APPLICATION OF INVESTMENT THEORY TO SPORT CONSUMERS: PREDICTING INTENTION TO CONTINUE OR REDUCE COMMITMENT

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Sandra Ann Jackle, candidate for the degree of Master of Science in Kinesiology & Health Studies, has presented a thesis titled, *Application of Investment Theory to Sport Consumers: Predicting Intention to Continue or Reduce Commitment*, in an oral examination held on August 12, 2014. The following committee members have found the thesis acceptable in form and content, and that the candidate demonstrated satisfactory knowledge of the subject material.

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ABSTRACT

The purpose of the present investigation is to use the Investment Model to better understand the intention to continue or reduce commitment to a sports team. The study will examine the nature of the relationships between satisfaction, investment, quality of alternatives on commitment and the subsequent intention to continue in the relationship by taking on a comparative analysis of major works, and applying Investment theory to sport consumers. Development of a newly proposed Sport Commitment Model will provide insight into the underlying psychological processes with regards to the intention to continue or reduce commitment to a professional sports team, the Saskatchewan Roughriders of the Canadian Football League (CFL).

Instrument development will involve the use of previously validated and reliable scales, specifically the Psychological Commitment to Team (PCT) scale (Mahony, Madrigal, & Howard, 2000) and the Investment Model scale (Rusbult, Martz, & Agnew, 1998). The analysis indicated that reduced commitment is associated with low scores on scale items measuring both behavioural and attitudinal loyalty as well as satisfaction and investment constructs, and higher scores on items measuring the quality of alternatives.

Based on these findings, sport marketers can target marketing strategies by assessing differing levels of commitment to a team. This framework is useful in assessing the impact of past and current promotional efforts by moving beyond accepting the loss of consumers. Research conducted in this context will shed light on a different type of consumer, and the effect this type of consumption has on the sport industry as a whole.
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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Sport Consumption

Sport consumption is a multifaceted area of study with consumers displaying an array of values, attitudes, behaviours, and motives. Stewart, Smith, and Nicholson’s (2003) review of literature led them to conclude that it is difficult to define the prototypical sport consumer because “sport consumption is a self-defining phenomenon” (p. 212). When looking at research regarding sport consumption, it is necessary to acknowledge a distinction between “fans” and “spectators”, even though the terms are commonly used interchangeably.

Trail, Anderson, and Fink (2000) state that “fans are usually spectators, however not all spectators are fans” (p.157). Sloan (1989) distinguishes between the two terms by defining fans as “enthusiastic devotees of a given diversion while spectators are those who merely watch and observe” (p.177). Crawford (2003) and Giulianotti (2002) offer the perspective that the terms “fan” and “spectator” may be looked at as part of a continuum. One may start out as merely a spectator of a certain team and then grow to become a die-hard fan. It is important to note that although an individual may consider themselves a ‘sport consumer’, they may not consider themselves to be a fan or a spectator of a particular sport.

The concept of sport consumption, looked at in depth further on in this research paper, can take many forms. These forms can range from the consumption of professional sports events, teams and games to the consumption of sports apparel, equipment, media, and participation. For the purpose of this thesis and for simplicity, I will focus my research using sport “fan” terminology while looking at the relationship
sport consumers have with a professional sports team. Factors that influence differing levels of “fandom” are an important aspect of this paper.

In my opinion, no one has summed up being a sports fan more eloquently than the New Yorker's Roger Angell in his piece "Agincourt and After," in this passage about Carlton Fisk's famous home run in the 1975 Major League Baseball World Series:

> It is foolish and childish, on the face of it, to affiliate ourselves with anything so insignificant and patently contrived and commercially exploitive as a professional sports team, and the amused superiority and icy scorn that the non-fan directs at the sports nut is understandable and almost unanswerable. Almost. What is left out of this calculation, it seems to me, is the business of caring -- caring deeply and passionately, really, really caring -- which is a capacity or an emotion that has almost gone out of our lives. And so it seems possible that we have come to a time when it no longer matters so much what the caring is about, how frail or foolish is the object of that concern, as long as the feeling itself can be saved. Naiveté -- the infantile and ignoble joy that sends a grown man or woman to dancing and shouting with joy in the middle of the night over the haphazardous flight of a distant ball -- seems a small price to pay for such a gift.

Angell’s quote illustrates one of the most curious human relationships: the one between a fan and his/her sports team. Sports fans have many things in common, but most of all they exude loyalty, commitment, and allegiance to their teams. For some, the term “being married to your sports team” is literal. Many find that the relationship they are in with their team is very similar to that of a romantic partner.

ESPN Sports writer Bill Simmons sums up this feeling in the following passage about the New England Patriots 2008 National Football League (NFL) season:

> You can fall in love 20 times, but you'll never care about anyone in quite the same demented way you cared about your first girlfriend or boyfriend—those three-hour phone calls, all the sappy letters and mortifying mix tapes, the nauseating PDAs. For sports fans, winning a title after a prolonged wait is like falling for that first girlfriend. Win it in an especially memorable way, and that girlfriend is also the best girl
you're ever going to meet. There's an old saying that "comedy = tragedy +
time." Well, maybe "sports nirvana = tragedy + time + an improbable
victory." The best of sports nirvana is also the worst: Realistically, you're
getting to the mountaintop only once every 20 years or so, and that means
the unstoppable isn't likely to be topped during that span without the
occurrence of a unique twist. You know, like last season's Patriots
morphing into America's No. 1 villain. As the team made a run at
immortality and the spotlight brightened, Pats diehards constantly
defended our boys, taking every slight personally and fighting abuse from
friends and co-workers. In a weird way, we were part of the action.

While sports fans may be looked at through a consumer loyalty lens, the relationship
between a fan and their team is much different than, say, a person and their car. Similar
to a romantic partner, sports fans will generally have one favorite team in a chosen sport
thus exhibiting a committed, loyal relationship to one entity. For example, fans of the
Saskatchewan Roughriders football team would never dream of “cheating” on their team
by cheering for, or supporting, a rival football club. Fans of a team may even find
themselves in heated debates discussing the merits of their team in comparison to
another. The similarities between sports fans and romantic partners will be explored
more fully in this paper using Rusbult, Martz, and Agnew’s Investment Model (1998).
Use of this model allows us to understand more fully how individuals grow from being a
spectator to become more committed, loyal fans, and also, how that loyalty might be
discontinued.

