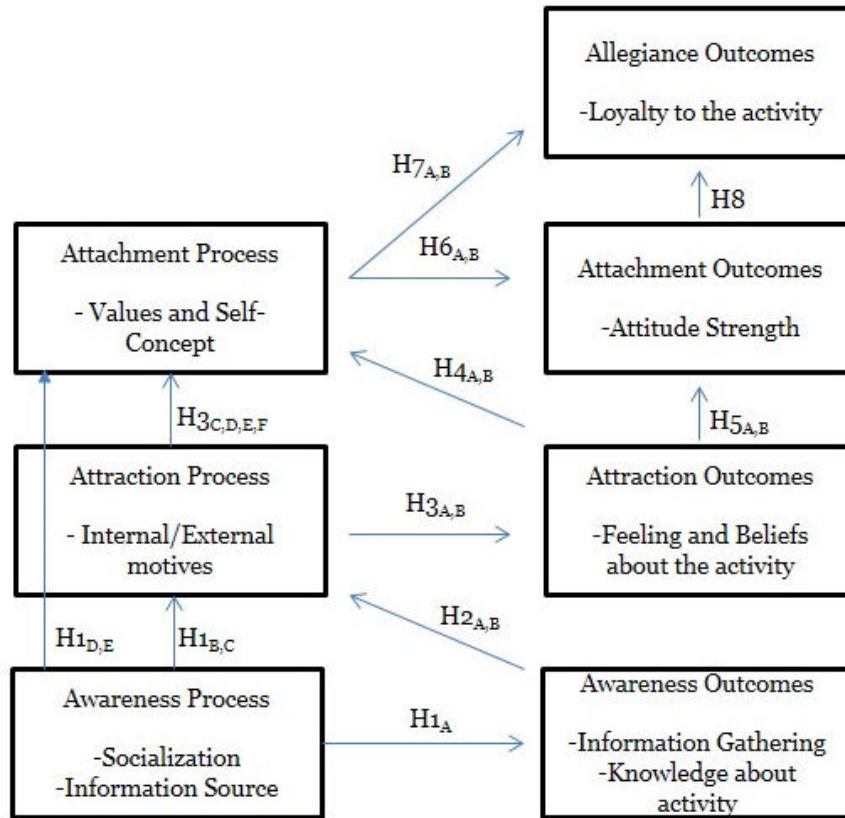


Figure 2: Proposed Path Model, adapted from Funk & James, 2006; Filo, 2008

Awareness

Before a person can be attracted to an activity they must first find out about it. The awareness stage (Level 1) of PCM examines where runners find out about and what information they gather about the activity. It has been shown that recreation participants first find out about activities through various mediums (Funk & James, 2001, 2006; Funk, 2008) such as friends, family, printed material, television or other media outlets, etc. If the activity seems as though it could strengthen the person's personal and social motivations, they are likely to gather information about it. Therefore, the following hypothesis is proposed:

H1_A: Information sources positively enhance runner's knowledge about participation in long distance running.

Information sources that demonstrate enjoyment towards the activity, enhance motivation in others (Brustad, 1993; 1996). Additionally, through the information gathering process (awareness outcomes), the person determines whether the activity will possibly strengthen personal and social motives (Funk & James, 2006). If so, they will move to the next stage in the model, attraction. Therefore, the following hypotheses are proposed:

H1_B: Information sources will positively enhance internal motivation to participate in long distance running.

H1_C: Information sources will positively enhance external motivation to participate in long distance running.

Social influencers directly communicate values they have attached to an activity on others through information sharing. Influencers can affect the development of self-concept by providing knowledge and opportunities for other to engage in long distance running (Eccles & Harold, 1991). Therefore the following hypotheses will examine the role of influencers (awareness process) on values and self-concept in the attachment process.

H1_D: Information sources will positively influence values in long distance runners

H1_E: Information sources will positively influence self-concept in long distance runners.

Attraction

The attraction process represents the motives and attitude formation related to participation in a leisure activity (Funk & James, 2001; 2006). In this stage, the

participant determines if the activity will strengthen their individual and social motives (i.e. internal and external motivations) from the information gathered in the awareness stage.

H_{2A}: Enhanced knowledge about long distance running positively influences internal motivations to participate in long distance running.

H_{2B}: Enhanced knowledge about long distance running positively influences external motivations to participate in long distance running.

In attraction outcomes, the person develops feelings toward the chosen activity. Through participation in long distance running, internal and external motives are supported and the person forms an attitude based on feelings about this activity (Beaton & Funk, 2008). Research has shown that motives and attitude are predictive of attachment and intention to participate (Filo, Funk, O' Brien, 2009; 2011). Therefore the present study examines the role of participant motives on feelings towards the activity.

H_{3A}: Internal motivations to participate will positively influence feelings about long distance running.

H_{3B}: External motivations to participate will positively influence feelings about long distance running.

According to Funk & James (2001; 2006), motivations interact with values and self-concept in the development. They suggest that motives take on a deeper and emotional meaning when combined with values and self-concept. Researchers (Filo, Funk & O'Brien, 2009) have found that motives take on an enhanced meaning when combined with values in measuring activity attachment and loyalty. Values are a means of gaining understanding about an individual's motivation toward leisure activity (Kahle, Duncan, Dalakis & Aiken, 2001) However, the role that self-concept plays in the development of attachment has not yet been explored. Therefore, the following

hypotheses will examine motivations (attraction process) on values and self-concept (attachment process).

H_{3C}: Internal motivations to participate will positively influence values.

H_{3D}: External motivations to participate will positively influence values.

H_{3E}: Internal motivations to participate will positively influence self-concept.

H_{3F}: External motivations to participate will positively influence self-concept.

Attitude development in the attraction process interacts with values and self-concept to develop a stronger psychological connection to the activity. Therefore the following hypotheses examine attraction outcomes on the attachment process

H_{4A}: Feelings towards long distance running will positively influence personal values.

H_{4B}: Feelings towards long distance running will positively influence self-concept.

As the psychological connection strengthens between the person and the activity, attachment forms (Funk & James, 2006). The initial attitude takes on a functional, symbolic and emotional meaning by interacting with self-concept and values (Funk & James, 2001; 2006). By taking on a stronger meaning, one's attitude moves from attraction outcomes to attachment outcomes, represented by attitude strength, and eventually to loyalty.

H_{5A}: Feelings will have a positive effect on attitude strength.

H_{5B}: Feelings will have a direct and indirect effect on loyalty to long distance running.

Attachment Process on Attachment Outcomes and Loyalty

Researchers have explored motives and values on attitude (Filo, Funk, & O'Brien, 2009) but have not examined self-concept. Measures of increased self-concept have been

shown to predict repeat behavior (Filo, Funk, & O'Brien, 2011). Researchers have found motives to be predictive of attitude strength and loyalty (Filo, Funk, & O'Brien, 2009; 2011; Funk & James, 2006). Values still require further exploration on their role on attachment. Therefore, this study looks at self-concept and values to predict attachment and loyalty to running.

H_{6A}: Personal values will positively influence attitude strength toward long distance running.

H_{6B}: Self-concept will positively influence attitude strength toward long distance running.

H_{7A}: Personal values will positively influence loyalty toward long distance running.

H_{7B}: Self-concept will positively influence loyalty toward long distance running.

Attachment Outcomes on Loyalty

PCM uses emotional, symbolic and functional meaning to indicate attachment to an activity (Funk & James, 2006). As the psychological connection strengthens the person moves from attachment outcomes to loyalty. Each has been shown to be effective in measuring loyalty and repeat behavior. Thus, this study looks at the influence of meaning on loyalty:

H₈: Attitude strength toward long distance running positively influences loyalty to long distance running.

Part 2

Part 2 of this study explores difference of 'more serious' and 'less serious' runners on each of the four outcomes of PCM. The Serious Leisure Inventory and Measure (SLIM) can determine how serious a person is about a particular activity

(Gould, Moore, McGuire, & Stebbins, 2008). It includes an additive index that measures each of the six characteristics of serious leisure. This inventory is used to determine how serious a person is about their running behaviors. This inventory is used to create two groups ('more serious' and 'less serious' leisure) based on their level of seriousness. The following hypotheses determine the differences between 'more' and 'less' serious participants in each aspect of PCM.

Awareness

Serious leisure requires an accumulation of experience, skill and knowledge (Stebbins, 1982). The level of knowledge about an activity is what differentiates serious leisure participants from their counterparts. Serious leisure participants will typically devote time learning more about an activity to develop technique and skill. Those that are 'less serious' tend to view the activity as more of a "game of chance" and require minimal knowledge about the activity (Stebbins, 1997). Those that are 'more serious' possess more knowledge about the activity (Wann & Brandscombe, 1995) and continue to gain knowledge to increase performance standards (Stebbins, 1982). Thus, knowledge about long distance running between these two groups is explored.

H₉: There is a significant difference between serious and less-serious runners in terms of knowledge about long distance running.

Attraction

Participants that are 'more serious' have positive feelings toward the activity (Stebbins, 1992). These individuals tend to feel competent enough to perform the activity, where 'less serious' individuals lack this feeling of control over the activity (Stebbins, 1997). 'More serious' participants feel a sense of accomplishment, increased self-image and gratification with their participation in the activity (Stebbins, 1982). They tend to be

sincere, enthusiastic and feel the activity is important in their lives. 'Less serious' participants may experience anxiety, distress and joylessness when participating in the activity. Therefore, feelings about long distance running are examined.

H₁₀: There is a significant difference between serious and less-serious runner's feeling about long distance running.

Attachment

'More serious' leisure participants have a positive attitude towards long distance running (Cheng & Tsaur, 2012). This positive attitude is linked with higher satisfaction (Green & Chalip, 1997), commitment (Gahwiler & Havitz, 1998), and loyalty (Kim, Scott & Crompton, 1997; Kyle, Graefe, Manning & Bacon, 2003) and seen in individuals that are more involved in the pursuit. Serious participants differ from others in that they engage in a leisure activity to develop skill and have an interest in pursuing it (Cheng & Tsaur, 2012). Their attitude about the activity is more serious whereas others are more carefree (Stebbins, 1997). Therefore, differences in attitude between serious and 'less serious' runners are looked at.

H₁₁: There is a significant difference between serious and less-serious runner's attitude strength toward long distance running.

Loyalty

Serious participants exhibit characteristics such as perseverance and career (Stebbins, 1982). They dedicate time developing knowledge and skills that will improve their ability to perform the activity. Serious participants devote time to practice to become better at the activity and organize their schedules to ensure they are able to participate in the activity. Unlike their counterparts, 'more serious' participants stick with the activity

for a long period of time and are unlikely to switch their loyalty to another activity. Therefore, loyalty differences among 'more' and 'less' serious runners are explored.

H₁₂: There is a significant difference between serious and less-serious runners loyalty toward long distance running.

Chapter 4

METHODS

The following chapter describes the methodology completed for this study. Path analysis and multivariate analysis of variance (MANOVA) are used to determine the psychological process in which runners become loyal and the differences between ‘more serious’ and ‘less-serious’ runners in association with long distance running.

Selection of Subjects

The population for this study includes marathon (42K) and half- marathon (21K) runners who participated in one of the following 2013 endurance events: Big Sur International Marathon, Fun in the Sun Half Marathon series, Midtown Race Series and the Madison Marathon.

Big Sur International Marathon took place on Sunday April 28, 2013. This sell out event attracted 10,000 entrants that represented 50 states and 30 countries. This popular race course allows runners to enjoy the beautiful coast line of Monterey, California.

The Fun in the Sun Half Marathon took place on June 15, 2013. This race takes place in southern California with 200 participants. This half marathon is one of several events in the Rocket Racing, LLC summer marathon and half marathon series.

The Midtown Race Series took place on Saturday June 1, 2013. This half marathon is one of three events offered during the year and is limited to 1500 participants. It takes place in the residential community of North Hills in Raleigh, North Carolina.

Madison Marathon took place on July 28, 2013 in the Gravelly Mountains in southwest Montana. It is a small event, selling out at 250 entrants and has been called the highest road race in America, reaching almost 10,000 feet.

Race participants were asked to complete an online survey related to their long distance running experience. Subjects were required to be over the age of 18 and have completed the marathon or half from which the email is coming from. Those that did not meet these requirements were not included in the study. Participants were informed that their participation in the study is voluntary and they can withdraw at any time, as required by the Institutional Review Board.

Research Design

To understand the factors that play a role in long distance running, a survey was administered electronically to marathon and half participants. A link to the electronic questionnaire was sent out by the race producers. Runners were asked to participate in the survey that took approximately ten minutes of their time. Because the link to the questionnaire was sent out to the participants by the race directors, the researcher did not have access to any identifiable information about the respondents. This helped ensure confidentiality and anonymity of the study participants.

To assess activity loyalty, the present study used the Psychological Continuum Model (PCM) to show the psychological connection and involvement with long distance running. To assess the level of seriousness, this study used the Serious Leisure Perspective (SLP) and the SLIM inventory. Within the PCM Framework, Internal External Theory (IET) and Identity Theory were used to explain inputs in each of the four stages of the model. IET measured and identified the intrinsic and extrinsic factors that are related to activity attitude, attachment and loyalty. Internal and external motivations were used in the attachment process with values and self-concept (SIE and SoIE) to determine the effect on attitude strength and loyalty. Attitude strength was used

to determine the attachment outcomes in PCM and describe the meaning long distance running has on the participant.

Procedures

Prior to the study, the researcher obtained permission from two full and two half-marathon event directors in the continental United States to survey their participants about their running experience. All runners that completed the marathon or half marathon were sent an email asking for their participation in a survey about their long distance running that would be conducted as part of dissertation research at Arizona State University. A link to the survey (Appendix A) was sent with a cover letter via email from the event director and staff requesting their participation. The survey did not ask for any identifiable information or email addresses to ensure confidentiality and anonymity.

An incentive was provided to each of the survey participants for their participation in the study. At the conclusion of the survey, a link was provided to a second survey where participants could enter their name and email address for a drawing to win a free race entry to the 2014 event of the race they had just completed. The email addresses were in no way tied to the survey responses to ensure confidentiality. Once the drawing winners were announced the link and information were deleted to ensure confidentiality. The survey was available online for three weeks for participants to complete. The race organizers sent out a follow-up email one week later reminding runners to participate in the survey. All data were collected online and not shared with anyone else.

While runners are the majority of marathon and half-marathon participants, these events are “walker friendly” (Kandel, 2013). Because this study is focused on long

distance runners, survey participants that indicated they mostly walked the event were excluded.

Measurement

The present study used three instruments: Serious Leisure Inventory and Measure (SLIM), Commitment to Running Scale, LOV (List of Values) Scale and a questionnaire created from various scales that have been modified to examine the different stages of PCM. Because PCM does not have a previously validated inventory, the researcher created and tested one based on pilot data and interviews.

Serious Leisure Inventory and Measure

One way to quantify how serious a person is in regards to an activity is by utilizing the Serious Leisure Inventory and Measure (SLIM) (Gould, Moore, McGuire & Stebbins, 2008). Six of the eighteen factors (perseverance, effort, career progress, career contingencies, identity and ethos) of SLIM were used to measure the level of seriousness of each participant. The score from this additive inventory distinguished ‘more serious’ from ‘less-serious’ runners. Havard and Gould (2010) found the reduced 6-item model is just as reliable and valid as the 54-item inventory.

Commitment to Running Scale

This twelve item instrument, used for attraction outcomes, examines how a runner generally feels about running (Carmack & Martens, 1979). For the purposes of this study, the scale was adapted to examine long distance running rather than running in general.

List of Values

Filo, Funk and O'Brien (2009) suggest using the List of Values (LOV) to understand and measure personal values of activity participants. LOV is one way to determine the values of a population and is easier to administer than other value scales (Kahle & Kennedy, 1989). Because values have not been heavily explored using PCM, the present study used the scale as the value measurement in the attachment process. The LOV scale was created from Rokeach's list of terminal values, Maslow's hierarchy of values and other literature sources (Kahle & Kennedy, 1989). Subjects were presented with a list of nine values and asked to rank each of the values based on their level of importance (Kahle, Beatty & Homer, 1986). The scale has been shown to be more reliable than Rokeach's Value Survey (RVS) in predicting consumer (Kahle & Kennedy, 1989), sport-related behavior (Kahle, Beatty & Homer, 1986) and effective in influencing sport spectatorship and creating new relations with others (Shoham & Kahle, 1996).

Psychological Continuum Model

The questions used to assess each stage of the PCM framework contained items to determine how study participants first found out about long distance running, the outlets from which they obtained running information, what they found to be attractive about long distance running, and their motivations, feelings, attitudes and intentions relative to continuing running. Likert scales (1-5) were used to assess knowledge about running, the internal and external factors for participating, their identity expressiveness, values, self-concept, attitude toward the activity, strength of that attitude, and loyalty to long distance running. Demographic information and running behavior was obtained to describe the sample and use within the analysis.

The PCM model included 84 items plus an additional selection of demographic and running behavior questions. This included twenty-nine items that were developed from interviews with runners and event organizers through a pilot study to measure awareness. Sixteen items measuring the internal and external motives were adapted and modified from Ogles and Masters (2003) and USA Track and Field (RunningUSA, 2012). Twelve items feelings towards long distance running were adapted and modified from the Commitment to Running Scale (Carmack & Martens, 1979). Six items measuring self-concept were developed and altered from Thorbjornsen, Pedersen & Nysveen (2007). Six items measuring attitude strength were revised from Funk & James (2006) and Filo, Funk & O'Brien, (2009) and six items measuring loyalty to participate in long distance running were adapted from Gladden & Funk (2001).

Prior to data collection, an expert panel reviewed the questionnaire for construct validity and made recommendations regarding wording. They made recommendations about the number of items used in the questionnaire and how to simplify the survey.

Pre-test and instrument evaluation

A pilot test was completed to check for reliability and validity of the instruments. The survey was administered by the researcher to thirty-four runners via email and through a social networking site. The pretest participants were asked to identify any ambiguities or confusion they may have had regarding the questionnaire. Pretest participants completed the entire 109 item survey. Mean and Cronbach alpha scores are provided in Table's 1-7 for each construct of the model.

Table 1: Awareness Process Descriptive Statistics	Mean	Cronbach Alpha
Other Runners	3.90	$\alpha = 0.82$
Friends that run	3.60	
National Running Magazine	2.74	
I watched a running event	2.69	
Friend or runner on Facebook	2.59	
I saw a person running	2.58	
Family Members that run	2.50	
Local Running Magazine	2.17	
Social Networking site	2.09	
Postcard/Flyer in Running Store	1.96	
Online Advertisement	1.92	
Blog	1.81	

*Note: n= 34

Measured on a 5-point Likert Scale where 1 = Not Important and 5 = Very Important

Table 2: Awareness Outcomes Descriptive Statistics	Mean	Cronbach Alpha
Running nutrition	4.01	$\alpha = 0.86$
Shoes to buy	3.87	
How far to run	3.53	
Running apparel to purchase	3.72	
Area safe to run	3.01	
How to run	3.85	
How fast to run	3.46	
Others like about running	3.56	
Equipment to buy	3.05	
Where to Run	3.56	
Event to participate in	3.96	
Watch to buy	3.24	
Others dislike about running	3.30	
People in the community run	3.01	

* Note: n= 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Table 3: Attraction Process Descriptive Statistics	Mean	Cronbach Alpha
External		$\alpha = 0.78$
Participate in running events	4.28	
Participate in endurance events	4.22	
Complete my first marathon or half marathon	3.28	
Internal		$\alpha = 0.71$
Meet others	4.56	
Challenge myself	4.52	
Push myself	4.44	
Personal Record	4.36	
Lose Weight	4.28	
Stay Fit	3.40	
Relieve Stress	3.40	
Be with friends	3.32	
Travel	3.30	
Feel accomplished	3.26	
Be with family	3.26	
Compete with other athletes	2.86	
Compete against other athletes	2.72	

* Note: n = 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Table 4: Attraction Outcomes Descriptive Statistics	Mean	Cronbach Alpha
I look forward to LDR.	4.29	$\alpha = 0.85$
Running is vitally important to me.	4.07	
LDR is pleasant.	3.90	
Life is so much richer as a result of LDR.	3.88	
I would change my schedule to meet the need to long distance run.	3.79	
LDR is the high point in my day.	3.29	
I do not enjoy running	2.94	
LDR is a chore	2.70	
I have to force myself to run long distances	1.84	
To miss a day of running is sheer relief	1.74	
I wish there were more enjoyable ways to stay fit	1.68	
I dread the thought of LDR	1.45	

* Note: n = 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Table 5: Attachment Process Descriptive Statistics	Mean	Cronbach Alpha
Values		$\alpha = 0.87$
Fun and Enjoyment in Life	4.62	
Sense of Accomplishment	4.50	
Self-Fulfillment	4.47	
Self-Respect	4.43	
Excitement	4.19	
Warm Relationships	4.11	
Being well respected	3.92	
Security	3.78	
Sense of Belonging	3.76	
<i>Measured on a 5-point Likert Scale where 1 = Not Important and 5 = Very Important</i>		
Self-Concept		$\alpha = 0.88$
Others are impressed by my LRD	3.90	
Talk to others about LDR	3.76	
Express who I want to be	3.34	
Express Personality	3.32	
Express person values	3.23	
Show LDR messages and services	3.03	

* Note: n= 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Table 6: Attitude Strength Descriptive Statistics	Mean	Cronbach Alpha
Running is important to me.	4.45	$\alpha = 0.75$
Being a long distance runner is important to me	4.16	
Running gives insight into the type of person I am.	3.78	
I poses a great deal of knowledge about LDR	3.62	
If I were to list everything I know about running, the list would be quite long.	3.54	
Tell a lot about a person - LD runner	3.12	

*Note: n= 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Table 7: Loyalty Descriptive Statistics	Mean	Cronbach Alpha
Participate in LDR next year	4.55	$\alpha = 0.83$
Always be a LDR	4.40	
Attend LDR event during the year	4.25	
Committed to LDR	3.88	
Unlikely to change allegiance	3.01	
Passionate about LDR	2.46	

* Note: n = 34

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Each scale was tested for internal consistency and validity. Items that had a low Cronbach Alpha ($\alpha > 0.70$) or factor loading below 0.05 were removed to increase reliability and decrease measurement error (Lee, Xiong, Hu, 2012). Additionally, discriminant validity cannot be verified on items with factor loadings below 0.05. Seven items were removed due to low factor loadings of $\alpha < 0.5$: family members that run (awareness process); where to run, safety in area, equipment to buy and events (awareness outcomes); complete first marathon or half marathon (attraction process); and excitement (attachment process). The final questionnaire (Appendix A) consisted of 102 total items. These include: six SLIM items measure the seriousness of running, twelve from the Commitment to Running Scale, eight from the LOV scale. Also, sixty-one items were used to measure the components of PCM: twenty-three items measure awareness; fourteen items measure the internal and external motives, twelve items measure feelings, six measure self-concept, nine measure values, six measure attitude strength and six to measure loyalty and intention to continue participating in long distance running. A selection of demographic and running behavior questions we also included to describe the sample of runners participating in the survey.

Analysis

The data in this study were analyzed using Statistical Packages for the Social Sciences (SPSS) 20.0 and AMOS 21 (Arbuckle, 1997). Descriptive statistics were run on age, gender, education, ethnicity, income, marital status, zip code, number of completed marathon and half- marathons, weekly training miles, number of days they run and years running to describe the sample. Following descriptive statistics, tests for normality were run on each item to ensure the data is distributed normally. Correlations on all variables were run to identify variables or constructs that may strongly correlate.

Part 1

To determine the process in which a runner becomes committed, the present study used path analysis, which “estimates the magnitude and strength of effects within a causal model” (Lleras, 2005). Path analysis is able to examine direct and indirect relationships between variables that are hypothesized by the researcher, making it possible to determine the causal relationship between two more observed variables (Kline, 2010). This form uses a linear model to show the relationship between variables. In the analysis, directional arrows are used to indicate the direct linear relationship between variables as hypothesized by the researcher.

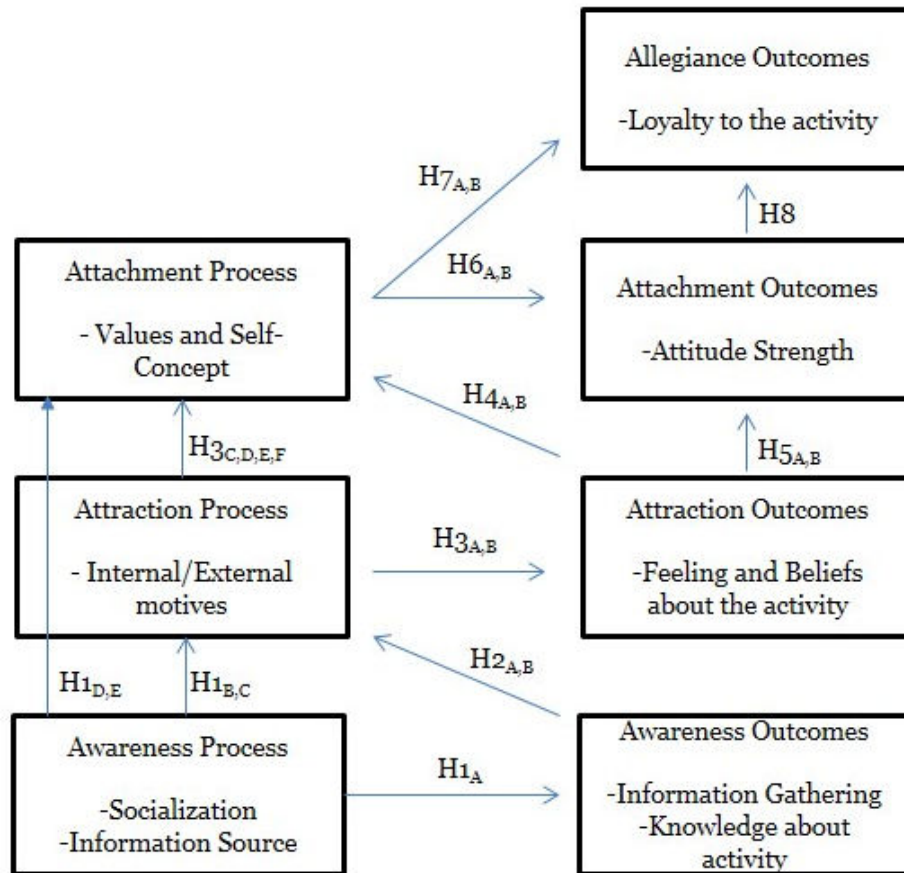


Figure 2: Proposed Path Model, adapted from Funk & James, 2006; Filo, 2008

The path model (Figure 2) represents proposed relationships between the variables in the model. Each of the rectangular boxes in the path diagram represent a measured variable (Lleras, 2005). The proposed relationships are hypothesized to be unidirectional; meaning the flow of causality from one variable to another is in only one direction. The proposed path model indicates the proposed relationships of the variables most significantly related to becoming a loyal participant.

Path analysis was run on the factors of PCM to determine the process in which people become loyal to long distance running. This analysis used the mean score of each construct to determine the role motivations, feelings about long distance running, values, self-concept and attitude strength play on loyalty. This analysis also indicated the

role event participation plays on becoming loyal. The path diagram in Figure 2 includes all seven constructs. All variable data types are continuous. Straight lines indicate the direction of the prediction, leading from predictor variable to outcome variable (Lleras, 2005). For example, the model hypothesizes that values, self-concept, internal motives and meaning act as predictors for becoming loyal.

Part 2

In order to evaluate differences between ‘more serious’ and ‘less serious’ leisure runners in awareness, attraction, attachment and loyalty, a multivariate analysis of variance (MANOVA) was used. MANOVA is appropriate for this study because it allows for the analysis of multiple dependent variables between groups. This type of analysis is used to determine if differences exist between the independent variables regarding each of the four aspects of PCM. In the present study, the dependent variables are the four outcomes variables in PCM: awareness, attraction, attachment and loyalty, with the independent variables being serious and less-serious runners.

To determine differences between ‘more serious’ and ‘less serious’ runners in terms of their running behavior, analysis of variance (ANOVA) was used. ANOVA is appropriate because it determines differences between group means. In the present study, ANOVA was used to identify difference in the number of marathon and half marathon events completed between ‘more serious’ and ‘less serious’ runners

Assumptions

The present study has made four assumptions. First, all runners voluntarily participated in this research study. Secondly, the sample was representative of the field of runners participating in each specific event. Third, because most participants in marathon and half marathon events are required to register online, it can be assumed

that all study participants have access to the internet and are able to take this survey online. Finally, all study participants are long distance runners.

Limitations

The study utilized an online self-administered questionnaire. The completed pre-test of the instrument has reduced the chance of this happening. The questionnaire was only presented in English; therefore the study did not include responses from non-English speaking runners. An additional limitation of this study is that it does not test the people that did not participate in the event. The present study looks at runners that completed one of the four events and the factors that motivate them to participate in long distance running. Future research can examine what aspects of specific event attract long distance runners. Finally, the half marathon sample is much smaller than the full marathon. Therefore, the results may be skewed toward individuals that run longer distances.

Chapter 5

RESULTS

This chapter presents the results of the hypothesized relationships within the PCM model. This section presents participant demographic information, descriptive statistics of items in the PCM Framework, MANOVA and ANOVA results of the current research.

Survey Response

A link to the online survey was emailed out to race participants of two marathon and two half marathon events taking place in the spring and summer of 2013. The Big Sur International Marathon (n= 399), Raleigh Midtown Half-Marathon (n= 50), Fun in the Sun Half Marathon (n = 77), and the Madison Marathon (n= 54). A total of 579 surveys were completed and used in the analysis.

Participant Demographics

Participant demographics are presented in Table 8. The questionnaire was completed by 64.4% female (n = 373) and 35.6% male (n = 206). Participants were mostly between the ages of 35-44 (n = 180; 31.1%) followed by 45-54 (n= 149; 25.7%) and 25-34 (n= 126; 21.8%) with 54.2% (n= 314) reporting a family income of \$100,000 or more. Seventy percent reported being married or partnered. The participants were well educated with the majority earning a college degree (n = 431; 74%). The majority classified themselves as White (n= 454; 78.4%) followed by Asian (n=61; 10.5%) and Hispanic (n=38; 6.6%). Most of the survey participants completed the full marathon (n= 344; 59.4%) over the half marathon distance (n=207; 35.7%).

Table 8: Participant Demographic

		Frequency	%
Gender	Male	206	35.6
	Female	373	64.4
Age	Under 16	1	.2
	16-24	22	3.8
	25-34	126	21.8
	35-44	180	31.1
	45-54	149	25.7
	55-64	80	13.8
	65 or over	21	3.6
Income	Less than \$30,000	24	4.1
	\$30-39,999	26	4.3
	\$40-49,999	32	5.4
	\$50-59,999	33	5.5
	\$60-69,999	27	4.5
	\$70-79,999	30	5.2
	\$80-89,999	60	5.9
	\$90-99,999	30	5.2
	\$100,000 or more	314	54.2
Unknown	3	5.7	
Race	White	454	78.4
	African American	10	1.7
	Hispanic	38	6.6
	Asian	61	10.5
	Native American	7	1.2
	Pacific Islander	9	1.6
	Other	15	2.6
Marital Status	Single	170	29.4
	Married/Partnered	408	70.6
	Unknown	1	0.3
Education	High School/GED	12	2.1
	Some College	43	7.4
	Associates Degree	43	7.4
	Bachelor's Degree	227	39.2
	Master's Degree	148	25.6
	Doctoral Degree	35	6.0
	Professional Degree	57	9.8

	Other	11	1.9
	Unknown	3	0.5
Distance completed	Full	344	59.4
	Half	207	35.8
	Unknown	28	4.8

Note: n = 579. Some respondents indicated more than one race/ethnicity category.

Running behaviors of the participants are presented in Table 9. The majority of the sample has been running for less than five years, (n = 181; 31.3%) followed by those running between six and ten years (n = 144; 24.9%). Study participants run between three (n = 157; 27.1%) and five (n = 122; 21.1%) times per week with the majority (n= 191; 33%) running four times per week. Over half of the respondents reported running between 21-40 miles per week (n= 353; 60.8%). Most have completed more than ten full marathons (n= 167; 28.8%) and half marathons (n= 273; 47.2%). Over half (n= 328; 56.2%) of survey respondents would like to qualify for the Boston Marathon while less than a fourth (n = 118; 20.4%) have already qualified for the event.