Sport Consumption and Socialization

Many authors have suggested a number of motives for sport consumptive
behaviour, with most based on social and psychological needs (Trail et al., 2000).
Traditionally, research examining why individuals attend sporting events has focused
primarily on game attractiveness, economics, socio-demographics, and audience
preference (Zhang et al., 2001). Although sport consumers may have different
motivations, researchers have identified several common socio-motivational factors that prompt consumers to engage in a variety of consumptive related behaviours, including game attendance (Funk, Mahony, & Ridinger, 2002; James, Kolbe, & Trail, 2002; Robinson & Trail, 2005). These factors include: achievement, acquisition of knowledge, aesthetics, social interaction, escape, the skill of participants, attractiveness of participants, and community pride (Funk et al., 2002; James & Ridinger, 2002).

Achievement refers to feelings related to a win or a loss, or even a team playing to the best of their ability. Acquisition of knowledge refers to an individual learning more about the sport, the team, and the plays a team might run in certain game situations. Aesthetics refers to an individual showing interest and appreciation for the beauty of a sport or a key play made during a game such as a slam-dunk, a home run, or a goal. Many individuals are motivated to attend games purely for the social interaction, camaraderie with friends, and fun of a social event.

Escape refers to one’s desire to be a part of something that is different from the normal routine of everyday life. Fans may escape their reality by feeling like they are a part of the team they are watching or attending. The Saskatchewan Roughriders have successfully marketed the concept of the “13th man” which makes fans a member of the team, on the field for every play.

Skill of participants is self-explanatory. Many fans choose to watch certain athletic contests featuring major sports stars known for their unparalleled abilities. Examples include LeBron James (basketball), Sidney Crosby (hockey), and Tiger Woods (golf). While many suggest some females only go to sports events to look at the attractiveness of players, the reality is that ‘sex’ may sell tickets to males and females at all sporting
events. ‘Sex’ has been incorporated into sport through the snug uniforms of football, baseball, tennis, beach volleyball players, dancers performing throughout an event, and even the profiling of athletes that are considered sexually appealing. Finally, community pride is an important component in sport consumption and is evident in almost every sports market, especially small-town markets. In Regina, for example, those not supportive of the hometown Saskatchewan Roughriders may find themselves ostracized.

Many authors have indicated that individuals are motivated to attend sporting events because of a need to interact with others (e.g. social interaction, escape). Trail et al. (2000) suggest that “Individuals have a need for social relationships and sentiments of belonging. Some have turned to sport spectatorship for fulfillment replacing other affiliations such as religious and social organizations” (p. 160). When attending sporting events, fans tend to respond in a highly ritualised manner such as cheering for a good offensive/defensive play, by expressing their scorn for the opposing team, or heckling the referee. “This suggests that learned behaviour may occur where the group has self-regulated with regard to the type of response appropriate for the situation” (Richardson, 2004, p. 97). By conforming to behaviour considered appropriate by the group, fans are socialized to exhibit ritualised actions. Moreover, participation in rituals effectively constitutes a deeper meaning and attachment to group membership as a function of one’s own self-identity (Richardson, 2004).

The influence of both personal and social variables on becoming a fan of a specific team can partially be explained through socialization theory. Socialization involves the development and use of skills, knowledge, and self-perceptions whereby social values are accepted and endorsed to the extent necessary to function within society (Solomon,
In a consumptive context, consumer socialization is the process by which individuals, young or old, acquire the skills, knowledge, and attitudes related to their functioning as consumers in the marketplace (Bush, Smith, & Martin, 1999).

The process of becoming socialized as a fan tends to begin early in life (James, 2001). For those who become a fan in their pre-teen years, fathers were the most influential. That is, 50% of children reported having the same favourite team as their father. Those forming commitment to a team during adolescence were more so influenced by where they lived or their hometown team, their peers and coaches.

From the perspective of being a fan of a team, “socialization theory would suggest that an individual’s personal characteristics, significant others, and social settings contribute both independently, and in combination to the development of knowledge, values, and self-perceptions requisite to being a team fan” (Kolbe & James, 2000, p. 3). This implies that the process of becoming a team fan involves a combination of influences including one’s personal characteristics, significant others, and the social environment. The process of becoming a fan (i.e. being socialized to the extent a psychological commitment is solidified) may be visualized as a continuum with casual fans at one end, and committed, loyal fans at the other. Since it is unlikely that one day an individual will wake up and describe themselves as a loyal fan of a team, Funk and James (2001) looked at how commitment to a team evolves in their Psychological Continuum Model (PCM).
Psychological Continuum Model

The PCM framework lists four incremental levels through which an individual may move from initial awareness to eventual allegiance to a team (Funk & James, 2001). The model (Figure 1) presented by Funk and James (2001) focuses on the psychological connections one forms and the factors influencing this connection.

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<th>Psychological Characteristics</th>
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*Figure 1. The Psychological Continuum Model (Funk & James, 2001)*

The first floor of the PCM is labeled *awareness*. Funk and James (2001) define awareness as “the initial connection to a sport object one forms and the recognition that different sports and teams exist; but have little commitment or interest” (p. 125). The authors suggest individuals are drawn to, become aware of, and identify with a team because of influences from significant others during different life cycle periods. Here, an introduction to various sports, teams, and even players may occur at an early age as children are dressed in clothes with logos, or learn about sports from close family members and friends. *Awareness* may also be a function of moving to a new location. For example, an individual moving from North America to Europe would become more aware of soccer and the extreme popularity of the sport. To fit in socially, that individual may choose to follow a certain team in order to identify with others.
The second floor of the PCM is *attraction*. Individuals begin to distinguish between different teams, skill level, and may even choose to like one team over another, or one player over another. Attraction is a low-level connection that may not be strong or consistent. However, at this level consumers use sport as an escape from daily routines because it provides a sense of excitement and enjoyment. The decision to follow a certain team may be influenced by the desire for a pleasurable experience (i.e., drama, excitement, skill), psychological features of a situation (i.e., supporting a local team to fit in), physical features (i.e., arena, technology) and situational factors (i.e., special events, promotions, discounts).

The third floor of the PCM is *attachment*; here an individual has formed a stable and meaningful psychological connection to a team and has integrated the team image into their own sense of self. More importantly, a team will have taken on intrinsic value for an individual. “Attachment may result from a strengthening of features linking the team to important attitudes, beliefs, and values. This results in a complex network of links that are activated when an evaluation of the team is primed and lead to a stronger relationship with the team” (p.134). Simply put, consumers will begin to invest more time and emotional energy into their favourite team’s activities. For example, an individual may purchase team clothing, they may attend social events where they have a chance to meet team members, and they may start to identify themselves as a fan of a specific team.

The final floor of the PCM is *allegiance*. The main difference between this floor and the third floor of attachment is the characteristics of allegiant individuals. These characteristics include persistence of attitude (i.e., frequency that one thinks about
the team), resistance to change (i.e., resistance to negative information), favourable biases towards the team (i.e., believing an “underdog team” will win), and an increased likelihood the individual will engage in consistent, positive behaviour related to the sport or team. This positive behaviour is what makes an individual a committed, loyal fan of a specific team.

It is important to note that Funk and James (2001) do not constrain movement along the PCM to an upward progression. In addition, not all individuals may progress to the fourth floor of allegiance. It is also possible that an individual may regress to earlier stages on the continuum, or else find themselves at different stages for different types of sports.

Take for example fans of the NFL’s New York Giants. At the beginning of the 2011 season, some Giants fans may have identified themselves as having a low-level attraction to the team, corresponding to the second level of the PCM. Such fans may have been attracted to the Giants because of the excitement, skill, and pleasure of watching the team. As the season ended and the Giants found themselves in Superbowl XLVI, many of these same fans may have found themselves moving up the continuum to the third level of attachment as they invested more into the team by watching televised playoff games and purchasing Giants merchandise. Such fans would have integrated the Giants team image into their own sense of self internalizing the Giants as “my team”; as a result, creating a stable, psychological connection.

During the next season, the reigning Super Bowl champions found themselves in a mid-season funk, struggling for wins. Due to high expectations and a poor output, many Giants fans who were once attached at a strong level could regress to a level of
awareness by investing less and simply referring to what was once “my team”, as now “the Giants”. In sum, a variety of socializing agents such as team identification or attachment will function to shape the creation of a team fan (Funk & James, 2001). The following section looks further into the types of identification and points of attachment a fan might have.

Identification/Points of Attachment

A key predictor of sport consumption related behaviour is team identification or attachment to a team (Greenwell, Fink, & Pastore, 2002; Robinson & Trail, 2005; Wann, et al., 2002). Trail et al. (2000) define identification as “an orientation of the self in regard to other objects, including a person or a group that results in feelings of close attachment” (p.165). Wann et al. (2002) define team identification as “the extent to which a fan feels psychological attachment to a team” (p.208). Simply put, team identification refers to one’s level of commitment and emotional attachment to a particular team.

Brokaw and Stone (2006) indicate that team familiarity was the most important influence on attendance and that fan identification with players of a particular sports team is an area in which personal commitment and emotional involvement often occurs. Similarly, Robinson and Trail (2005) suggest that a team is one of several possible points of attachment. In addition, one may be attached to the coach, a specific player, the sport, or the level of sport (i.e., amateur, college, professional).

A review of the literature has revealed that individuals highly identified with a team display different behaviours than those with lower levels of identification (Robinson & Trail, 2005; Greenwell et al., 2002; James & Ridinger, 2002; Van
Leeuwen, Quick, & Daniel, 2002; Wann, 2002; Trail et al., 2000). Those high in identification attend more games, predict more future success for their favourite team, are more knowledgeable about the team, and display a persistent commitment to a team (James & Ridinger, 2002). “In general, highly identified fans, relative to less identified fans, exhibit more intense reactions to their team’s performances (e.g., report higher levels of anxiety/arousal, have more intense positive/negative emotions)” (Wann, 2002, p.104).

James et al. (2002) studied team identification as a function of how a new fan develops a psychological connection or level of allegiance to a sports team. They define psychological connection/ allegiance in general terms as “having a felt personal connection to a team resulting in consistent and enduring behaviours and attitudes towards a team” (p. 216). James et al. found that strength of connection did not increase or decrease as a result of age, gender, income, or seat location amongst season ticket holders. This is a significant finding in that it suggests psychological connection or level of allegiance transcends demographic characteristics. Thus, a consumer may feel a deep personal connection to a team regardless of age, gender, or financial ability to purchase tickets before a product is even consumed (James & Ridinger, 2002).

The complexity of sport fandom is apparent with those who remain strongly connected, even if their team is performing poorly (Kolbe & James, 2000). Some fans have gone to extreme lengths to demonstrate their allegiance to their team. One confident Chicago Bears fan went as far as betting a friend before Super Bowl XLI that if the Bears lost the Super Bowl, he would legally change his formal name to Peyton Manning (http://nfl.aolsportsblog.com/2007/02/07/bears-fan-loses-bet-changes-name-to-peyton-
manning). More recently, Major League Baseball has signed a licensing agreement with Eternal Image, a funeral company that will make urns and caskets for all 30 teams (http://sports.espn.go.com/mlb/news/story?id=2630637). These examples illustrate only some of the extremes fans will go to display their unwavering allegiance to a sports team. Although alluded to by Funk and James (2001), the question whether such relationships end or waiver is still unanswered. Moreover, the circumstances under which this occurs, if at all, remain unclear.

The Concept of Loyalty

Similar to the concepts of psychological connection and allegiance is the concept of loyalty. Mahony, Madrigal, and Howard (2000) refer to loyalty as a two-dimensional construct integrating both attitudinal and behavioural components. The attitudinal component is demonstrated through psychological attachment, or one’s general feelings towards a team. The behavioural component is characterized by active participation in the form of attending live games or watching games on television.

Research outside of the sport-fan discipline has shown that individuals who are emotionally involved or feel a sense of commitment to a particular service are more likely to evaluate the service more positively and to be repeat buyers, thus increasing behavioural loyalty (Havitz & Howard, 1995). From a sport consumption perspective, Wakefield and Sloan (1995) conclude that team loyalty, “defined as enduring allegiance to a particular team, was the most important factor in determining individual’s desire to attend live sporting events” (p. 170). Loyalty is, in many ways, conceptually similar to attachment and allegiance.
Although repeat attendance may be the most obvious behavioural indicator of one’s loyalty to a team, the underlying psychological processes explaining why sport consumers attend games has largely been ignored (Mahony et al., 2000). Pritchard, Havitz, and Howard (1999) used the construct of commitment as the foundation for explaining the psychological processes leading to the development of consumer loyalty. Pritchard et al. (1999) operationalized psychological commitment as the tendency to resist changing one’s preference based on the desire to maintain cognitive consistency.

Following a thorough scale construction process, Pritchard et al. (1999) developed an instrument measuring the attitudinal component of loyalty based on how committed people were to a travel service provider. With Prichard et al.’s scale being the first to provide a conceptually valid assessment to measure the *attitudinal* component of loyalty, researchers in other disciplines looked to adapt the scale and apply it in different consumer based contexts.

The Psychological Commitment to Team (PCT) Scale

In order to study psychological commitment within a sporting context, Mahony et al. (2000) extended Pritchard et al.’s (1999) work and established the Psychological Commitment to Team (PCT) scale (refer to Appendix A for a copy of the PCT scale). The PCT scale uses a 7-point Likert scale ranging from *strongly disagree* to *strongly agree* for its 15 items. Development of the PCT scale has provided researchers with both a reliable and valid instrument for measuring the *attitudinal* component of team loyalty, or the strength of one’s commitment to a sports team (Mahony et al., 2000). Behavioural loyalty was measured by watching games on television, attendance at games, and
purchase of merchandise. Since the scale is short and can be administered with relative ease, it is ideal to be used in conjunction with other measures of commitment.