Table 9: Running Behaviors		Frequency	%
Years Running	Less than 5 Years	181	31.3
	6-10 Years	144	24.9
	11-15 Years	71	12.3
	16-20 Years	57	9.8
	20 + Years	126	21.8
Running Times/Week	1 time	10	1.7
	2 times	31	5.4
	3 times	157	27.1
	4 times	191	33.0
	5 times	122	21.1
	6 times	54	9.3
	7 times	14	2.4
Miles/Week	< 20 miles/week	145	25.0
	21-40 miles/week	353	60.8
	41-60 miles/week	65	11.2
	60 + miles/week	13	2.2
	Unknown	3	.7
Completed Full Marathons	None	91	15.7
	1-2	127	21.9
	3-5	107	18.5
	6-9	87	15.0
	10 or more	167	28.8
Completed Half Marathons	None	39	6.7
	1-2	78	13.5
	3-5	101	17.4
	6-9	87	15.0
	10 or more	273	47.2
	Unknown	1	.2
Have Qualified for Boston	Yes	118	20.4
	No	411	71.0
	NA	50	8.6
Want to qualify for Boston	Yes	328	56.6
	No	196	33.9
	Unknown	55	9.5

Note: n = 579.

Reliability, Validity and Confirmatory Factor Analysis

Cronbach Alpha and factor analysis was used to determine the reliability and validity of each item in the model. Confirmatory factor analysis and Cronbach Alpha was used to determine construct validity and reliability of each item. Discriminant and convergent validity are ways of assessing construct validity (Garson, 2007).

Discriminant validity measures if items that should be unrelated are in fact unrelated (Campbell, 1959). Convergent validity measures if items that should be related actually are. Cronbach alpha is one way to measure convergent validity (Cronbach & Meehl, 1955). Both discriminant and convergent validity can be measured using confirmatory factor analysis (Lehmann, 1988).

Cronbach Alphas (α) were calculated for each construct in the model. All items had an alpha greater than 0.70 (Table 10). Cronbach Alpha of $\alpha=0.7$ or above indicates a high internal consistency (Nunnally, 1967). Table 10 shows the results of each Cronbach Alpha ranging from $\alpha= 0.75$ - 0.89 , indicating high internal consistency. Factor loadings ranging from 0.547 - 0.893 indicate that all elements within each item were a reasonably good fit. Results from Cronbach Alpha provided evidence of reliability and construct validity of the items in the PCM model.

Table 10: Descriptive Statistics and Confirmatory Factor Analysis

	Mean	S.D.	α	Factor Loading Range
Awareness Process	2.76	0.77	0.86	0.588 - 0.852
Awareness Outcomes	3.69	0.62	0.82	0.572 - 0.879
Internal Motivation	3.77	0.51	0.78	0.526 - 0.836
External Motivation	4.17	0.81	0.75	0.882 - 0.886
Feeling about LDR Values	4.01	0.59	0.89	0.570 - 0.824
Self-Concept	4.22	0.51	0.86	0.629 - 0.836
Attitude Strength	3.47	0.76	0.84	0.522 - 0.847
Allegiance	3.73	0.65	0.81	0.584 - 0.793
	3.81	0.76	0.81	0.600 - 0.830

Note: n = 579

Normality

Before testing the fit of the model, tests of normality and homoscedasticity were examined. Table 10 presents the descriptive statistics for the items in each stage of PCM. Descriptive statistics, histograms and Q-Q plots were visually used to evaluate normality. Skewness under 3.0 and kurtosis under 8.0 is suggested as normal (Kline, 1998). The present study shows skewness ranging from 0.25 to 1.1 and kurtosis from 0.139-1.9. A bell curve was shown on all histograms representing each item of the PCM model. Q-Q plot also showed data points falling along a straight vertical axis. Based on a visual inspection of the data (histograms and Q-Q plots), means, standard deviation, skew and kurtosis, all variables were considered normal.

Stages of PCM

Awareness Process

The mean scores that comprise awareness process are presented in Table 11. Of the twelve items listed, friends that run (M= 3.824), other runners (M= 3.791) and national running magazines (M= 3.166) were the most important when finding out about long distance running. Postcards or flyers in a running store (M= 2.185) were the least important resource to learn about running. Reliability for this construct is $\alpha=0.85$.

Table 11: Awareness Process Descriptive Statistics (n=11 items)	Mean	Cronbach Alpha
Friends that run	3.82	$\alpha=0.85$
Other Runners	3.79	
National Running Magazine	3.17	
I watched a running event	2.81	
Friend or runner on Facebook	2.70	
Social Networking site	2.48	
I saw a person running	2.43	
Local Running Magazine	2.41	
Online Advertisement	2.24	
Blog	2.19	
Postcard/Flyer in Running Store	2.19	

*Note: n= 565

Measured on a 5-point Likert Scale where 1 = Not Important and 5 = Very Important

In addition, an open-ended question asked participants where they first learned about long distance running. This information identified additional sources that influence participation in long distance running. The results (n= 516) were divided into five categories that are outlined in Table 12. Responses from survey participants indicate ‘other people’ was where they primarily first learned about long distance running. This category includes friends that run, family members and others that participated in long distance running. Media was the second most important category where people first learn about long distance running. This category was divided up into sub-categories including TV, movies and books. The results of the open ended question support the results of the Likert Scale questions indicating that other runners and media outlets were the most important resource for first learning about long distance running. Results from the Likert Scale and open-ended question revealed that other people and media outlets are most influential to learning about long distance running over various other outlets.

Table 12: Awareness Process Open-Ended Question Results (n=516)

Category	Sub-Category	N	Example
Other People	Friends	22	"My friend made me watch the LA Marathon in 2000 and I got hooked".
	Family/relative	10	"It is a family sport for us".
	At work/Co-workers	8	"My work supports healthy habits and encourages employees to participate in its wellness program. We earn savings towards our health insurance premiums".
	Coaches	16	"I am an e-Coach client of Jeff Galloway"
	Running groups/clubs/teams	43	"My Virtual Running team - Team Victorious. Those ladies rock"
	WOM	5	"There was no social media when I began running, only word of mouth and a few magazine"
	Trainer	7	"Trainer at my gym...the YMCA, Trainer with whom I have been working with"
	Charity Teams	18	"I started running through the Leukemia & Lymphoma Society's Team in Training program"
	Other runners	18	"Pretty much 100% from other runners"
	Media	TV	8
Movies		13	<i>Spirit of the Marathon I and II, Prefontaine</i>
Books		93	<i>"Born to Run, Eat and Run, Barefoot Running Step by Step, etc."</i> "Books by Hal Higdon, Jeff Galloway and Dean Karnazes"
Magazines		18	<i>Runners World, Running Times, Outside Magazine, Marathon and Beyond Magazine</i>
Local news media		6	"Listened to track meets on radio in 1950s". "Newspaper / Radio coverage and advertising of running events".

Experience	Member of the military	6	"Military training; The military is one of the very few employers that place great emphasis on physical fitness and promotes a positive, competitive culture regarding physical ability. Running, especially distance running and other endurance activities are held in high regard within this military culture".	
	"Just doing it"	5	I just started doing it as a personal challenge. By going out and running	
	"Trial and Error"	8	"Trial and Error on my own part. Learning how to push my own limitations through coaches and articles"	
	Personal experience	18	"Many years of personal experience. I was running before it was mainstream".	
	Attending race expos	7	"At expos from other races"	
	Attending other endurance events	38	"Participating in long distance races"	
	School in general	13	"Elementary school had an annual county-wide track meet".	
	Team participation in school	22	"Participating in cross country as a high school student"	
	Online	Blogs	5	"Blogs from brands (products) that I trust -- Brooks, GU...Etc."
		Internet/Online reading	48	"Running Websites: active.com, HalHigdon.com" Runnersworld.com, runningintheusa.com , coolRunning.com, marathonguide.com
Running stores	Podcasts	3	"Podcasts"	
	Google	7	"Google searches"	
	Store (general)	28	"Running store e.g. A Runners Circle", "Training program through running store"	
Other	Seminar/clinics/training programs	13	"Training Seminars and clinics", "In-store clinics"	
		10	Classes, banners, app on phone, Tumblr	

Awareness Outcomes

The mean scores that form awareness outcomes are presented in Table 13. This construct has a reliability of $\alpha=0.83$. Of the fourteen presented running related elements, running nutrition (M = 4.106), shoes to buy (M = 4.054), and how far to run (M = 3.90) were the most important when gathering information about running. Whether or not other people in the community run (M= 3.25) was the least important factor when learning about running.

Table 13: Awareness Outcomes Descriptive Statistics (n=10 items)	Mean	Cronbach Alpha
Running nutrition	4.11	$\alpha=0.85$
Shoes to buy	4.05	
How far to run	3.90	
Running apparel to purchase	3.90	
How to run	3.81	
How fast to run	3.70	
Others like about running	3.54	
Watch to buy	3.48	
Others dislike about running	3.26	
People in the community run	3.25	

* Note: n= 552

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

A second open- ended question asked survey participants about the type of information they gathered from sources that were influential in their participation in long distance running. This information identified additional aspects of long distance running that are important before participating. These results were divided into six categories and are outlined in Table 14. Results show that learning how to run was most important before beginning the activity. This includes gathering information about cross-training, pacing, stretching, etc. Personal experience with running was also important as were factors related to well-being and social benefits from participating in

long distance running. Overall, information about how to run and personal experience were the most important contributions to learning about LDR.

Table 14: Awareness Outcomes Open Ended Question Results (n=416)

Category	Sub-Category	N	Example
How to Run	How to train	64	"Hal Higdon's books on Marathoning",
	How to breathe	6	"Breathing techniques"
	Stretching	8	"Stretching techniques"
	Cross training	10	"Cross training is important", "Cross-training activities"
	Running/race strategy	2	"Race strategy from coaches"
	Distance to run	7	"Difference between a marathon and all other distances".
	Pacing	8	"Training and pacing"
	Frequency	3	"Frequency of runs, recovery times"
	Time of day to run	2	"Best time of day to run"
	Goals	3	"What mental/personal obstacles I might encounter while pursuing long distance running goals".
	Commitment/mental strength	7	"The amount of time/commitment necessary", "What mental/personal obstacles I might encounter while pursuing long distance running goals".
Nothing	Just do it	100	"None - I just laced up some shoes and hit the trails", "I really just decided to sign up for a race, put my shoes on, and went! I wanted to get started ASAP & worry about logistics later".
Running Resources	Media/print material	17	"I gathered multiple running books related to distance running, Runner's world"
	Training plans	30	"A plan (couch to 5k)", "Half and full marathon plans",
	Classes	2	"Looked for local running classes"
	Running Vocabulary	2	"Running vocabulary"

	Travel	2	"The logistics of travelling to races; hotels to stay at for marathons"
	Routes/areas to run	10	"Trails/routes in my community and surrounding area", "Areas to run in"
Well Being	Weather	5	"Dressing for severe weather"
	Benefits of running	8	"Health benefits of running", "Benefits of a running club/group"
	Health improvement	11	"Health & fitness implications", "RMR, VO ₂ , Aerobic Baseline, Anaerobic Threshold, Types of workouts: AR, Base, MSD, Lactate.."
	Injury prevention/treatment	23	"Best ways to avoid injury"
	Recovery information	4	"Rest and recovery"
	Safety	2	"Safety tips--country road and city running"
Social Factors	People that run	13	"None, I just started running with people at work in 1978 (before Internet)"
	Run clubs/groups	8	"I looked around my community to see if there were any running groups. I checked in a local paper".
	Events/types of races	22	"Calendar of events of short to long distance events to aspire to"
What you need to run	Clothing	7	"clothes, food , shoes, safety"
	Shoes	6	"The importance of buying good shoes"
	Equipment	2	"Local running stores helped out a lot with equipment, training, gear, etc."
	Hydration	3	"Information on supplements, proper hydration and diet".
	Running nutrition	19	"Nutrition - before, after and during a race"

Attraction Process (External and Internal Motivation)

The attraction process is made up of both external and internal motivations. Motives measured here were obtained through previously mentioned pilot study. Only three external motivations were mentioned with one (complete full/half marathon) being dropped due to a low factor loading. The mean scores for external and internal motivations are presented in Table 15. External motivations has a reliability of $\alpha = 0.75$. Participation in running ($M = 4.32$) and endurance ($M = 4.03$) events were most important for meeting social needs. Internal motivations had a reliability of $\alpha = 0.78$. Among these, staying fit ($M = 4.603$), challenging themselves ($M = 4.588$) and pushing themselves ($M = 4.488$) were the most important personal needs that running satisfies. Least of all was to compete against other athletes ($M = 2.75$).

Table 15: Attraction Process Descriptive Statistics (n= 14 items)	Mean	Cronbach Alpha
External (n=2 items)		$\alpha=0.75$
Participate in running events	4.32	
Participate in endurance events	4.03	
Internal (n=12 items)		$\alpha=0.78$
Stay Fit	4.60	
Challenge myself	4.59	
Push myself	4.49	
Feel accomplished	4.46	
Relieve Stress	4.40	
Personal Record	3.82	
Lose Weight	3.73	
Be with friends	3.56	
Meet others	3.23	
Compete with other athletes	3.18	
Be with family	2.83	
Compete against other athletes	2.75	

* Note: n = 557

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Attraction Outcomes

Attraction outcomes are based on how participation in long distance running makes a person feel (Funk & James, 2001). Long distance running is important to this sample. The mean scores this construct are present in Table 16 and has a reliability of $\alpha=0.89$. Participants indicated they look forward to running (M= 4.31), running is important to them (M= 4.26) and their lives are much richer as a result of long distance running (M= 4.23).

Table 16: Attraction Outcomes Descriptive Statistics (n=12 items)	Mean	Cronbach Alpha
I do not enjoy running	4.44	$\alpha = 0.89$
I look forward to LDR.	4.31	
Running is vitally important to me.	4.26	
Life is so much richer as a result of LDR.	4.23	
To miss a day of running is sheer relief	4.16	
I dread the thought of LDR	4.12	
LDR is pleasant.	4.07	
I would change my schedule to meet the need to long distance run.	4.06	
LDR is a chore	3.84	
I have to force myself to run long distances	3.67	
LDR is the high point in my day.	3.56	
I wish there were more enjoyable ways to stay fit	3.36	

* Note: n = 573

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Attachment Process (Values & Self-Concept)

The attachment process is made up of both personal values and self-concept. The mean scores for both are presented in Table 17. Values (n=8) has a reliability of $\alpha = 0.86$. Sense of accomplishment (M= 4.54), fun and enjoyment (M= 4.53) and self-fulfillment (M= 4.50) are the most important values. Security and a sense of belonging were the least (M= 3.84). Self-concept (n=6) has a reliability of $\alpha = 0.84$. Talking to others (M= 3.89) about long distance running and others being impressed with their long distance

running (M= 3.85) were identified as the most important when increasing self-concept. The least important contributor to increasing self-concept was sharing LDR messages and services with others (M= 3.14).

Table 17: Attachment Process Descriptive Statistics		Mean	Cronbach Alpha
Values (n=8 items)			$\alpha = 0.86$
	Sense of Accomplishment	4.54	
	Fun and Enjoyment in Life	4.53	
	Self-Fulfillment	4.50	
	Self-Respect	4.47	
	Warm Relationships	4.22	
	Being well respected	3.98	
	Security	3.84	
	Sense of Belonging	3.84	
<i>Measured on a 5-point Likert Scale where 1 = Not Important and 5 = Very Important</i>			
Self-Concept (n=6 items)			$\alpha = 0.84$
	Talk to others about LDR	3.90	
	Others are impressed by my LRD	3.85	
	Express who I want to be	3.41	
	Express Personality	3.32	
	Express person values	3.22	
	Show LDR messages and services	3.14	

* Note: n= 563

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Attitude Strength

Attachment outcomes are more intrinsically focused than extrinsic (Funk & James, 2001). While attraction outcomes, examine the how long distance running makes a person feel, attitude strength (attachment outcomes) looks at how a person identifies with being a long distance runner (Funk & James, 2001). Results for attitude strength (attachment outcomes) are presented in Table 18 and has a reliability of $\alpha = 0.81$. Identifying as a long distance runner is important (M= 4.16) because it provides understanding into the type of person they are. Overall, the sample has a strong positive attitude about long distance running.

Table 18: Attitude Strength Descriptive Statistics (n=6 items)		Mean	Cronbach Alpha
	Running is important to me.	4.45	$\alpha = 0.81$
	Being a long distance runner is important to me	4.16	
	Running gives insight into the type of person I am.	3.78	
	I poses a great deal of knowledge about LDR	3.60	
	If I were to list everything I know about running, the list would be quite long.	3.41	
	Tell a lot about a person - LD runner	3.02	

*Note:

n= 573

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Loyalty

Reliability for loyalty is $\alpha=0.81$ and the results of long distance running loyalty are presented in Table 19. Of 579 respondents, n= 560 plan on participating in long distance running next year (M= 4.59). The sample hopes to always be a long distance runner (M= 4.38) and will attend long distance running events during the next year (M= 4.22).