Depending on the scores achieved on the PCT scale, personal commitment to a team (i.e. loyalty) will be described as high, spurious, latent, or low. Those scoring high on the PCT scale are considered *high loyalty* fans and exhibit high attitudinal and behavioural loyalty. These fans have made a commitment to a specific team through which the team has in return, become a significant part of their lives. According to the Psychological Continuum Model (PCM), *high loyalty* fans may be characterized as *allegiant* and highest level of connection because of their level of intrinsic consistency.

*Spuriously loyal* fans are those scoring low on measures of attitudinal loyalty but high on measures of behavioural loyalty. Such fans frequently attend games or watch games on television, yet are not committed and could stop their attendance at any time. *Attraction*, the second level of the PCM, characterizes *spuriously loyal* fans due to the inconsistency of the connection, and because the decision to follow a team is based on a sense of excitement, or enjoyment.

*Latently loyal* fans exhibit low levels of behavioural loyalty yet have high attitudinal scores on the PCT scale and are not likely to change their commitments to a specific team. These fans do not demonstrate behaviour that is directly beneficial to the team, such as attending games or purchasing merchandise. However, behaviour may be indirectly beneficial since fans may read about the team, or watch/listen to games. *Attachment*, the third level of the PCM, may characterize *latently loyal* fans. At this level, a fan has formed a stable psychological connection to the team and integrated that team image into their sense of self, similar to a fan with high attitudinal loyalty.
The final segment is low loyalty fans. These fans exhibit low scores on the PCT and have low behavioural loyalty (Mahony et al., 2000). Awareness, the first level of the PCM, may characterize low loyalty fans. Here, fans recognize and differentiate between sports teams, but no meaningful connection has developed or is outwardly expressed.

A majority of sport consumption research conducted to date focuses on how loyalty to a specific team is developed. However, conceptually, if loyalty can be developed, it can also be unravelled. Understanding the dynamics of why an individual may discontinue their loyalty to a team will add an important dimension of understanding to the sport consumer literature.

Presently, we do not understand which factors may lead individuals to reduce their commitment level to a specific sports team. We can see many instances where season ticket holders choose not to renew their tickets, where some fans choose to cheer for a different, perhaps more successful team, where some fans choose to follow another team simply because their favourite player has been traded or has chosen to play there. I find it very interesting to try and discover why a committed fan might abandon their so-called “favourite” team for greener pastures. After investing so much of themselves and their time in the team, sharing successes and failures, what could be the reasoning behind such a decision?

In order to answer this question it is necessary to look to commitment literature in other disciplines, such as adult romantic relationships, to identify determinants in the break-up of relationships that demonstrate both attitudinal and behavioural loyalty or commitment. Although research focusing on personal relationships does not have a direct linkage to sport consumption, parallels within the literature can be drawn and
applied conceptually. Therefore, looking at literature focusing on commitment from a relationship perspective, the probability of relationship persistence, and the factors associated with the break-up of a relationship can be a fundamental first step in identifying variables affecting a decrease in commitment to a team. The following is a succinct analysis of the theoretical background pertaining to relationship commitment.

Relationship Commitment: Theoretical Background

Rusbult (1980) defines relationship commitment as “an individual’s intent to maintain the relationship and to remain psychologically attached to it” (p. 172). Similarly, Arriaga and Agnew (2001) assert that commitment is regularly used to describe the probability that an involvement between two individuals will continue. While these are somewhat simplistic definitions, most models of commitment are based on the assumption that the decision to continue or discontinue a relationship is dependent on factors attracting one towards the partnership, combined with those factors compelling an individual to move away from the partnership.

Thus, commitment is interpreted as the extent to which attracting powers overcome opposing powers (Adams & Jones, 1997; Le & Agnew, 2003). Research conducted by Le and Agnew (2003) indicates that lack of commitment is a significant predictor of relationship break-up. Furthermore, commitment is regarded as being “strengthened by the amount of satisfaction one derives from a relationship, and weakened by possible alternatives to that relationship” (Le & Agnew, p. 38).

According to research conducted by Sprecher (2001), “One’s commitment to a relationship is affected positively by satisfaction and by the positive difference between rewards and costs” (p. 600). Le & Agnew (2003) define satisfaction in similar terms by
stating that when an outcome surpasses a set standard, satisfaction within the relationship will occur; if an outcome fails to meet this standard, dissatisfaction within the relationship will result. “Thus, satisfaction is the subjective evaluation of the relative positivity or negativity that one experiences in a relationship” (p. 39).

Applying the concept of satisfaction to a sport context, it may relate or even be a main predictor, to *spurious loyalty*. For example, spuriously loyal fans will attend more live games or become a fan of a team if satisfaction is high. Choosing to be a fan of a team of the highest quality is an act termed “band-wagon jumping”. That is, fans who favour a team that is winning, highly popular, or that offers a high level of satisfaction for fans who follow the team.

The relationship between satisfaction and spurious loyalty was evident following the Saskatchewan Roughriders 2007 Grey Cup Championship win. In speaking with Jim Hopson, President and Chief Executive Officer of the Roughriders, the team saw an enormous spike in ticket sales and popularity following their Grey Cup win. Hopson said that while ticket sales lagged in 2006 and 2007, each home game was sold out in 2008 and the team set an attendance record for the season. Hopson attributed the spike in sales to the newfound popularity, high level of competition and performance of the team which provided a good product for fans who previously did not attend games on a regular basis (J. Hopson, personal communication, October 6, 2010).

*Dependence* is defined as “the degree to which an individual relies on a relationship for the fulfillment of important relationship needs” (Rusbult & Van Lange, 1996, p. 569). How does dependence differ from commitment? *Dependence* is a fundamental characteristic of relationships through which there is a reliance on a partner
Commitment is regarded as one’s own subjective experience or interpretation of dependence within a relationship (Le & Agnew, 2003; Rusbult, Martz, & Agnew, 1998) and has both attitudinal and behavioural components.

With increased levels of dependence, commitment levels tend to strengthen and are interpreted as “a sense of allegiance that is established with regard to the source of one’s dependence” (Rusbult et al., 1998, p. 357). In this context, dependence may be regarded as an important antecedent of commitment. In the same respect, dependence could be conceptualized as being antecedent to spurious loyalty. From this point of view, an individual’s level of loyalty - say spurious - is dependent on the fulfillment of an individual’s expectation of excitement, enjoyment, and overall pleasure of a specific sporting experience.

Commitment: Factors, Determinants, Consequences

It is evident from a review of the literature that commitment is a multi-faceted component thus warranting a more in-depth look at its representation. Research conducted by Le & Agnew (2003) indicates that commitment is a significant predictor of relationship break-up. Rusbult, Johnson, & Morrow (1986) theorize that commitment to maintaining a relationship is affected by three specific factors.

First, commitment will be stronger based on the degree to which a relationship is deemed satisfying. Second, if one believes that there are only poor alternatives to their current involvement, they will feel more committed to the relationship. Third, the level of commitment will reflect the degree to which the amount of intrinsic and extrinsic resources or level of investment one has put into a relationship. Intrinsic resources
include time spent together and effort put into the relationship while extrinsic resources include material possessions and mutual friendships. Each of these factors is dependent on the perceptions or feelings of one or both individuals in the relationship.

Taking Rusbult et al.’s (1986) theory into a sporting context, one may examine commitment by looking at a season ticket holder of a team. First, the fan must derive a high level of satisfaction from the team, perhaps from a high performance level, the number of wins, or the social aspects of the fan experience such as team camaraderie. Second, the fan will be more committed if they feel that the alternatives to attending each game are poor in comparison. Perhaps the thought of attending a Junior football game leaves one desiring a higher level of competition and skill. Finally, commitment will become even stronger as one’s level of investment increases through watching away games on television, reading about the team in the news, and making material purchases such as jersey’s, hat’s and other team gear. If satisfaction, quality of alternatives and investment level expectations are met, commitment level will increase. If not, commitment level may be put into question and a season ticket holder may rethink their allegiance to the team.

Sprecher (1999) conducted a longitudinal study to examine how individuals in a stable relationship perceive positive change over time. Results indicated that “positive feelings in a relationship were associated with relationship stability, length, feelings, and optimism for the maintenance and continuation of the romantic relationship” (p. 52). Participants whose relationships ended during the study reported decreases in their positive feelings, most notably satisfaction, prior to ending the relationship. This is
consistent with Rusbult’s (1983) findings that continual decreases in satisfaction and other positive feelings will occur before a committed relationship is dissolved.

Existing research supports the theory that relationship commitment is strengthened by such determinants as high satisfaction, poor alternatives, and significant investment size (Rusbult et al., 1998). “Stronger commitment and greater dependence on a relationship (i.e., high satisfaction, poor alternatives, and high investments) consistently are associated with superior functioning in relationships” (Rusbult et al., 1998, p. 376).

Results from a study conducted by Rusbult et al. (1998) looking at relationship commitment and its determinants were consistent with previous findings indicating commitment is positively associated with satisfaction level and investment size, and negatively associated with quality of alternatives. Commitment was found to be strengthened by the degree to which an individual is dependent on a relationship, “to the extent an individual wants to persist with a partner, feels bound to persist, and has no choice but to persist” (p. 382). In light of these findings, commitment level is arguably the best determinant of overall relationship persistence or dissolution.

There is consistent support within the literature identifying several consequences of relationship commitment. First, commitment—as previously noted— is positively associated with satisfaction level and investment size, and negatively associated with quality of alternatives. Second, Rusbult et al. (1998) note that each of these variables contributes a unique level of variance in their prediction of commitment. Third, highly committed individuals are more likely than less committed individuals to persist in their current relationships. Finally, commitment is “the most direct and powerful predictor of
persistence, partially or wholly mediating the effects of satisfaction, alternatives, and investments on decisions to remain in versus end a relationship” (Rusbult et al., 1998, p. 360). Rusbult et al. (1998) indicate that such findings have also been observed in a variety of contexts such as commitment to a friendship, a residential community, and in organizational settings.

In order to conceptualize how the constructs of satisfaction, alternatives, investments, and commitment fit together it is important to first gain an understanding of theories relevant to relationship commitment. These theories include Interdependence Theory proposed by Kelley and Thibault (1978) and the Investment Model proposed by Rusbult (1980). Given the widespread application of these theories to numerous contexts involving commitment, they are discussed in greater detail in the following section.

Interdependence Theory

According to Interdependence Theory, a high level of relationship dependence will result when both satisfaction and investment levels are high, and quality of alternatives is low (Etcheverry & Agnew, 2004). Individuals with a high level of dependence will rely less on their social network to guide them in decision-making because ending the relationship is viewed as being too costly. Conversely, those with a low level of dependence tend to experience a greater amount of uncertainty about the relationship, lending a stronger influence to outside factors.

Interdependence Theory also suggests that outcomes in a relationship are determined by weighing rewards against costs to determine what has been gained. “Outcomes are compared to a personal standard or expectation of what constitutes acceptable outcomes known as the comparison level” (Le & Agnew, 2003, p. 38). The
two main processes identified through which dependence may grow include satisfaction level and quality of alternatives (Rusbult, Martz, & Agnew, 1998).

In a sporting context, individuals with a high level of dependence to specific team may view the team as a source of entertainment, pleasure, arousal, and have high levels of monetary investment (e.g., season tickets, team merchandise). Such highly dependant team fans would likely continue in this relationship regardless of influence from any outside factors such as disappointment from poor performance, and friends/family seeking pleasure from other entertainment sources. Conversely, fans with low levels of dependence will be highly influenced by outside factors and other forms of entertainment including other sports teams, and sports leagues.

Le and Agnew (2003) describe satisfaction level as a function of the comparison level and current relational outcomes. More specifically, when an outcome exceeds a comparison level, an individual is satisfied within the relationship. Contrary to this, when an outcome fails to achieve a comparison level standard, dissatisfaction will occur. In order to boost personal satisfaction levels fans may switch allegiances to teams that are currently popular, on winning streaks, or are favourites of co-workers, friends, and family. In general, satisfaction may be influenced by the degree to which an individual fulfills their partner’s most significant needs.

According to Rusbult et al. (1998), dependence is mediated by a second factor termed the quality of alternatives which represents the perceived attractiveness of the best available alternative to a relationship. Quality of alternatives is also a function of needs being met. This concept is based on the degree to which one’s needs can be met outside of the current relationship with such eligible partners as friends or family.
members. Therefore, if one determines that the quality of alternatives are poorer than his or her current situation and needs are being met, dependence on the current relationship will increase.