Table 19: Loyalty Descriptive Statistics (n=6 items)		Mean	Cronbach Alpha
Behavioral Loyalty	Participate in LDR next year	4.59	$\alpha = 0.81$
	Always be a LDR	4.38	
	Attend LDR event during the year	4.22	
Attitudinal Loyalty	Committed to LDR	4.01	
	Unlikely to change allegiance	3.25	
	Passionate about LDR	2.65	

* Note: n = 566

Measured on a 5-point Likert Scale where 1 = Strongly Disagree and 5 = Strongly Agree

Model Fit

A good model fit would provide an insignificant chi-square result of $p > 0.05$ (Barrett, 2007). Because chi square (χ^2) tests are sensitive to sample size, chi-square by

degrees of freedom (CMIN/DF (χ^2/df) <5.00) (Byrne, 2001), goodness of fit index (GFI>0.90), root mean square residual (RMR<0.08), normative fit index (NFI>0.90), comparative-fit-index (CFI >0.90) and root mean square error of approximations (RMSEA<0.08) (Hu & Bentler, 1999) were also used in this analysis to assess model fit. The proposed model showed: CMIN/DF = 4.69, GFI = 0.98, RMR = 0.02, NFI = 0.97, CFI =0.98 and RMSEA = 0.08. All goodness of fit criteria were met, as displayed in Table 20. This indicated that the model is a good fit for the PCM Framework. Figure 3 illustrates the accepted model for the presented research.

Table 20: Goodness of Fit for PCM Model

X ² (CMIN)	56.39
	p < 0.01
X ² /d.f (CMIN/DF)	4.69*
GFI	0.98*
RMR	0.02*
NFI	0.97*
CFI	0.98*
RMSEA	0.08*

Note: * indicates the index meets the fit criteria

(CMIN/DF <4.70) (GFI>0.90), (RMR<0.08), (NFI>0.90), (CFI >0.90) (RMSEA<0.08)

Path Analysis Results

The path analysis provided standardized path coefficients for each direct effect of one variable on another. Standardized path coefficients appear next to the arrows in figure 3, between variables. Solid lines represent a significant relationship between variable while a dashed lines indicate an insignificant path.

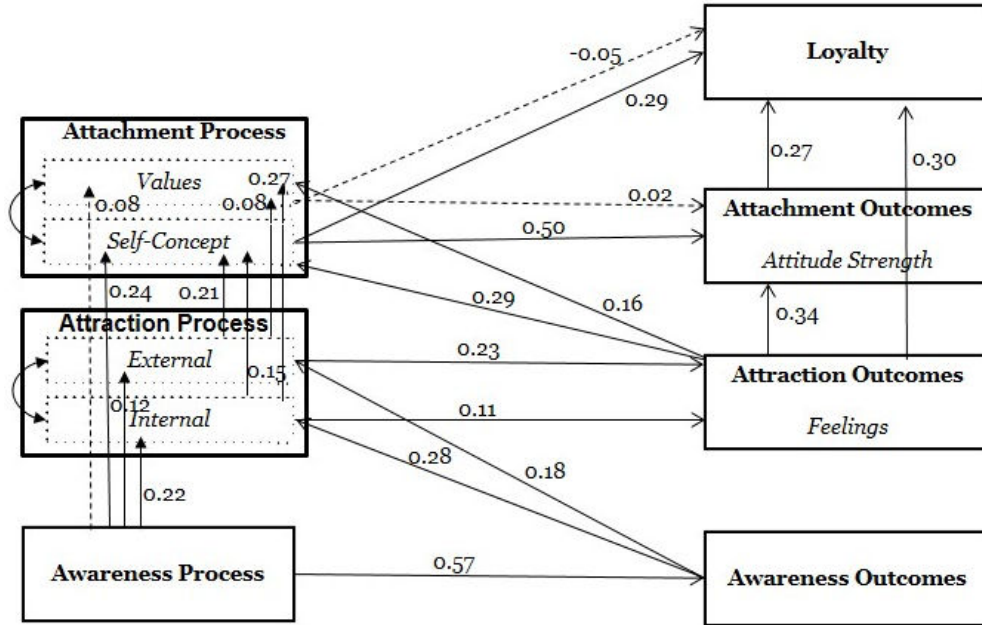


Figure 3: Path Analysis of Accepted Model

Hypothesis Results

The accepted path model was used to evaluate the hypothesized relationships between seven construct of the PCM model (awareness process and outcomes, attraction process and outcomes, attachment process, attitude strength and loyalty). Results of the path analysis evaluated the four stages of the PCM model leading to loyalty to long distance running. Direct effects are presented in Table 21. The path analysis supported nineteen of the twenty-two hypotheses, indicating a significant positive influence from one item of PCM to another.

Table 21

Significance Levels and Standardized Regression Coefficients for PCM model

Direct Effects	C.R.	β	P
Awareness Outcome <--- Awareness Process	16.56	0.57	***
Internal Motivation <--- Awareness Outcome	6.08	0.28	***
External Motivation <--- Awareness Outcome	3.79	0.18	***
Internal Motivation <--- Awareness Process	4.88	0.22	***
External Motivation <--- Awareness Process	2.40	0.12	0.02
Feelings <--- Internal Motivation	2.55	0.11	0.01
Feelings <--- External Motivation	5.18	0.23	***
Self-Concept <--- Feelings	8.34	0.29	***
Values <--- Feelings	3.92	0.16	***
Self-Concept <--- Awareness Process	6.54	0.24	***
Values <--- Internal Motivation	5.92	0.27	***
Self-Concept <--- External Motivation	5.29	0.21	***
Self-Concept <--- Internal Motivation	3.59	0.15	***
Values <--- Awareness Process	1.92	0.08	0.06
Values <--- External Motivation	1.93	0.08	0.05
Attitude Strength <--- Values	0.59	0.02	0.55
Attitude Strength <--- Self-Concept	15.33	0.50	***
Attitude Strength <--- Feelings	10.77	0.34	***
Loyalty <--- Values	-1.68	-0.05	0.09
Loyalty <--- Self-Concept	7.01	0.29	***
Loyalty <--- Attitude Strength	6.83	0.30	***
Loyalty <--- Feelings	7.52	0.27	***

Note: *** indicates $p < 0.001$

Awareness

Hypotheses 1 and 2 examined the awareness stage of the PCM model. The path analysis (figure 4) showed a significant positive influence ($\beta = 0.57$, $p < 0.001$) between awareness process and awareness outcomes. As the number of information sources increase, more information about running is gathered. This indicates that the number information sources positively enhance runner's knowledge about participation in long distance running. Thus, hypothesis H1_A was supported. As the number of sources become larger, a greater amount of knowledge about long distance running is acquired.

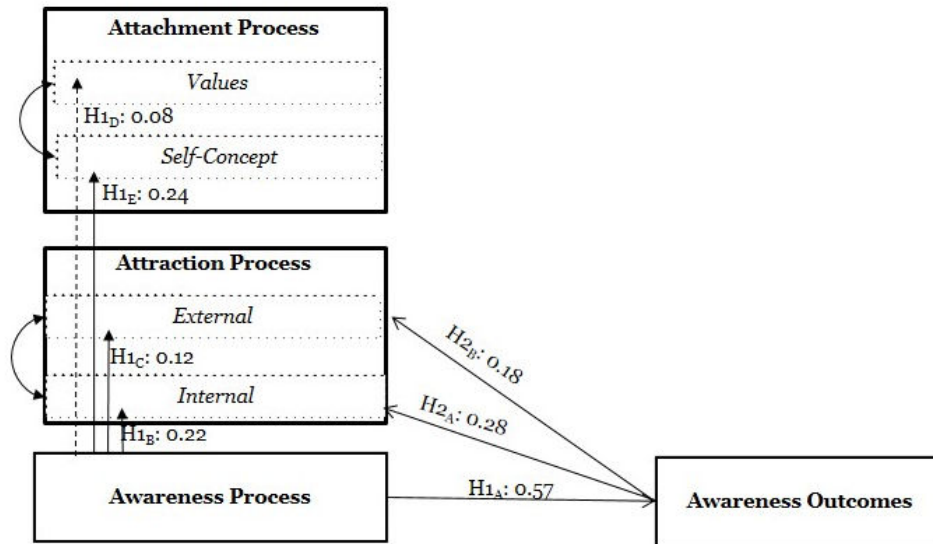


Figure 4: Awareness Stage Path Analysis Results

Path analysis testing showed a positive and significant relationship between awareness process and the components of the attraction and attachment processes. First, awareness process had a positive and significant impact on internal ($\beta=0.22$, $p < 0.001$) and external motivations ($\beta= 0.12$, $p < 0.001$) (attraction process), supporting hypotheses H_{1B} and H_{1C} . Besides gathering information from the media, individuals that participate in long distance running training programs have the support of mutual friends, family, coworkers and other training program participants. Support from a large number of sources enhances motivation to participate. This finding supports literature (Jeffery & Butryn, 2012) that as the number of information sources grow, strength of motivation to participate in long distance running increases.

The model also shows the relationship between awareness process and motivations is fully mediated by awareness outcomes. The more sources that inform people about long distance running and gaining knowledge will enhance motivation to participate. Therefore, as the number of information sources grow, motivation to

participate in long distance running get stronger due to acquiring more knowledge about the activity.

The attachment process is made up of self-concept and values (Funk & James, 2001). This construct represents runner identity that is formed through participation as the activity takes on a deeper and more personal meaning. Identity is directly related to a large social network of friends who are runners (Horton & Mack, 2000). Individuals identify with others that share similar values and resemble how they view themselves (Lock, Filo, Kunkel & Skinner, 2013). However, an insignificant ($\beta= 0.08$, $p>0.05$) relationship was found between awareness process and values. This shows that where an individual finds out about long distance running is not a reflection of personal values. Therefore, hypothesis H_{1D} was not supported. On the other hand, the model does show that information sources (awareness process) has a positive and significant impact on self-concept ($\beta=0.24$, $p<0.001$) (attachment process). This supports hypotheses H_{1E} and suggests that the larger number of information sources can increase how a person feel about themselves. This finding reflects other self-concept literature, indicating that individuals develop a substantial portion of their self-concept from social groups in which they belong (Lock, Filo, Kunkel & Skinner, 2013; Tajfel, 1972).

This relationship between awareness process and self-concept was fully mediated by an increase in motivation. Individuals are motivated to build self-concept (Lock & Filo, 2011). Therefore, sources that inform individuals about long distance running will strengthen motivation to participate. To achieve a high self-concept, runners aim to associate themselves with others that have similar interests (Lock & Filo, 2011). Because participation in long distance running satisfies motivations (e.g. staying fit and pushing themselves) the individual will develop a greater self-concept.

Results show a significant positive influence ($\beta= 0.28, p<0.001$) from awareness outcomes to internal motivations, supporting H_{2A}. This shows that as knowledge increases, internal motivation to participate in long distance running can be stimulated. In other words, as knowledge is acquired, internal motivation (e.g. staying fit and challenging oneself) to participate in long distance running gets stronger. Awareness outcomes also had a significant impact ($\beta= 0.18, p<0.001$) on external motivations. Therefore, an increase in information about long distance running strengthens motivation to participate in endurance running events. Thus, hypothesis H_{2B} is supported. Greater knowledge that is acquired about long distance running elicits a response resulting in the person “liking” the activity (Funk & James, 2001). Knowledge gained in the awareness stage allows the individual to learn about qualities they may find attractive, encouraging participation.

The awareness stage explains that learning about an activity from many sources will lead to greater knowledge acquisition. The role of socialization is essential in the progression from awareness to attraction in the PCM Model (Lock & Filo, 2011). Learning about the activity from multiple sources will increase motivation to participate in long distance running and result in an increased self-concept. Therefore, having a large number of information sources and acquiring knowledge about long distance running is the first step in becoming loyal to long distance running.

Attraction

Hypotheses 3, 4, and 5 examined the attraction stage in the PCM model. Figure 5 illustrates the path analysis results for the attraction stage. This stage encompasses internal and external motives on feelings about LDR, and the relationship between the feeling about LDR on the attachment process and attitude strength. First, the path

analysis showed a significant positive influence ($\beta=0.11$, $p<0.01$) between internal motivation and feelings about long distance running. This shows that as internal motivations (e.g. staying fit and challenging self) grow, feelings about long distance running become stronger. As motives are bolstered through participation, strong feelings toward the activity form. Therefore, hypothesis H3_A is supported.

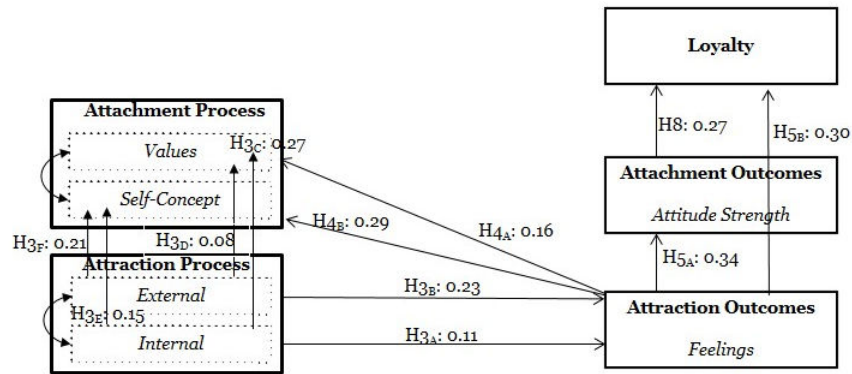


Figure 5: Attraction Stage Path Analysis Results

External motivations also had a positive significant influence ($\beta=0.23$, $p<0.001$) on feelings about LDR. This shows that motivation to participate in an event leads to the development of stronger feelings about long distance running. Therefore, hypothesis H3_B is supported. The more motivated a runner is to participate in endurance events, the stronger their feelings about LDR become. Both of these findings support literature (Funk & James, 2006) that as motivations to participate become stronger, feelings towards long distance running intensify.

The path analysis showed positive and significant relationships between motivations (attraction process) on values and self-concept (attachment process). Values are an expression of identity in the attachment process and can be used to explain behavior. When motives align with values they have been shown to stimulate behavioral responses (Vinson, Scott & Lamont, 1977). This supports hypotheses H3_C and H3_D showing a significant relationship between internal ($\beta=0.27$, $p<0.001$) and external

($\beta=0.08$, $p<0.05$) motivation on values. As motives (e.g. staying fit and pushing oneself) are strengthened through participation, they become a form of self-expression and represent a connection with others (Filo, Funk & O'Brien, 2011).

Individuals are more motivated to participate in long distance running if they have higher opinions of their abilities (increased self-concept) (Bandura, 1997; Jeffery & Butryn, 2012). As motivation intensifies, it significantly influences participant self-concept. A significant influence was found between internal ($\beta=0.15$, $p<0.001$) and external ($\beta=0.21$, $p<0.001$) motivations on self-concept, supporting hypotheses H3_E and H3_F. This finding indicates that as motives are strengthened through participation, long distance runners develop a higher self-concept and runner identity. This supports research showing that a strong identity can provide motivation for success in long distance running (Horton & Mack, 2000).

Therefore, participation in long distance running elicits a response that strengthens the motivation between the activity and attitude (attachment outcomes) (Funk & James, 2001). Motives are a reflection of values and self-concept. (Filo, Funk & O'Brien, 2011). As motives are satisfied through participation, identification as a 'long distance runner' becomes stronger. Motives contribute to enhancing meaning and importance for long distance running (Filo, Funk & O'Brien, 2011).

Strong feelings about long distance running were found to have a positive and significant ($\beta=0.16$, $p<0.001$) relationship with the strength of personal values, supporting hypothesis H4_A. As feelings (attraction outcomes) become stronger, the person starts to develop a psychological connection with long distance running (attachment stage). A positive and significant relationship between feelings about LDR and self-concept ($\beta=0.29$, $p<0.001$) was also found, supporting hypothesis H4_B. This shows an improvement in self-concept as feelings about LDR become stronger. Both

values and self-concept have been shown to be a reflection of feelings toward an activity (Funk & James, 2001; 2006). Additionally, values and self-concept explain how meaning is attached to long distance running. Therefore, the present study demonstrates that participants enjoy running because the activity provides them with a sense of accomplishment and fun and enjoyment while allowing them to feel good about themselves.

Next, feelings in the attraction stage were explored on attitude strength in the attachment stage and loyalty. Feelings toward long distance running were shown to positively influence attitude strength ($\beta=0.34$, $p<0.001$), supporting hypothesis H5_A. This finding supports previous literature (Funk & James, 2006) that feelings become stronger to create attitude as participation continues and take on a deeper meaning.