Take for example the quality of alternatives to the Saskatchewan Roughriders professional football team. In terms of being able to attend, the alternatives to other high profile professional sporting events and teams are relatively nonexistent. For lack of a better option, fans continue to support the Roughriders through attendance at games, purchase of monetary items, and community support. As a result, the Roughriders continue to have an extremely strong fan base whether their season is successful or not. While attendance is an excellent direct measure of behavioural commitment, there are many forms of involvement. Canadian fans of the NFL may become involved with a specific team simply by watching that team each week on television. Here, the quality if alternatives is very high since fans have the option to tune into any game they choose. If a high level of play is consistently displayed from another team, a fan may switch their loyalty and begin a relationship with that team.

Le and Agnew (2003) confirm that perceiving an alternative as attractive can provide a greater outcome to the relationship and in turn may lead one partner toward that alternative and away from the existing relationship. If for some reason there are no perceived alternatives, an individual may decide to continue with a partnership for lack of a better option. Interdependence Theory suggests that dependence on a relationship is greater when satisfaction level is high, and when the quality of alternatives is poor. Rusbult (1980) extended this theory by proposing the Investment Model which suggests
that dependence is also influenced by a third factor, investment size. A more thorough examination of the Investment Model follows.

The Investment Model

Although most of the evidence supporting the Investment Model and its theory is based on literature from personal relationships, application to other non-relational contexts has been successful. For example, the Investment Model has predicted organizational and job commitment, patients’ commitment to medical treatment, and college students’ commitment to their school (Le & Agnew, 2003). The Investment Model’s widespread applicability has made it an important contribution to the study of commitment and a prospective model for studying commitment within a sport setting.

The Investment Model extends Interdependence Theory by suggesting that “dependence” is not fully explained by looking at satisfaction level and quality of alternatives. Rusbult et al. (1998) state that if dependence was explained solely on the basis of satisfactions derived from the relationship as compared to those imagined elsewhere, few relationships would endure. As a result, dependence and the probability of persisting in a relationship are influenced by a third factor termed investment size.

Investment Size

Rusbult et al. (1998) define investment size as “the magnitude and importance of the resources that are attached to a relationship. These resources may decline in value or be lost if the relationship were to end” (p. 359). As a relationship matures, individuals invest resources directly into the partnership in the hopes that it will improve, be maintained, or will grow. The magnitude of one’s investments will mediate their intent to stay in, or complicate their decision to leave a relationship.
Investments may take a variety of intrinsic and extrinsic forms such as material possessions, financial security, mutual social networks (i.e., friends and family), sharing private thoughts and aspirations, or putting in considerable amounts of time and effort into the relationship (Rusbult, Johnson, & Morrow, 1986). Perhaps the greatest extrinsic measure of investment size in a sporting context is the monetary investment of becoming a season ticket holder. Season ticket holders put in considerable amounts of time and effort into their relationship with a team by attending games, developing social networks, and undoubtedly buying team merchandise in order to outwardly express their allegiance. Intrinsic investments can also strengthen one’s personal connection to a team.

For example, an investment will become more important depending on the amount of time spent following or watching a team, and even by telling others within a social network how much a team is personally valued. Rusbult et al. (1998) suggest that invested resources serve to boost commitment because if the relationship were to end, the loss of such investments would be immeasurable thus serving as a potent psychological stimulus to remain committed.

**Antecedents of Commitment**

The Investment Model provides a theoretical framework of the antecedents of commitment and the probability of persistence in a relationship. Rusbult et al. (1998) suggest that satisfaction, quality of alternatives, and investment size will function to impact dependence which in turn will influence commitment levels. An interesting point regarding this multi-dimensional structure is that “not all of these factors must be present for commitment to be experienced” (Le & Agnew, 2003, p. 39). To illustrate the point, one could assume that a lack of satisfaction could characterize an emotionally abusive
relationship. However, this relationship may continue based on the notion that the abused partner is highly invested in the relationship (i.e., have children with their partner), or because the quality of alternatives (i.e., lack of close family, friends) are not perceived as being better than the current situation.

In a sporting context, a lack of satisfaction may stem from a losing season. For example, a team may go on a losing streak challenging fan satisfaction and commitment levels. While satisfaction may drop, commitment levels may still remain high if the fan has a high level of investment in the team as a season ticket holder, has developed a strong social network with other fans, or because the quality of alternatives to attending a live game may not be any better.

In another scenario, quality of alternatives may increase. Cities that have several professional sports teams must deal with this factor every season. In Toronto, the quality of alternatives to the National Hockey League’s (NHL) Toronto Maple Leaf’s and Major League Baseball’s (MLB) Toronto Blue Jays, increased with the addition of new professional sport franchises: the Toronto Raptors of the National Basketball Association (NBA) and Toronto FC of Major League Soccer (MLS). While many fans will remain committed to the Maple Leafs or Blue Jays, some will choose to attend more basketball or soccer games depending on the quality of the team.

The Investment Model is pictorially displayed by Rusbult et al. (1998) as a positive level of satisfaction, combined with a lesser number of quality of alternatives, and positive investment size as the main contributors to commitment level, and in turn the probability of persistence (see Figure 2). Rusbult’s et al.’s theory proposes that when compared to less committed individuals, those highly committed are much more likely to
persist in their relationships (Rusbult et al., 1998). Although the variable dependence is notably absent from Rusbult et al.’s (1998) Investment Model, it does have an impact on the probability of persistence of commitment. As noted by Rusbult et al. (1998), dependence is impacted by satisfaction, quality of alternatives, and investment size which in turn, influences commitment level.

![Diagram of the Investment Model](image)

**Figure 2.** The Investment Model (Rusbult et al., 1998, p.360).

**Predicting Commitment**

Le & Agnew (2003) conducted an extensive review of 52 published and unpublished studies that used the Investment Model as a predictor of commitment. Results showed satisfaction level to be significantly more predictive of commitment than quality of alternatives and investment size. Both quality of alternatives and investment size were found to predict commitment to a similar degree. These results suggest that “external, influences on commitment such as alternatives and investments individually are less predictive than internal factors such as satisfaction” (Le & Agnew, 2003, p. 50). This finding is consistent with other results (Etchevery & Le, 2005; Etchevery &
Agnew, 2004; Rusbult et al., 1998; Rusbult et al. 1986) and confirms the belief that satisfaction is a crucial component in determining relationship persistence.

**Investment Model Scale**

The Investment Model Scale is comprised of subscales measuring items related to satisfaction level, quality of alternatives, investment size, and commitment. The scale used by Rusbult et al. (1998) is comprised of 22 items rated on an 8-point Likert scale ranging from *Do Not Agree At All* to *Agree Completely*. The validity and reliability of the scale (Rusbult et al., 1998) makes this an appropriate instrument to be used in conjunction with the PCT scale (refer to Appendix B for a copy of the Investment Model Scale’s Items). With this basic understanding of the Investment Model and its variables, we can turn our attention to the application of this model to sport commitment.

**Investment Model Applied to Sport Commitment**

Applying the Investment Model to sport consumption related behaviour can provide a conceptual example as to how commitment to a team may develop, and how commitment may decrease. Figure 3 on the following page displays the prospective Sport Team Commitment Model. The new proposed model takes into account the Investment Model, Interdependence Theory, and Psychological Commitment items. For the purposes of this research, it was decided that *dependence* would be de-limited (analyzing this variable would have added complications beyond the necessary scope of this work).

Within the proposed model, satisfaction level may be affected by motives to attend a sporting event with judgement being rendered as to whether expectancies were met, not met, or exceeded. Satisfaction may be met if a team simply wins a game, other
times satisfaction may be met if the athletic contest was extremely competitive even if the result was a loss. If attending a sporting event leaves a consumer satisfied, commitment or repeat attendance will likely ensue. However, if expectations are not met, satisfaction will begin to decrease and the consumer may look at the alternatives available to them regarding sport consumption, and the relative investment size to take in the new service. Individuals with a high level of dependence to a specific team rely on the relationship for a type of need fulfillment. One’s relationship to a team may be regarded as a source of entertainment, pleasure, and arousal for many team fans. Individuals that are highly satisfied and are not distracted by alternative sources of pleasure will display greater levels of dependence to the relationship they have with a team.

![Feedback Loop](image)

**Figure 3. The Sport Team Commitment Model**
Quality of alternatives will have a major impact within a sporting context particularly in densely populated areas home to more than one professional league or team. Take for example a previously “committed” season ticket holder for a NHL team that decides to not renew their season tickets because he or she is unsatisfied with the team’s performance. Perhaps a choice is made to attend a CFL game and the quality of this experience matches or even exceeds expectations thus increasing satisfaction level. This will have an effect on the individual’s commitment level to hockey, even if the team begins to win a few games.

It is important to note that quality of alternatives does not always have to refer to another sport consumptive related option. For example, one may find something such as a recreational activity, or dinner and a movie may be a preferable alternative. In sum, commitment may decrease due to the high quality of other alternatives one has experienced.

Investment size can take on both intrinsic and extrinsic forms. For example, an extrinsic investment such as the monetary expenditure it takes to attend a game may be a major factor in the commitment level of a sport spectator. Today, it is costly to regularly attend a sporting event, particularly professional league games. With ticket prices increasing, it becomes difficult for the average consumer to make such a large extrinsic investment relative to their income level. At times, fans may have to choose if taking the family to the game is within the budget, or if there is a more cost effective entertainment choice. Intrinsic investments such as the time and effort it takes to attend a game, or follow (i.e., acquire knowledge) a particular team must also be considered. Many
committed fans spend hours reading game reviews, statistics, and research upcoming opponents. If a decision is made that the (intrinsic) investment size is greater than the perceived benefits of the service, commitment may once again decrease.

One’s commitment level can also manifest itself both attitudinally and behaviorally. The attitudinal component is characterized by one’s general feelings towards a team such as identifying it as “your favourite team.” The behavioural component is characterized by active participation such as watching/attending games or purchasing team merchandise. Fans who demonstrate high levels of commitment to a particular team will possess a stable and persistent attitudinal bias in turn leading to strong behavioural loyalty, active participation, and high psychological commitment. Conversely, fans who do not demonstrate a stable and persistent attitudinal bias, strong behavioural loyalty, or high psychological commitment to any varying degree, may intend to decrease their relationship commitment to a team.

In sum, most models of commitment suggest that relationship maintenance is a function of factors attracting an individual towards a partnership combined with those factors moving an individual away. Both commitment and the probability of persistence in a relationship are associated with variables including satisfaction level, quality of alternatives, and investment size (Etcheverry & Le, 2005; Rusbult et al., 1998). Looking back on the literature review of both fan loyalty and relationship commitment, there is a case to be made that both concepts are very similar if not related. Therefore, testing the application of the PCT scale and the Investment Model in a sport context could lead to new understandings related to the persistence of commitment to a sports team.
Research Purpose

The purpose of the present investigation is to use the Investment Model to better understand the intention to continue or reduce commitment to a sports team.

Research Question

To examine the nature of the relationships between satisfaction, investment, quality of alternatives on commitment and the subsequent intention to continue in the relationship.
CHAPTER 2: METHODOLOGY

Participants

Fans of the Saskatchewan Roughriders were chosen because the Roughriders are the most highly visible and identifiable professional sports team in Regina, Saskatchewan, where this research study took place. Participants were selected through use of the online social utility platform: Facebook.com. Two specific facebook.com social groups, ‘I Bleed Green - Saskatchewan Roughriders Fan Club’ and ‘Rider Nation’, boast thousands of members. Members of these groups were identified as fans of the Saskatchewan Roughriders football team because of having freely chosen to join a social fan group specifically dedicated to the team. 1000 members were asked to take part in the study and 400 people indicated an interest in participating. However, only 256 participants (157 male, 95 female, and 4 missing) took part in the study. Participants ranged in age from 18 to 59 years (mean = 30; sd = 8.04). Reported annual personal incomes ranged from $100.00 to $250,000.00 (mean = $48,093.00; median = $41,000; sd = 29,184.00).

Participants were asked at what age they attended their first Saskatchewan Roughrider game (mean = 11.48; sd = 6.41) and what age they watched their first game on television (mean = 8.10; sd = 5.70). The number of home games participants said they attended during the 2007 season ranged between one and 12 games with 12 including both preseason and playoff games (mean = 5.52; sd = 4.12). The number of away games participants said they attended during the 2007 season ranged between one and 10 games with 10 including both preseason and playoff games (mean = 1.67; sd = 1.10). When asked to estimate the amount of money spent on both home and away games during the
2007 season amounts ranged from zero to 3,000 dollars (mean = $315.94, sd = $490.17).

Procedures

Approval for the study was first obtained from the University of Regina Research Ethics Board in January, 2008. See Appendix C for approval memorandum. President of the Saskatchewan Roughriders, Jim Hopson, was contacted and asked for permission to complete the study using the Saskatchewan Roughrider’s team as a research subject. Permission from the Saskatchewan Roughriders was granted with no restrictions.

A message was posted on the ‘I Bleed Green - Saskatchewan Roughriders Fan Club’ and ‘Rider Nation’ Facebook pages inviting members to take part in the survey after which they would be entered into a draw to win a signed football. The Roughrider organization donated a football signed by members of the 2007 Grey Cup Champion team to be awarded to one lucky participant of the study, chosen at random, as a token of gratitude for taking part. The formal message posted to members can be read in full in Appendix D.