Loyalty is reached as attitude continues to grow (Funk & James, 2001). The present study found feelings (attraction outcomes) about long distance running and loyalty to be significantly ($\beta=0.30$, $p<0.001$) mediated by attitude strength. As participation in long distance running continues, feelings become strong leading to the development of a strong attitude. This supports PCM literature that says feelings (attraction outcomes) about long distance running become stronger through participation which leads to loyalty. Thus, hypothesis H5_B is supported indicating an indirect influence between feelings about LDR and loyalty.

As participation in long distance running continues to strengthen motives, the individual feels better about themselves. Thus, participation in LDR and endurance running events will help improve an individual's self-concept. The increase in self-concept and strength of values due to participation in LDR indicates the initial formation of their runner identity. As long as long distance running continues to support motives, runner identity will continue to develop. Exerting a great amount of effort will increase

the attractiveness of accomplishing the goal (marathoners specifically) (Lock & Filo, 2012). Justification for long distance training must come from within. Marathon runners develop a strong identity to justify the effort they spend to cross the finish line.

Attachment

Hypothesis 6 examined the attachment stage of the model. Figure 6 illustrates the path analysis results for this stage. The attachment stage encompasses values, self-concept and attitude strength. Values was found to not have a significant ($\beta=0.02$, $p>0.5$) relationship with attitude strength. This indicated that personal values do not have an effect on developing a stronger attitude toward long distance running. Therefore, H6_A is not supported.

Filo, Funk & O'Brien (2009; 2011) suggested testing the LOV scale with PCM to quantify the relative contribution of each value. This scale has been shown to closely relate to consumer behavior and increased loyalty (Kahle, Beatty, & Homer, 1986). Perhaps the present study did not have positive results because the LOV scale is not compatible with the PCM framework. Additional research is needed to find a value scale that fits best within PCM framework.

However, self-concept was found to have a significant impact ($\beta=0.50$, $p<0.001$) on attitude strength. This indicates that as long distance running continues to be a reflection of the person's identity, they will maintain a strong attitude about the activity. Thus, H6_B is supported.

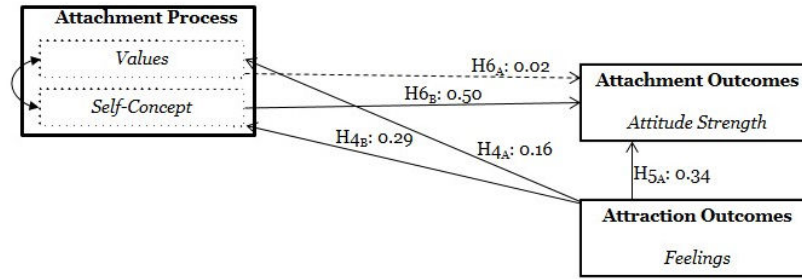


Figure 6: Attachment Stage Path Analysis Results

As previously mentioned above, feelings in the attraction stage had a positive and significant relationship with values and self-concept. There was also a positive and significant relationship between feelings about long distance running and attitude, mediated by self-concept. An increase in self-concept, due to participation in long distance running, explains how the activity takes on a more meaningful and deeper role in order to become attached to the activity (Funk & James, 2001). Because participation allows the person to feel better about themselves, they have a stronger attitude towards long distance running.

Loyalty

Hypotheses 7 and 8 examined the components of the attachment stage on loyalty towards long distance running. Figure 7 illustrates the path analysis results for this stage. Comparable to the attachment stage, values did not have a significant ($\beta=-0.05$, $p>0.05$) relationship with LDR loyalty. This shows that strong personal values are not an indicator of developing activity loyalty. Therefore, H7_A is not supported. On the other hand, self-concept did have a significant ($\beta=0.29$, $p<0.001$) influence on long distance running loyalty, supporting H7_B. This indicates that an increase in self-concept as a result of activity participation, has a direct impact on developing LDR loyalty. Thus, as long distance running continues to be a reflection of self, loyalty will be maintained.

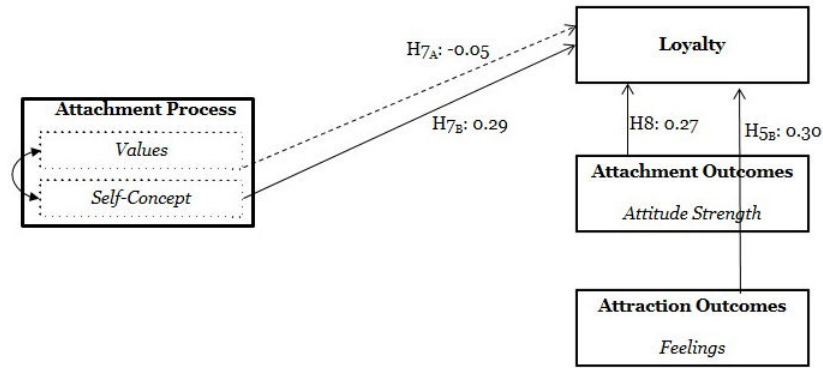


Figure 7: Loyalty Stage Path Analysis Results

Attitude strength was also found to have a significant ($\beta=0.27$, $p<0.001$) impact on loyalty, supporting hypothesis H8. As mentioned earlier, feelings about LDR (attraction stage) and loyalty were significantly mediated by attitude strength ($\beta=0.30$, $p<0.001$). This supports Funk & James (2001; 2006) who state that loyalty can be achieved as people develop stronger and deeper connection to LDR as they move progressively through each stage of the PCM Framework.

Training to be Loyal

To further investigate loyalty to long distance running, survey participants were asked to describe how their training has changed over the last few years in an open-ended question. Of the $n= 579$ total survey responses, 270 participants indicated an increase in training, 119 indicated a decrease in training, and 55 indicated that training has not changed.

Participants that indicated that their training has increased referred to a change in the way they train due to: adding additional workouts, health purposes, joining a group, and training for new races. Table 22 outlines the responses provided by runners that indicated their training has increased due to changing their overall activity.

Table 22: Increased due to changes in training (n=88)

Reason	N
Additional weekly miles	30
More training during the week (general)	20
Additional speed and intensity	13
Additional hill workouts	7
Increased number of days they ran	6
Additional interval workouts	4
Additional cross training	4
Reducing number of rest/recovery days	4

Specifically, survey respondents indicated that have added different components to their workouts.

“I have only been running less than 2 years; however, my training has increased and expanded. I now do LDR, speed work and hill training”.

“Longer distances and more frequent training”

Others have changed the structure of their program without adding additional miles.

“Two years ago started using the run less run faster program, and I cross train 2-3x/week with cycling or spinning, do one day speed, one day tempo, and one day long run”.

“Been the same except for more hills”

“I’ve been increasing the amount of distance I run every year. I’m competing in more challenging events.”

Participants also indicated an increase in training due to health reasons. Table 23 outlines the health related reason training has increased.

Table 23: Increases due to health reasons n= 30

Reason	N
Increase fitness and endurance	11
Increase general health	8
Push themselves	6
Weigh related	3
More rest/recovery days in increase general health	2

The following responses were describes changes for health related reasons:

“My training has increased in the past few years because I am trying to get back into shape.”

“My training has increased as I have wanted to get fit again, be able to complete marathons”

“When I am injury free, I increase my mileage. I have been injury free the last 7 months, so more miles”

“When I am training for a specific event, I can be very committed and put in the necessary miles (e.g. Big Sur); otherwise, not so much. Still I like/need to run for health and mental well-being, just not so many grueling, repetitive miles”

Survey participants indicated their training has increased as a result of an increase in running group and race participation. Runners are adding more marathons to their yearly calendar, despite RunningUSA’s (2012) report that the half-marathon distance is the most popular in the United States. Table 24 describes the reasons training has increased due to event participation.

Table 24: Increases due to group/race participation		n=118
Reason		N
More marathons		48
Participating in more events (general)		47
Joined a charity training program		7
Adding ultra-marathons to schedule		7
Changing race goal/setting new personal record		5
Want to qualify for Boston		4

Participants wrote about having increased their training to accommodate the requirements of the additional races. Due to the increase in race distances, runners needed to increase their training to be better prepared for the upcoming event.

“It increased because I was trying to qualify for the Boston Marathon and I needed to be faster”.

“Increased due to chasing for a Boston Qualifier”

“Increased dramatically. 3 years ago was running about 10 miles per week, never ran a marathon. Now training for Boston at 90+ /week”.

Participants also joined a charity- based marathon/half marathon training program. Team in Training was the most popular group mentioned by survey participants. Team in Training (www.teamintraining.org) is a group of individuals that participate in an event to raise money for Leukemia and Lymphoma research. Participants on this team have a set amount that is required to raise before they are able to participate in an event. Being a part of the team allows the runner to have free coaching through the entire 16-week training program. Most programs have strength training, nutrition guidance and weekly group runs that allow the entire team to come together. There are a number of “teams” across the country and typically each metropolitan area has a team. It is common for multiple teams from different cities to participate in the same event.

Participants that indicated their training has decreased referred to health related causes, other commitments and running related restraints. Table 25 shows the health related reasons training has decreased.

Table 25: Decreases due to health reasons		n= 52
	Reason	N
Injury		33
Increases in age		16
Chronic illness		3

Specifically, participants their commitment to running despite increases in age and injury.

“Age has crept up on me and I had an injury last November which affected my running”

“Decreased due to age, occasional injuries, and job, family changes”

“Decreased by about 50% due to injury once healed I will be back”

Table 26 identifies other constraints reported by survey participants.

Commitments included work, family, other activities and school are common constraints that are widely researched in leisure research.

Reason	N
Lack of interest in running	33
Work	20
Family	17
Other activities	10
General constraints	8
Running related constrains (general)	6
School	5

Specifically, respondents said:

“My full time schedule and family doesn't allows allow me to train enough but when I get the chance I make the best of it”.

“It's decreased due to my work schedule”

“It's increased and I've gotten better at running in the 2 1/2 years I've been running”

The majority of this group described a lack of interest in the activity. Some showed a loyalty to an event but not to running specifically.

One respondent wrote:

“Decreased. I'm down to just one marathon a year. I hate training, I hate running in the winter, but I love (LOVE) the Big Sur Marathon. I'm on my fourth run and I hope to always be healthy enough to do it. Now that I only do Big Sur I only run during Big Sur training months.”

Participants that referred to training levels staying the same indicated that they were content with their current training program and fitness levels. Participants also indicated that their training fluctuates depending on other commitments. There are periods during the years that they are busy with other commitments. However, when

those commitments are over they go back to their training. Even though their training may increase and decrease during the year, it is still the same from year to year.

Table 27: Training stayed the same		n=113
Reason		N
Training fluctuates depending on commitments		58
Content with current training program and fitness level		55

Survey respondents wrote:

“It depends on what I am training for”.

“Depends on what races I have coming up”

“It varies. Ahead of a race I run more, in the weeks after I run less, and then I start picking up again”.

“I am no longer in a "training" mode or frame of mind. My non-event running is to maintain my physical conditioning”

“My training flows with what is going on in my family life. So, it constantly increases and decreases based on how busy I am.”

Conclusion

Overall, a number of conclusions can be drawn from the results of the present study, which will be discussed in the proceeding chapter. First, we can conclude that the number of information sources positively influence the amount of knowledge a leisure participant obtains before starting a new activity. As the number of sources increase, knowledge also increases which can encourage motivation to participate. As motivations are satisfied through participation, positive feelings develop toward long distance running. Feelings about LDR interact with self-concept, resulting in long distance running becoming a meaningful activity that makes the participant feel good about him/herself. As this connection between the individual and the LDR continues to grow, loyalty is reached.

Part 2

Serious Leisure and Commitment

Participants in the study were divided into two groups based on their SLIM (Serious Leisure Inventory and Measure) score. A summative score was calculated from the six item SLIM inventory as part of the survey. Those with a score greater than the mean ($M=23.75$) were named 'more serious' ($n= 323$) and those less than were named 'less serious ($n=261$)'. This division into two groups allowed the researcher to determine if differences exist between two different levels of serious runners.

Descriptive statistics of both 'less serious' and 'more serious' runners are displayed in Table 28. 'Less serious' ($M<23.75$) runners identified as female ($n = 168$; 64.4%) and male ($n = 93$; 35.6%). Participants were mostly between the ages of 35-44 ($n = 78$; 29.9%) followed by 45-54 ($n= 62$; 23.8%) and 25-34 ($n= 55$; 21.1%) with more than half ($n= 135$; 51.7%) reporting a family income of \$100,000 or more. The majority ($n= 178$; 68.6%) reported being married or partnered. The participants are well educated with most ($n= 231$; 88.5%) earning at least a college degree. More participants completed the full marathon distance ($n = 147$; 56.3%) over the half marathon distance ($n = 100$; 33.1%).

'More serious' ($M >23.75$) runners identified as female ($n = 203$; 62.8%) and male ($n = 113$; 35%). Participants were mostly between the ages of 35-44 ($n = 102$; 31.6%) followed by 45-54 ($n= 87$; 26.9%) and 25-34 ($n= 71$; 22%) with most ($n= 179$; 55.4%) reporting a family income of \$100,000 or more. The majority ($n= 228$; 70.6%) reported being married or partnered. The participants are also well educated with most ($n= 277$; 85.7%) earning at least a college degree. More participants completed the full marathon distance ($n = 197$; 61%) over the half marathon distance ($n = 107$; 33.1%).

Table 28: Participant Demographics		Less Serious (n=261)		More Serious (n=323)	
		Frequency	%	Frequency	%
Gender	Male	93	35.6	113	35.0
	Female	168	64.4	203	62.8
Age	Under 16	1	.4	0	.0
	16-24	11	4.2	11	3.4
	25-34	55	21.1	71	22.0
	35-44	78	29.9	102	31.6
	45-54	62	23.8	87	26.9
	55-64	43	16.5	37	11.5
	65 or over	11	4.2	10	3.1
Income	Less than \$30,000	8	3.1	16	5.0
	\$30-39,999	13	5.0	12	3.7
	\$40-49,999	12	4.6	19	5.9
	\$50-59,999	17	6.5	15	4.6
	\$60-69,999	12	4.6	14	4.3
	\$70-79,999	13	5.0	17	5.3
	\$80-89,999	20	7.7	14	4.3
	\$90-99,999	15	5.7	15	4.6
	\$100,000 or more	135	51.7	179	55.4
Unknown	16	6.1	22	6.8	
Race	White	205	78.5	248	76.8
	African American	5	1.9	5	1.2
	Hispanic	19	7.3	19	5.9
	Asian	27	10.3	34	10.5
	Native American	4	1.5	3	0.9
	Pacific Islander	2	0.8	7	2.2
	Other	5	1.9	10	3.1
Marital Status	Single	81	31.0	89	27.6
	Married/Partnered	179	68.6	228	70.6
	Unknown	1	0.4	6	1.9
Education	High School/GED	5	1.9	7	2.2
	Some College	18	6.9	25	7.7
	Associates Degree	19	7.3	24	7.4
	Bachelor's Degree	105	40.2	120	37.2
	Master's Degree	64	24.5	84	26.0

	Doctoral Degree	16	6.1	19	5.9
	Professional Degree	27	10.3	30	9.3
	Other	5	1.9	6	1.9
	Unknown	2	0.8	8	2.5
Distance completed	Full	147	56.3	197	61.0
	Half	100	38.3	107	33.1
	Unknown	14	5.4	19	5.9

Running behaviors of 'less' and 'more serious' participants are presented in Table 29. The majority of the 'less serious' runners have been running for less than ten years and run three to four times per week. More than half (n= 168; 64.4%) run between 21-40 miles per week. A large portion of this group have completed at least ten marathons (n = 69; 26.4%) and ten half marathons (n = 124; 47.5%). Of these survey participants, more than half (n= 140, 53.6%) have not qualified for the Boston Marathon, but would like to.

'More serious' runners have been running for less than five years and they run three to four times per week. More than half (n= 184; 57%) run between 21-40 miles per week. A large portion of this group have completed at least ten marathons (n = 98; 30.3%) and half marathons (n = 149; 46.1%). Of these survey participants, more than half (n = 185; 57.3%) have not qualified for the Boston Marathon, but would like to.

Table 29: Running Behaviors		Less Serious (n=261)		More Serious (n=323)	
		Frequency	%	Frequency	%
Years Running	Less than 5 Years	76	29.1	105	32.5
	6-10 Years	60	23.0	84	26.0
	11-15 Years	31	11.9	40	12.4
	16-20 Years	27	10.3	30	9.3
	20 + Years	67	25.7	59	18.3
Running Times/Week	1 time	6	2.3	4	1.2
	2 times	14	5.4	17	5.3
	3 times	61	23.4	96	29.7
	4 times	91	34.9	100	31.0
	5 times	58	22.2	64	19.8
	6 times	26	10.0	28	8.7
	7 times	5	1.9	9	2.8
Miles/Week	< 20 miles/wk	63	24.1	82	25.4
	21-40 miles/wk	168	64.4	184	57.0
	41-60 miles/wk	25	9.6	40	12.4
	60 + miles/wk	4	1.5	9	2.8
	Unknown				
Completed Full Marathons	None	51	19.5	40	12.4
	1-2	60	23.0	67	20.7
	3-5	41	15.7	66	20.4
	6-9	40	15.3	47	14.6
	10 or more	69	26.4	98	30.3
Completed Half Marathons	None	23	8.8	16	5.0
	1-2	35	13.4	43	13.3
	3-5	37	14.2	64	19.8
	6-9	42	16.1	45	13.9
	10 or more	124	47.5	149	46.1
Have Qualified for Boston	Yes	55	21.1	63	19.5
	No	185	70.9	226	70.0
	NA	21	8.0	29	9.0

Want to qualify for Boston	Yes	140	53.6	185	57.3
	No	92	35.2	101	31.3
	Unknown	27	10.3	28	8.7

Multivariate Analysis of Variance (MANOVA)

A multivariate analysis of variance (MANOVA) was performed to analyze differences between ‘more serious’ and ‘less serious’ runners on all four stages of the PCM model. Those with a SLIM score greater than the mean ($M > 23.75$) were named ‘more serious’ ($n = 318$) and those with a score less than the mean ($M < 23.75$) were named ‘less serious’ ($n = 261$) runners. The Wilks’ Lambda test statistic was used because assumptions involving normality independence and equality of the variance-covariance matrices were satisfied, (Smith, Costello, Kim & Jahn, 2010). The main effect of the two groups was significant, Wilks’ $\lambda = 0.970$, $F(1, 577) = 4.45$, $p = 0.002$.

Table 30

Multivariate Analysis of Variance Results of SLIM/PCM

	More Serious	Less Serious
Knowledge	3.73 ± 0.64	3.65 ± 0.59
F-Statistic	3.04	
Feelings about LDR	4.03 ± 0.58	3.97 ± 0.60
F - Statistic	1.29	
Attitude toward LDR	3.80 ± 0.64	3.63 ± 0.66
F-Statistic	9.23**	
Loyalty	3.92 ± .60	3.72 ± 0.70
F-Statistic	13.62**	

Note: $df = 577$; * $p < .05$. ** $p < .01$

Univariate analysis found no significant difference between ‘more serious’ ($M = 3.73$) and ‘less serious’ runners ($M = 3.65$) in terms of their knowledge about long distance running; $F(1, 577) = 3.04$, $p = 0.08$. No difference was found in terms of the

information acquired about long distance running between the two groups. Therefore, H_9 is not supported indicating no significant difference in knowledge between 'more' and 'less' serious long distance runners.

Additionally, the present study found no significant difference between 'more serious' ($M= 4.03$) and 'less serious' runners ($M= 3.97$) in terms of their feelings about long distance running; $F(1, 577) = 1.29, p = 0.26$. Feelings about long distance running are similar between these groups. Hypothesis H_{10} cannot be supported indicating no difference in feelings between 'more' and 'less' serious long distance runners.

However, regarding attitude, the present study found that serious long distance runners ($M= 3.80$) have statistically significant different attitudes toward running compared to 'less serious' long distance runners ($M= 3.63$), $F(1, 577) = 9.23, p = 0.02$. 'More serious' runners have stronger attitudes toward running than 'less serious' runners, supporting H_{11} .

Additionally, the study found that 'less serious' long distance runners ($M= 3.92$) are statistically not as loyal compared to 'more serious' long distance runners ($M= 3.72$), $F(1, 577) = 13.62, p < 0.001$. The statistical difference in loyalty between 'less serious' and 'more serious' runners supports H_{12} .

Analysis of Variance (ANOVA)

An analysis of variance (ANOVA) was performed to analyze differences between 'more serious' and 'less serious' runners on their participation in marathon and half marathon events. Results indicate a significant difference between the number of marathons completed by 'more serious' and 'less serious' runners $F(1, 577) = 3.94, p = 0.05$. This shows that the 'more serious' runners have completed more marathons than the 'less serious' group. However, there was no significant difference between the groups

in the number of half marathons completed $F(1, 576) = 0.39, p = 0.56$. Therefore, there is no difference in the number of half marathons completed by either group.

Table 31
Analysis of Variance Results for completed events

	More Serious	Less Serious
Full Marathon	3.30 ± 1.41	3.06 ± 1.49
F-Statistic	3.94*	
Half Marathon	3.85 ± 1.28	3.78 ± 1.39
F-Statistic	0.39	

Note: * $p < .05$

Overall, the two groups are similar in terms of their demographic information and running behaviors. ‘More serious’ runners participate in more marathon events than the ‘less serious’ runners. However, they are similar in their awareness and attraction to LDR. Differences exist between the two groups in terms of their strength of attitude and loyalty towards LDR This indicates that ‘more serious’ runners have stronger attitudes and are more loyal to long distance running than their counterparts.

Chapter 6

DISCUSSION

Hypothesized relationships between awareness, attraction, attachment and loyalty to long distance running were tested. The present study also examined the role organized event participation plays in becoming a committed long distance runner. Additionally, differences between levels of serious leisure were explored within the PCM framework. The following chapter discusses the contributions and implications of the present research and makes suggestions for future research.

Contributions of the Research

The present study extends the body of literature on the Psychological Continuum Model (PCM) and Serious Leisure Perspective (SLP). First, the present study is the first to empirically test all four stages of the PCM Framework as one cohesive model. Previous literature has examined the attraction and attachment stages in the development of loyalty (Filo, Funk & O'Brien, 2009; 2011). Until now, the awareness stage has not been analytically measured in the PCM Framework. While validating the role of all four stages in the development of activity loyalty, the present study supports that the PCM Framework is a good model to understand the psychological process one goes through to become loyal.

The first contribution of the present study determined that awareness is essential to the development of long distance running loyalty. Until now, the awareness stage had not been examined in the PCM Framework and it was assumed that participants learned about activities from others (Funk & James, 2001; 2006). The present study shows that having a large number of influencers, rather than a few, initiates the psychological process leading to loyalty. Additionally, acquiring a large amount, rather than some,

information is more influential in strengthening motivations to participate in long distance running.

Hypotheses used in the present study identified additional relationships in the PCM Framework that were not previously described by Funk & James, 2001; 2006). It was determined that a direct relationship exists between the awareness, attraction, and attachment processes. This shows that all input variables interact in the development of loyalty. The present study uncovers that information sources are also a contributor to strengthening motives and enhancing self-concept before loyalty can form. Therefore, the present study extend the PCM literature to show that influencers are a fundamental to strengthening motives and enhancing self-concept.

Thus far, PCM literature has demonstrated loyalty to sports teams, charitable causes and activities (Filo, Funk & O'Brien, 2009; 2011; Funk & James, 2001; 2006; Gladden & Funk, 2004). The present study reveals that motivation to participate in endurance event s also leads to loyalty in long distance running. Therefore, the PCM literature now includes event participation as a contributor to running loyalty.

The present study also supports suggestions that the PCM Framework and SLP would work well together to categorize participants into different association levels (Havard & Gould, 2010). Each describes committed participants, but the combination of the two perspectives identified the psychological connection that 'more serious' participant possess that 'less serious' participants do not. Knowledge acquisition about long distance running can induce feelings and beliefs among those with low commitment levels (Funk & Pritchard, 2006).

The present research, suggests that levels of seriousness exists in the serious leisure perspective. Rather than just describing characteristics of serious participants, the present study shows that 'more serious' runners form an emotional connection to the

activity. Additionally, not all 'serious runners' will develop a psychological loyalty to long distance running. Therefore, the present study concludes that not all 'serious' runners are committed to long distance running. Only the 'more serious' runner will become loyal.

'More serious participants are those that have stronger attitudes and are loyal to long distance running (Brown 2007). Long distance running is a reflection of self for 'more serious' runners but not with 'less serious'. This is a reflection of mastery of the activity (Pearce & Caltabiano, 1983). Therefore, in order to be considered a 'more serious' participant the activity must provide a sense of self and social identity. 'More serious' runners assign a greater meaning to long distance running as they became immersed in the activity. 'Less serious' runners may still run long distances over a long period of time, but may not develop loyalty like their counterparts. In other words, the psychological connection developed towards long distance running is stronger in 'more serious' participants than 'less serious'.

Thus far, research related to serious leisure simply defined individuals as 'serious' participants. This description was based on behaviors demonstrated by activity participants in pursuit of an activity. It was said that participants chose to spend their free time participating in the activity and acquiring knowledge and skills to help them improve their ability to participate (Stebbins, 1992). Results from the present study show an internal connection is formed between the activity and participant. The individual must assign meaning to the activity (Metheny, 1968). Rather than just describing behaviors, the present study unveiled the psychological process that runners go through to become loyal. Serious participants are said to be committed to the activity, however the present study revealed that not all serious participants reach the loyalty stage. This finding supports Lin (2008) who found different levels of serious leisure to predict commitment. Individuals may participate in the activity for a long period of time, but

will not have the strong connection needed to become loyal. As determined by this study, the activity must be a reflection of self in order for the person to develop loyalty towards the activity.

Filo, Funk & O'Brien, (2009) suggest that attachment to an activity reflects serious leisure. The present study revealed those with higher SLIM scores ('more serious') exhibited attachment and loyalty to long distance running. Therefore, PCM is a good framework for describing the psychological connection a 'more serious' runner has with long distance running. The study serves as a platform for explaining parallels between the psychological stages of PCM and behaviors described in SLP.

Implications of the Research

Survey Respondents

The sample in the present study was found to be similar to the general population of runners in the United States in terms of demographic breakdown and running behaviors. According to Running USA (2013) a 'core runner' is an active adult that enters running events and trains year round. The core runner, on average, is between 35-45 years of age and married. These runners are highly educated, where 75% have earned at least a college degree. They are affluent, earning an average annual household income of at least \$75,000. Core runners average 20-40 miles per week over four days of running.

Survey participants in the present study, on average, indicated they were between 35-44 years of age and married or partnered. The sample was also highly educated with over 70% earning at least a college degree. More than half have an annual household income of at least \$100,000. Survey participants run between 3-4 days per week putting in between 21-40 miles per week.

Strong similarities exist between national core runners and survey participants. This suggests that the study sample is representative of the general population of core

runners. Therefore, the findings of the present study can be used to describe the general population of long distance runners. Conclusions made based on the results of the present study can be used to describe the psychological process all serious long distance runners go through to become loyal.

PCM Framework

Part one of the present study examined the PCM framework (Funk & James, 2001; 2006) to describe how participants become loyal to long distance running. Results were found investigating how individuals go through the entire PCM framework in order to reach the loyalty stage. As individuals progressed through each of the four stages, the possibility of them reaching loyalty increased.

Awareness

Little research has been done on the awareness stage in the PCM model thus far. It has been suggested that people usually learn about activities from word of mouth outlets such as family members, friends, peers, media preferences and others that are close to the individual (Kolbe & James, 2000; James, 2001). The present study supports this claim, showing that runners first learn about long distance running from friends that run, other runners and national magazines. This represents the socialization component of the awareness stage, as suggested by Funk & James (2001). It also confirms that socialization is very important during the early stages of activity participation when users are sharing the relevant information which is the early stages of the psychological process (Harvard & Gould, 2010). The present study shows that as the number of information sources increases, knowledge acquired about long distance running grows. This is a logical finding in that the more people that an individual talks to about a topic, the more information they will gain. This could be due to the fact the individuals feel more comfortable with the sources that are providing the information.

Surprisingly, many of the participants indicated that they learned about running by going out and participating in the activity. These findings support claims that prior knowledge of an activity is strongly related to involvement when knowledge was “derived from personal experience” (Manfredo & Bright, 1991). Responses indicated that they learned the most about the activity by trial and error and just seeing what worked for them. Some participants indicated that they would try something and see how their body reacted to it. If it was favorable, they would continue doing it. Two respondents described their awareness as:

“Many years of personal experience. I was running before it was mainstream”.

“Because there was not a lot published about running when I started, the vast majority of my information came from personal experience”.

This finding differs from the interpretation provided by Funk and James (2001; 2006). It was assumed that individuals in the awareness stage have not yet participated in the activity and are just gathering information. This stage was dedicated to just gathering information. However, the present study suggests that activity participation may actually begin sooner than the attraction stage as suggested by Funk & James (2001). Perhaps this relationship in the PCM model is actually a two-way relationship where individuals gather information about the activity, determine if they feel that the activity will enhance motives, participate in the activity, then go back to learn more once they determine the activity does augment motives. If the experience was pleasurable and the individual believes that consistent participation will strengthen motives, they could move into the attraction stage. If it was not pleasurable, they may remain at the awareness stage.

First, runners initiate interest in an activity for potential participants. Sources enhance motivation to participate in long distance running by supplying knowledge to

the potential participant. The more information that is gathered, the more likely the individual will participate. This is due to the perception that long distance running will strengthen individual motives. Sources provide information that allow the potential participant to decide if participation will intensify their motives.

The attraction stage explored motivations and initial feelings about recreational leisure activity. Knowledge gained in the awareness stage is an input to determine whether participation in long distance running will boost motivation (Funk & James, 2001; 2006). Results from the present study confirmed that increased knowledge about long distance running positively influences motives to participate.

The present study also supports literature on socialization that people learn about activities first through friends and family members (McPherson, 1976). The present study extends this area of research by adding national media outlets as a place to learn about an activity. The present study indicated national magazines and books were influential in learning about long distance running. While socialization outlets such as friends and family have been investigated heavily in the literature (McPherson, 1976; Stebbins, 1982; 1992), national publications have not. Therefore, this is one area of the awareness stage in PCM that requires investigation.

Marketing

Traditional marketing communication (print media) is used by event organizers to distribute event information (Hede & Kellett, 2009). However, it has been argued that it is losing effectiveness Word of mouth and traditional print media are the most important ways to learn about long distance running. This supports Fairley and Getz (2004) who suggested word of mouth recommendations are effective in raising awareness in marketing special events. Traditional marketing is what drives long distance running loyalty and event participation. Therefore, event and activity promoters

should utilize these methods for marketing long distance running. Because word of mouth was most important, marketers should provide talking points for participants to share with others. This will help to expand an individual's social network, and allow people to meet others that possess similar interests and values (Lock & Filo, 2011). One way to create talking points is by increasing the event experience. For example, race directors could increase the quality of race t-shirts or product at course aid stations. Adding fun signage or backdrops will allow runners to take photos of themselves as they progress through the course. Commitment to the activity comes from a positive experience (Pearce & Caltabiano, 1983). Thus, enhancing the overall event elements will increase the event experience and get people talking to others.

Event marketers can use key phrases that let the participant know they can reinforce motives (e.g. staying fit, pushing themselves) through participation. Benefits the participants are perceived to receive through participation should be incorporated in marketing messages (Barbieri & Sotomayr, 2013; Funk, Filo, Beaton, & Pritchard, 2009). For those that have never participated, marketing communications should be more informative to increase knowledge and highlight benefits to be attained. This can also be applied to events that have not been known previously (Funk, Filo, Beaton, & Pritchard, 2009). Participation in the event may act as a reflection of self, which then serves as a facilitator in the movement of participants from awareness to attraction within PCM. Using an expression of self in advertising serves as a reflection of who they are (Kahle & Kennedy, 1989). For example, the Big Sur Marathon can promote how participation in their event enables runners to stay fit and challenge themselves.

Marketing messages to 'more serious' and 'less serious' participants will differ slightly depending on the target. Marketers should advertise the benefits of the activity participation and highlight aspects that increase activity participation (Harvard & Gould,

2010). Despite differences in attachment and loyalty, event organizers should still market to all levels of participants (McGehee, Yoon & Cardenas, 2003). Those that are less involved process information “passively” but still retain the information. Marketing efforts may need to be more aggressive and accessible to those that are less attached or loyal.

Web communications (Blogs, Twitter, and Facebook) were less important to the sample when initially learning about LDR. This could be due to the fact that new activity participants, or those that have not started the activity, may not be familiar with running specific websites or social network sites. However, web communication has been shown to improve attitude, which ultimately results in an increase in attendance (Filo, Funk & Hornby, 2011; Lee, Xiang & Hu, 2012). Websites are self-selecting and primarily used by people that are already interested or attracted to the activity (McQuitty & Peterson, 2000). Runners may need to participate in the activity for a while and talk with others that run about mediums that are able to provide helpful information. Subsequently, online mediums may be essential to individuals that already have developed an interest in the activity.

The present study found that social medial was not useful for attracting an audience. Recently, however, there has been a push to increase various forms of social media to promote an event (e.g. Facebook, Twitter, and Instagram) and create an online community. Because socialization is very important during the early stages of activity participation (Havard & Gould, 2010), marketing dollars are best spent on increasing experience in order to increase word of mouth. People prefer word of mouth because they hear about most things from other activity participants (Hede & Kellett, 2009). Perhaps online outlets may help maintain communities created by word of mouth with runners that are already aware and attracted to long distance running.

Websites and blogs were not dominant mediums for gathering information. The web is effective as a direct information retrieval source (Filo, Funk & Hornby, 2009) and self-directed (Manfredo & Bright, 1981). This means that people need to know where to go specifically on the web to get specific pieces of information. Web pages should include communications that highlight consumer motivation for attending special events (Filo & Funk, 2005). Filo and Funk (2005) also suggest that web communication is more appropriate for an individual that has already participated in the activity.

Attraction

The attraction stage explored motivations and initial feelings about recreational leisure activity. Knowledge gained in the awareness stage is an input to determine whether participation in long distance running will strengthen motives (Funk & James, 2001; 2006). Results from the present study confirmed that increased knowledge about long distance running positively influences motives to participate.

Motives identified in the attraction stage are consistent with previously identified running motives (Masers & Ogles, 2003; Johnsgard, 1985; Masters, Ogles & Jolton, 1993). Running USA (2013) also found that core runners continue to run to for health and fitness benefit as well as challenging themselves. The motives leading to activity participation found in this study: staying fit, challenging myself and pushing myself are consistent with runner (Martens & Carmack, 1979) and leisure research (Hultsman, 1998; 2012). This supports previous literature that people participate in leisure activity to fill health, fitness and self-accomplishment motives.

Motivations were found to positively enhance feelings about long distance running. This finding indicates that participation in long distance running intensifies personal motives which leads to an increase in feelings about the activity (Funk & James, 2006). As the strength of motivations for long distance running grows, participants are

likely to form strong feelings toward the activity. Motives facilitated in this stage interact with self-concept and values (attachment stage) which ultimately led to the development of loyalty. Consequently, as the number of motivations to run mature, feelings about long distance running become stronger, eventually leading to loyalty.

Event Participation

An increase in knowledge was found to increase motivation to participate in long distance running events. This supports Filo, Funk & Hornby (2009) who found by increasing the amount of information a person has, the more motivated they are to attend running events. Thus, by increasing the amount of knowledge a person has about an activity, motivation to participate in events increases.

The present study found motivation to participate in an event to enhance identity, which strengthened attitude and loyalty towards long distance running. Direct relationship between external motivations on values and self-concept supports literature that participation in sporting events increases identity (Getz & Andersson, 2010, Gibson, Willming & Holdnak, 2002; Jones, 2000, Kane & Zink, 2007, Lamont & Kennelly, 2011). Therefore, participation in running events can act as opportunity for the individual to express their personality. The event needs to provide opportunities (Eccles & Harold, 1991) for the participant to reinforce motives (fast course, hilly course, qualify for Boston) in order for it to be a reflection of self.

Participation in distance events also influenced feelings about long distance running. Motivation to participate in an event also increases self-concept and is a reflection of personal values. As indicated earlier, the enrichment of self-concept led to long distance running loyalty. Therefore, increased event knowledge and motivation to participate in an event led to long distance running loyalty because the event motivation

assists in the development of runner identity which elicits strong feelings toward the activity.

Runners described their training to increase or decrease depending on the number and type of events they were training for. Training would “ramp up” as an event got closer than it would go back down after the event. Participants described an increase in mileage, intensity and cross training as they were preparing for an event and an increase in recovery days after the event. The more events they registered for, the more training they completed during the year.

“When training for marathons - I run between 50 - 60 miles a week. When I don't have a goal race for a marathon I don't run as many miles per week - closer to 20 -40”.

“Training will increase to 50+ miles/week only when I'm ramping up for a marathon. Otherwise, I'm consistently at 30+miles/week.”

“I've run 70 mile weeks in college, 50 mile weeks with running equivalents up to 90 miles this preceded a 3:41:58 @. Big Sur) and 15 mile weeks. This year, now that I'm properly healed, I plan to healthily approach 55 with running equivalents to 70”.

“My training has been consistent as I try to schedule 3-5 races throughout the year (mainly half marathons). My mileage increases if I train for a full marathon”.

The present study suggests that runners are loyal to long distance running in part, due to participation in running events. The event is an opportunity to intensify training and become more involved with the activity. As noted earlier, runners use the event to stay fit and challenge themselves to meet personal goals. The event acts as an opportunity to express themselves as runner and be part of the running community. Runners will continue to participate in LDR regardless of event participation.

The present study showed that motivation to participate in long distance running events leads to the development of activity loyalty. This is because participation is a form

of self and social expression (Getz & Andersson, 2010, Gibson, Willming & Holdnak, 2002; Jones, 2000, Kane & Zink, 2007, Lamont & Kennelly, 2011). The person is confirming to themselves and other runners that they are a runner (identity), which is vital to the development of loyalty. Race organizers need to implement strategies that will increase runner identity and the emotional connection between the person and running. For example, the event could reinforce motives by offering a hilly course to challenge the runner. Strengthening this motive allows the person to feel a sense of accomplishment which will increase self-concept. It is vital for race organizers to provide opportunities to strengthen motives that will encourage the development of an emotional connection, which leads to loyalty.

It is also important to create a unique and memorable experience (Getz, 2002) for those attending activity events. Gitelson & Kerstetter (2000) found that 70% of a target market for a special event relied on their previous experience to decide whether or not to attend again. These events are an opportunity to create an experience different than normal everyday life (Getz, 1997). The major challenge is how to get people talking about their experience (Morgan, 2008). Therefore, event producers need to give the runner something to talk about by increasing the experience at the event. Perhaps the event can recognize the accomplishment of each racer publically. For example, a difference color finisher shirts could be awarded to recognize a marathon completion time under four hours. When a runner wears this shirt after the event they confirm to others and themselves that they are a runner and complete marathons under 4 hours. An event can also provide a special medal to those that complete a certain number of marathons. For instance, after completing 10 Big Sur Marathons, race directors can award these runners on stage with a special medal and certification highlighting their accomplishment.

Attachment

Previous literature has stated that values and self-concept act as inputs toward the development of attitude and loyalty towards an activity (Funk & James, 2001; 2006). Values align with motives in the creation of runner identity and support increases in self-concept (Lock & filo, 2011). However, the present study did not find values to be a significant contributor to long distance running attachment or loyalty. This contradicts previous literature on values and behavior (Beatty, Kahle, Homer, & Misra, 1985; Kahle, Beatty & Homer, 1986). Values have been shown to predict loyalty toward sport teams (Kolbe & James, 2001) and charity based sport events (Filo, Funk & O'Brien, 2011). Camaraderie was mentioned by survey respondents in the open ended questions describing their loyalty to long distance running. Participants said:

“My views on running have become more dedicated to the sport and have formed a larger sense of camaraderie with all other runners I race with”.

“My views did not change I still feel strongly about the sport and the people who participate, it did however make me appreciate all the more the type of camaraderie that is at the races and the commitment of the organizers”.

“Yes, the recent Boston Marathon tragedy further solidifies the camaraderie, passion, self-awareness and self-reliance that all runners share”.

Filo, Funk and O'Brien (2009) found camaraderie, cause and competency to enhance attitude toward a sporting event to explain the attachment process. Perhaps quantifying these values will show a positive influence of values in the attachment process on attitude and loyalty towards LDR.

Self-concept did have a significant relationship with attitude strength and loyalty. Findings in the present study indicate that participation in the activity allows a person the opportunity to connect with others that participate in the activity and with themselves (Wallendorf & Arnould, 1988). People will associate themselves with an activity more or less depending on how the connection will affect their identity

(Lassegard, & Ford, 1986). Based on the current study, positive feelings toward long distance running strengthen identity as individuals move through the stages. As runners continue to run, a constant increase in self-concept enhanced the connection they have with the activity (Havard & Gould, 2010). This led to the development of strong attitude and loyalty towards LDR.

A strong positive attitude developed as activity participants moved through the stages of PCM (Filo, Funk and O'Brien, 2009, Funk & James, 2001; 2006). The present study found strong motivations and feelings about long distance running to influence self-concept. The psychological connection made to long distance running is strengthened as feelings took on a deeper and emotional meaning. As attitude got stronger it fed back into the PCM process to reach loyalty (Funk & James, 2006). Strong attitudes displayed by the long distance runners suggest advancement through the PCM Framework, reflecting a higher level of attachment leading to loyalty.

Self-concept was found to carry the weight in developing activity loyalty. Therefore, the present study suggests that people do not participate in long distance running to enhance values. They run to feel good about themselves and to express to others that they are a runner. Values are a reflection of motives and aid in the development of runner identity. For example, a runner is motivated to run because it allows them an opportunity to stay fit. Staying fit provides the runner with a sense of accomplishment (value). Thus, values are a reflection of motives. This sense of accomplishment allows the runner to feel good about themselves which increases identity. Therefore, increasing self-concept is the driving factor to increasing strength of attitude and loyalty. Continued enhancement of self-concept through participation in long distance running will move runners into the loyalty stage.

The attachment stage was found to be the “bottleneck” of the entire model. In order for a person to become loyal to long distance running, they must pass through this stage. Strength of attitude is the determining factor on whether they become loyal. A runner must form a deep emotional connection with the activity before they can become loyal. If this connection is not formed and strengthened over time, the runner will never develop loyalty. ‘Less serious’ runners may participate in long distance running for a very long time. However, if they cannot identify themselves as a long distance runner and do not develop the emotional connection to running, they will never become loyal. ‘More serious’ runner develop the self and social identity required for developing the emotional connection with long distance running.

Loyalty

The present study confirms literature about the psychological process of becoming loyal as presented by Funk & James (2001; 2006). Feelings about long distance running and loyalty are mediated by attitude strength. This supports Funk & James (2006) to show that as feelings take on a stronger meaning, runners are likely to become loyal. This is due to an increase in self-concept is a result of long distance running participation. As in attachment, values were not a significant indicator of loyalty. Therefore, values interact with self-concept and motives to create runner identity, however it is not an indicator of loyalty.

PCM has been used to explain the psychological connection of fans to sports teams and non-profit organizations (Filo, Funk & O’Brien, 2009; 2011; Funk & James, 2001 2006). The present study supports Funk & James (2001; 2006) who state that PCM is a suitable framework for examining the psychological connection to an activity with recreational participants. It was determined that a positive experience with long distance

running which supports motives, assists in the improvement of self-concept, and is a reflection of self, aids loyalty development.

Another significant contribution of the present study is that it was the first to examine all four stage of the PCM Framework proposed by Funk and James (2001; 2006) in leisure recreation participation. Previous literature has examined two of the four stage at one time, focusing on attraction and attachment in the development of loyalty. Hypotheses used in this study suggest there are additional paths in the development of loyalty not originally on the model created by Funk & James (2006). The present study revealed an area of research that is requires the full understanding of the relationship between awareness process, attraction process and self-concept on each outcome variable in the model.

Heightened self-concept was a strong determinant in the development of loyalty to an activity. Literature on PCM indicated self-concept, motives and values interact to develop a strong positive attitude. Self-concept was found to be a strong indicator leading to a strong attitude and loyalty. Values were suggested to be a critical element of attachment and loyalty development (Funk & James, 2001) but not found to be significant in this study. This present study serves as a platform for future research on the role of values and self-concept on attachment and loyalty to a recreational leisure activity. Overall, as the number of information sources grow, more knowledge about long distance running is acquired. Through knowledge acquisition, the person becomes confident that long distance running can strengthen motives, resulting to activity participation. As long distance running continues to enhance motives, positive feelings about long distance running develop. Participation and strong feelings about long distance running boosts self-concept. As values align with motives, runner identity forms. As feelings about long distance running become stronger, self-concept is

increased and loyalty is developed. As runner move through each stage of the PCM Framework, the chance of them becoming loyal grows.

Loyalty to Long Distance Running through Event Participation

April 15, 2013 is a day that will always be remembered by runners everywhere. At 2:50pm EST, two explosions occurred near the finish line of the 117th annual Boston Marathon. The race had been going for 4 hours and 9 minutes when the explosions occurred and the majority of the race finishers had already completed the race. Three spectators were killed in the blasts and 264 were injured (CNN.com). The race was stopped after the explosions and the remaining runners were diverted away from the finish line area. The race has a capacity of just over 23,000 runners. However, on this particular day over 5,000 runners were unable to complete their 26.2 miles.

This Boston Marathon is one race that many serious runners strive to participate in due to the strict entry qualifications. Unlike other marathons, to run Boston, the runner must qualify for the event beforehand. Qualifying times are based on age and are preset by the Boston Athletic Association (www.baa.org). Qualifying for this is event is not easy. The lowest age group must run an average of 8 min/mile for 26.2 miles to qualify where the average marathoner runs a 10:37 min/mile (Marathonguide.com). Once you have qualified, you must also enter the lottery to be entered into the race. The runners with the fastest times in each age group will be granted entry.

After the tragic events of April 15th, running groups across the country came together to support the running community. Group runs at local running stores encouraged runners to come out and support the victims of the Boston Marathon. Others encouraged runners to come out and stand up to terrorism. Many offered fundraising opportunities to support *The One Fund*. This fund was organized by the State of Massachusetts to support the families and victims of the terrorist attacks. So far, more

than \$60 million has been raised for the victims and families of the 2013 Boston Marathon (OneFundBoston.com). Survey respondents described being even more loyal to long distance running after the Boston bombings and proud to be part of the running community.

“The Boston Marathon bombings, in my opinion, had nothing at all to do with running. I felt horrible for the people who weren't able to finish as I know how much time and energy goes into training. I ran Big Sur just two weeks later and I would have been devastated if I had been prevented from finishing. But as a whole I didn't see the bombing as an indictment on running and as such the tragedy didn't change my views on running at all”.

“The Boston Marathon tragedy helped show how precious life is and can be taken away in an instant when individuals set out to hurt others. The Boston Marathon is supposed to be a day of happiness, celebration, and achievement, not a day for the world to fear. We can't live in fear that such tragedies will occur, but continue to enjoy running a special race and remember and celebrate those who lost their lives or were injured”.

There is an incredible connection to running and the running community. Respondents described their connection to running positively and the terrorist attacks makes them more proud to be part of the running community.

“They haven't changed. They have become more solidified in that running is a spiritual and encouraging sport. Runners stick together through thick and thin through a tragedy such as Boston or through a long, hot and humid marathon”.

“I feel like the running community is much stronger and that we are a closer group because of all that happened.”

“This is the world we live in. But how the running community reacted to it, shows how great runners are. It is why I'm proud to say I'm a runner”.

“My views remain the same. My love for the sport and the community have been nurtured by the support of runners and those who support our running everywhere. The running community seems even more resilient and still willing to endure the training and risks involved”.

“I run with more heart and always run an extra .7mi at the end of my training runs to play homage to the runners at Boston who didn't get to finish”.

“I ran a marathon five days after the tragedy at Boston. I only have more respect for the running community. If anything it brought the community closer together”.

In addition to the commitment to running and the connection to the running community, survey participants still want to qualify for Boston. The events of April 15th caused an increase in motivation to qualify.

“I am now much more motivated to run the Boston Marathon”.

“I think that it's made me even want to be better at running and hope to qualify for the Boston Marathon someday. I'm saddened by what happened but didn't scare me as a long distance runner, though it does worry me about having my family there to greet me at the finish line”.

“I grew up in New England. I will NEVER qualify for the Boston Marathon time wise. But I want to run that race more than ever now”.

Runners are proud to be part of the community because they are resilient.

“I have never been more proud to be part of the running community. I was impressed with the way the community came together to support the victims. Also, the Big Sur marathon was definitely part of the healing process for me. I had the privilege to run Boston last year, and I have an even greater desire to run Boston again in 2014”.

“I think it brought running communities closer together. We are resilient bunch and we will not let incidents like this break our spirit”.

“Every race has its potential for issues, and while what happened at Boston was an extreme case, I will continue to run the races. The running community is a pretty tight one, and we stick together, keep going, and persevere”.

Runners demonstrated their appreciation for running and pride to be an American.

“I want to run more to show that terrorism will not scare me. Americans do not hide”.

“No. The American spirit is always strong, but sadly it takes a tragedy to really pull it out”.

“No. Running is what I do. Evil will always exist in the world. I do not believe that the Boston Marathon Bombings were specifically targeted at runners because they were runners. We were targeted because we were mostly

Americans on American soil, and the marathon provide a parade type environment with lots of people in one place, for the evildoers. This will not turn me away from running or even participating in Boston Marathon”.

Results of this open-ended question indicate that there may be an increase in awareness about LDR due to the Boston tragedy. One respondent said:

“Running has always been an activity to bring people together, the Boston Marathon experience highlighted that to non-runners”.

Possibly the running community and running events may notice a growth in participation over the next year. The Boston Marathon (www.baa.org) has announced an additional 9000 spots for the 2014 event to accommodate the runners that did not have an opportunity to complete the entire 26.2 miles in 2013.

The event of the Boston Marathon has brought the running community closer together. Runners are proud to be part of such a strong community. Their opinions toward running have gotten stronger and they are more committed than ever to continue running. They are proud to be part of a group that is resilient and not willing to back down. They are proud to be part a community that supports each other and comes together when they are needed to support each other.

Responses supported findings of the present study that running is part of who they are.

They will not stop running because of the attacks. One respondent said:

“Running is still part of what I do and part of who I am”.

If anything, the attacks have reinforced their identity as a runner and how they want to be seen by others:

“I have much more respect for runners who commit themselves over a long period of time to training. And it reinforced the positive light running casts on society as a whole”.

“The behaviour of runners and attitudes towards runners have changed - I believe we are viewed more favourably by others and our behaviour following the tragedy reinforced for us that runners are resilient, committed and connected to each other by our love of the sport”.

Event participation does influence long distance running loyalty. Confirmed that continued participation is key to developing runner identity. Stronger identity leads to running loyalty. Participants confirm that running is part of who they are and they will not stop running unless injury or health prevents them from doing so. Terrorism will not stop them from running and definitely will not stop them from qualifying for Boston. The tragic event of April 15th, 2013 has created a new energy within the running community. More than ever, people are excited to run and qualify for Boston. Runners are more committed to running then before.

Serious Leisure

Thus far, research related to serious leisure simply defined individuals as ‘serious’ participants. This description was based on behaviors demonstrated by activity participants in pursuit of an activity. It was said that participants chose to spend their free time participating in the activity and acquiring knowledge and skills to help them improve their ability to participate (Stebbins, 1992). Results from the present study show an internal connection is formed between the activity and participant. The act of participation is not naturally important. The individual must assign meaning to the activity (Metheny, 1968). Rather than just describing behaviors, the present study unveiled the psychological process that runners go through to become loyal. Serious participants are said to be committed to the activity, however the present study revealed that not all serious participants reach the loyalty stage. This finding supports Lin (2008) who found different levels of serious leisure to predict commitment. Individuals may participate in the activity for a long period of time, but will not have the strong connection needed to become loyal. As determined by this study, the activity must be a reflection of self in order for the person to develop loyalty towards the activity.

Differences between two classifications of serious leisure participants ('more serious' and 'less serious') were found. The present study revealed that the two groups do not differ in terms of how they learned about the activity and what attracted them to it. Therefore, communication to raise awareness and attraction should be the same for all activity participants. 'More serious participants are those that have stronger attitudes and are loyal to long distance running (Brown 2007). Long distance running is a reflection of self for 'more serious' runners but not with 'less serious'. This is a reflection of mastery of the activity (Pearce & Caltabiano, 1983). Therefore, in order to be considered a 'more serious' participant the activity must provide a sense of self and social identity. 'More serious' runners assign a greater meaning to long distance running as they became immersed in the activity. 'Less serious' runners may still run long distances over a long period of time, but may not develop loyalty like their counterparts. In other words, the psychological connection developed towards long distance running is stronger in 'more serious' participants than 'less serious'.

The present study suggests that levels of seriousness exist among serious leisure participants. This supports previous literature indicating that levels of commitment exist within serious leisure (Cuskelly, Harrington & Stebbins, 2002). Identifying differences in attitude strength and loyalty among 'more' and 'less' serious runners leave open a new area of research still to be explored with recreation participants. The serious leisure perspective classifies participants by exhibiting six characteristics. Individuals that hold serious leisure characteristics as a critical part of his/her identity value participation higher (Eccles & Harold, 1991). The present study suggests that differences with in these six characteristics exist among serious leisure participants and should be investigated.

The present study also supports suggestions that the PCM Framework and SLP would work well together to categorize participants into different association levels

(Havard & Gould, 2010). Each describes committed participants, but the combination of the two perspectives identified the psychological connection that ‘more serious’ participant possess that ‘less serious’ participants do not. Knowledge acquisition about long distance running can induce feelings and beliefs among those with low commitment levels (Funk & Pritchard, 2006).

Similarities exist between PCM and SLP. Meeting people, making friends and participating in-group activities is part of the social reward described by Stebbins (2002) in SLP. The present study determined that these behaviors were also indicators of social expression used in the development of self-concept in PCM. Additionally, those with higher SLIM scores also exhibited higher levels of commitment. Filo, Funk & O’ Brien (2009) suggest that attachment to a sporting event reflects serious leisure. Based on the results of the present study, attachment to a leisure activity reflected serious participants. PCM is a good match for determining the psychological process people go to become loyal. The present study serves as a platform for exploring parallels between the psychological stages of PCM and behaviors described in SLP.

Research has demonstrated that event participation leads to intention to participate in future events (Hallman & Wicker, 2012). The present study determined that there is an indirect relationship between motivation to participate in an event and activity loyalty. Overall, motivation to participate in events does improve attitude and loyalty. Runners who are loyal will run long distances regardless of event activity. They participate in the activity for the joy and reward of participating in the activity. They like the activity for what it is and the individual benefits they receive from participation. The event needs to provide an opportunity for participants to push and challenge themselves. This study serves as a platform for further investigation into the needs and requirements for initial and continued event participation.

Future research

Literature on PCM has demonstrated loyalty to sports teams and charity organizations. The present study demonstrated its effectiveness with loyalty to a leisure activity. Event participation in PCM thus far has been shown to be related to loyalty to a charity (Filo, Funk & O'Brien, 2009) and a recreational activity. Participating in special events demonstrates commitment to being an active activity participant (Gursoy, Kim & Uysal, 2004). Next, research should determine if PCM is a suitable model for determining loyalty to a specific event. Successful events that grow and are used in communities may augment overall sport-specific participation (Kurpis & Bozman, 2010), which can increase the social value that an event plays on loyalty to an activity.

The present study examined initial sources that provided information to the participant before taking part in long distance running. The present study found word of mouth communication and print media to be the most useful for increasing knowledge. However, Filo, Funk & Hornby (2009) found information on sport event websites to strengthen motivation, attitude and intention to attend a sport event. The present study did not examine information sources currently used by the participants, but only looked at initial mediums. Further research is needed to determine if information channels change once the leisure participants find out about the activity and what sources are considered most important for gathering information about the activity after they have already started.

The present study used long distance runners as a sample of recreational activity participants. The results are runner specific and are the first to examine activity loyalty using PCM. More validation is required before PCM can be applied to all recreational leisure activities. Future research should explore additional individual activities (triathlon, cycling) and team/groups sports (soccer, football, basketball). Looking at

different activities may determine if the PCM stages are able to be generalized to all activities or if it varies by activity.

The influence of personal values in marketing has been supported by theoretical literature (Rallapalli, Vitell & Szeinbach, 2000). Personal values have been shown to affect certain decision-making processes. Rallapalli, Vitell & Szeinbach (2000) determined that values are a foundation for understanding attitudes and behaviors of marketing efforts. Additionally, values have been shown to predict consumer behavior (Filo, Funk & O'Brien, 2011). The present study does not support these finding but rather, found an increase in self-concept to be fundamental in increasing both attitude strength and loyalty towards an activity. Therefore, more research is warranted on the role that values play in the PCM framework and on marketing efforts as it relates to attachment and loyalty. Camaraderie, cause and competency (Filo, Funk & O'Brien, 2009) were found as key components in the attachment stage. Quantifying these three values may show a development in attachment and loyalty. Furthermore, because the finding of the present study did not support the findings of other studies, it is assumed that the LOV scale may not be an appropriate fit for the PCM model. Research examining PCM should explore the effects of other value scales to determine a better fit for the PCM framework.

Finally, more work is needed to align the concepts of PCM and SLP. Filo, Funk & O'Brien (2009) determined that attachments to an activity reflects a form of serious leisure. Each of the themes they found reflects a specific reward described in SLP. Serious Leisure Perspective suggests that identity and ethos are components of a serious activity participant. The present study, however, revealed only those that are more serious are attached and loyal to long distance running. Therefore, future research should examine the six characteristics of SLP to determine where they align within PCM.

Perhaps there is an order in which the characteristics described in SLP are developed as they move through the four stages of PCM.

Chapter 7

CONCLUSION

The present study has described how people choose to participate in the activities they do (Gibson, 2005; Weed, 2005). Rather than describing activity participants, the present study found that serious activity participation is a reflection of the person's identity. Participation in long distance running is how the person is able to who they want to be. Additionally, it is a way for them to interact with and meet others that are like them. Continued involvement in long distance running increases self-concept and identity, which leads to a stronger attitude and loyalty toward long distance running. Serious leisure participants may still be aware and attracted to the activity because it bolsters personal motives. These individuals will never become loyal unless the activity becomes a part of their identity. They may still participate in the activity because they enjoy it, however they will never become enthusiasts without the activity taking on a deeper meaning.

Findings of the present study indicate that loyalty to a recreational leisure activity involves a behavioral and psychological connection to the activity. Where or how a person first finds out about the activity sets the stage for the entire connection process. Knowledge gathering is fundamental to becoming loyal. Ensuring the activity is meeting needs and is pleasurable will allow participants to continue with the activity. When the activity takes on a deeper meaning or becomes an expression of self, loyalty is likely to develop. Socialization is a key factor to beginning the journey to achieve loyalty. Strength of attitude is the "bottleneck" of the PCM Framework in that participants must go through this component in order to become loyal. Skipping a stage will result in the possibility of not becoming loyal. Continued participation is likely due to the increase in self-concept that is awarded through personal experience.

Attitude and loyalty differences exist between ‘more serious’ and ‘less serious’ participants. While some may always participate in the activity because it satisfies internal and external motives, ‘less serious’ participants will not develop the psychological connection with the activity. The event is not a form of self-expression with ‘less serious’ participants as it is with ‘more serious’ participants. ‘More serious’ participants are likely to overcome obstacles to remain loyal and because the activity is a reflection of who they are and how they want to be seen by others. Long distance running loyalty was best described by survey respondents in their response to the Boston tragedy by how they view the running community:

“I have much more respect for runners who commit themselves over a long period of time to training. And it [Boston] reinforced the positive light running casts on society as a whole”.

“The behaviour of runners and attitudes towards runners have changed - I believe we are viewed more favourably by others and our behaviour following the tragedy reinforced for us that runners are resilient, committed and connected to each other by our love of the sport”.

“I was a participant of the 2013 Boston Marathon and was very rattled by the tragedy as I was in the area when it happened but being there and having gone through it has made me a much more dedicated runner than I ever was. It renewed my passion for running in such a big way. I feel so grateful for everyday that I get to go out and run”.

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APPENDIX A

Awareness Process	How important was each of the following in learning about long distance running (Not Important-Very Important Likert Scale 1-5)
Awareness Outcomes	<p>Other runners. Friend or other runner's posts on Facebook. Friends that run I saw a person running I watched a running related event I read a national running magazine I read a local running magazine I saw an advertisement online Through a blog I subscribe to Through a postcard or flyer I saw in a store Reading a social networking site (Facebook, Twitter, YouTube, etc.) Other: Please indicate other way not indicated above that you first found out about long distance running</p> <p>Based on the resources of where you learned about long distance running, what type of information did you obtain? (Strongly Disagree-Strongly Agree Likert Scale 1-5)</p> <p>How to run The type of running apparel to buy (shirts, shorts, pants, socks, sports bras, etc.) The type of shoes to buy The type of watch to buy How fast to run If people in my community run What other people like about running What other people dislike about running How far I should run at first Running nutrition Other: What other type of information did you gather before starting to run?</p>
Attraction Process	<p>I run.... (Strongly Disagree-Strongly Agree Likert Scale 1-5)</p> <p>to participate in endurance events. to participate in long distance running events. to meet other people to stay fit. to lose weight. to relieve stress. to compete with other athletes. to compete against other athletes. to set a personal best time (personal record). to feel accomplished. to push myself. to challenge myself.</p>

to participate with my family.
to participate with friends

adapted from Carmack and Martens, 1979 (Likert Scale from 1-5)

The following statements may or may not describe your feelings about running. Read each statement and then select the appropriate number to indicate how well the statement describes your feeling most of the time. Give the answer that best describes how you generally feel about running.

Attraction
Outcomes

I look forward to long distance running.
I wish there were more enjoyable ways to stay fit
Long distance running is a chore.
I do not enjoy running.
Running is vitally important to me.
Life is so much richer as a result of long distance running.
Long distance running is pleasant.
I dread the thought of long distance running.
I would change my schedule to meet the need to long distance run.
I have to force myself to run long distances.
To miss a day's run is sheer relief.
Long distance running is the high point in my day.

Attachment
Process

adapted from Bearden & Netemeyer, 1999; Kurpis, Bozman & Kahle, 2010. (Importance Likert Scale 1-9)

Values

The following is a list of things that some people look for or want out of life. Please study the list carefully and then rate them on how important each is in your daily life

Warm Relationships with others
Self-Respect
Sense of Accomplishment
Fun & Enjoyment in Life
Self-Fulfillment
Being well respected
Security
Sense of Belonging

Self-Concept
(6)

adapted from Thorbjornsen, Pedersen & Nysveen, 2007 (Strongly Disagree-Strongly Agree Likert Scale 1-5)

SIE

Long distance running is how I express my personality.
I participate in long distance running to express my personal values.
I participate in long distance running to express who I want to be.

SoIE

I often talk to others about long distance running.
I often show long distance running messages and services to others.

Others are often impressed by my long distance running.

Attachment Outcomes *adapted from Dimanche et al, 1991, Funk & James, 2006; Filo, Funk & O'Brien, 2009 (Strongly Disagree-Strongly Agree Likert Scale 1-5)*

I possess a great deal of knowledge about the running.
 If I were to list everything I know about the running, the list would be quite long.
 Running is important to me.
 Being a long distance runner is important to me.
 You can tell a lot about a person by whether or not he or she is a long distance runner.
 Running gives insight into of the type of person I am.

Allegiance Outcome *adapted from Gladden & Funk, 2001; (Strongly Disagree-Strongly Agree Likert Scale 1-5)*

Attitudinal Loyalty It would be unlikely for me to change my loyalty from long distance running to another activity.
 I consider myself a committed long distance runner.
 I could never feel as passionately attached to any other activity as I do running.

Behavioral Loyalty I attend long distance running events throughout the year.
 I will participate in long distance running next year.
 I will always be a long distance runner.

SLIM *adapted from Gould, Moore, Karlin, Gaede, Walker & Dotterweich, 2011; (Strongly Disagree-Strongly Agree Likert Scale 1-5)*

Perseverance I overcome difficulties in long distance running by being persistent.
 Effort I try hard to become more competent in long distance running.
 Career Progress I feel that I have made progress in long distance running.
 Career Contingencies There are defining moments within long distance running that have significantly shaped my involvement in it.
 Identity Others that know me understand that long distance running is a part of who I am.
 Ethos I share many of my long distance running group's ideals.

Examine Serious Leisure behaviors

How many years have you been running?
 How many days/week do you run?
 How many miles do you average weekly?
 Please explain how your training has increased/decreased over the last few years?
 How many marathons have you completed?
 How many half- marathons have you completed?
 Have you qualified for the Boston Marathon?

Do you want to qualify for the Boston Marathon?
Have your views on running changed in light of the Boston
Marathon tragedy? Please explain.

Demographic Please select each of the following to best describes you:

Gender
Age
Family Income Level
Education
Zip Code
Race/Ethnicity (Multiple Checks)
Marital Status
Please indicate which event you participated in: Marathon,
Half-Marathon
Did you mostly walk or run this event?