Members who wanted to take part were asked to directly email the author, via Facebook, in order to receive the link to the survey and a unique password. Once a member made contact with the researcher, simple directions, a unique password, and a link to the survey location was sent back. The survey link and unique password message sent to research participants can be read in full in Appendix E. The goal of the sample selection process was to obtain a convenience sample of at least 250 participants.

A total of 400 individual passwords were emailed to participants who identified themselves as willing to take part in the survey. The email included a web-link and individualized password whereby participants were invited to access the questionnaire on
a secure online site. The online survey was created using Class Climate software which offers a security system to ensure data privacy with online communication operated over an encrypted connection (Retrieved April 15, 2008, from www.scantron.com/classclimate/ features.aspx). Online questionnaire completion using “Class Climate” software took place during participant’s personal/leisure time. The web-based survey tool, Class Climate, allows for confidentiality and maximization of response with quick and easy access for all participants.

Once a participant followed the survey link and entered their individualized password, it was assumed that consent to take part in the study had been granted. At the onset of the survey, participants were made aware of their rights as a participant, and that they were not obligated to participate in any way. This was followed by general instructions on how to complete the survey as well as how to contact the researcher by phone or email should there be any questions. The general information provided to participants, instructions and complete survey can be read in full in Appendix F.

Participants were asked to indicate their opinion/feelings/attitudes by clicking on the circle that best represented them/their answer and were granted the freedom to move ahead or backward within the survey to review/change their answers. The survey took approximately 10 to 15 minutes to complete. Once finished, participants were asked to submit their survey. Data was then stored on the Class Climate Server at the University of Regina.
Measures

All participants were asked to complete a series of questionnaires with items reworded to reflect a sporting context and with a focus on the Saskatchewan Roughriders football team. The purpose of the questionnaires was to allow detailed assessment of initial commitment level, attitudinal and behavioural commitment level, and the intention to continue or reduce relationship commitment. In addition, demographic information was collected.

**PCT Scale** - Attitudinal commitment, the strength of one’s intrinsic commitment to a sports team, was measured using a modified version of the PCT scale (Mahony et al., 2000). The PCT scale was chosen because of its use as a reliable and valid tool for measuring attitudinal loyalty, or the strength of fan commitment to a sports team (2000). In addition, the PCT scale has been shown by Mahony et al. to demonstrate good predictive validity when determining fan behaviour. Analysis of frequencies showed that participants scoring high on the PCT scale were more likely to demonstrate high behavioural loyalty (increased likelihood to attend games, purchase season tickets, etc.).

PCT scale properties include a 15-item, 7-point Likert scale with positively worded items scored as 1 for strongly disagree to 7 for strongly agree; negatively worded items scored as 7 for strongly disagree and 1 for strongly agree. A higher score represents greater psychological commitment to a team. Mahony et al.’s (2000) Cronbach’s alpha estimate for the PCT scale was .88. Cronbach’s alpha for the current research using the PCT scale was .90.
Investment Model Scale – The Investment Model Scale is comprised of 22 items rated on an 8-point Likert scale ranging from Do Not Agree At All to Agree Completely (Rusbult et al., 1998). The subscales used in this study measured investment, satisfaction and quality of alternatives.

**Investment** – A modified Investment scale (Rusbult et al., 1998) comprised of five items was used to measure *intrinsic investment*. Specifically, items measured invested time, shared identity, and level of involvement. Cronbach’s alpha for the current research using the Investment scale was .87 (mean = 4.06).

**Satisfaction** – A modified Satisfaction scale (Rusbult et al., 1998) comprised of five items was used to measure Satisfaction. These items assessed the degree to which the current relationship gratifies the individual’s specific needs for companionship, security, and emotional involvement. Cronbach’s alpha for the Satisfaction scale in the current sample was .83.

**Quality of Alternatives** – A modified Quality of Alternatives scale (Rusbult et al., 1998) comprised of five items was used to measure the degree to which one’s needs can be met *outside* of the current relationship (i.e. with another sports team, friends, or family, etc.). Reliability analysis revealed that one item had a very low item-to-total correlation (r = -.02). This item asked participants whether, “Watching other Canadian Football League teams is appealing to me”. The extremely low value suggests it has nothing in common with the other items in the scale and gave cause to delete this particular item from the scale. Conceptually the deletion is not problematic since watching other CFL teams may not be considered a viable ‘alternative’ to the relationship. Specifically, since the other teams are necessary for the league to exist
(have a place for the Riders to play) and, from time to time, the performance of other teams may have a direct bearing on the outcomes experienced by those committed to the Riders (e.g., if team B loses, my team makes the playoffs, etc.), watching other teams play on television is not necessarily indicative that alternatives to the current relationship being present. Elimination of the item increased the coefficient alpha estimate from .56 to .69.

**Extrinsic Investment** – Extrinsic investment was operationalized through the use of single items composed by the researcher (Jackle). Specifically, questions asked about (a) number of games watched on television, (b) number of games attended in person, (c) amount of money spent on tickets, and (d) amount of money spent on team merchandise.

**Intention to Continue Commitment** – One item, composed by the researcher (Jackle), measured the intention to continue the relationship with the Saskatchewan Roughriders. This item served as the dependent variable for the present research and asked participants whether they strongly disagree or strongly agree, “I see myself becoming an even bigger fan of the Saskatchewan Roughriders than I am now in 10 years”.

**Demographic Variables** – General demographic information relevant to the current study was collected. Demographic variables include: Sex, age, and annual personal income. These three demographic variables were used as control variables for the study in order to prevent any influence of these antecedents on the mediator, or the outcome in an indirect way.
Data Analysis

Descriptives for, and correlations between all scales and individual items were calculated. Reliability was estimated using Cronbach’s (1951) coefficient alpha. Following Baron and Kenny, (1986), three regression equations were used to examine the nature of the relationships between satisfaction, investment, quality of alternatives on commitment and the intention to continue in the relationship. Baron and Kenny explain that in general, a variable functions as a mediator when it “accounts for the relation between the predictor and the criterion”. To simplify, “mediators explain how an external physical event takes on internal psychological significance” (p. 1176).

A mediating relationship must involve more than one variable. If, for example, variable X, has an effect on or causes outcome Y, the relationship is said to be unmediated. This path is termed the direct effect. However, Kenny (1999) explains that the effect of variable X on outcome Y may be mediated by an intervening or process variable, M. “Complete mediation is the case in which variable X no longer affects Y after M has been controlled. Partial mediation is the case in which the path from X to Y is reduced in absolute size but is still different from zero when the mediator is controlled” (http://davidakenny.net/cm/mediate.htm). While statistical significance is important, researchers need also consider the absolute values of the variance being accounted for since with large sample sizes, even trivial amounts of changes in variability can be seen as statistically significant.

A total of three regression equations were calculated using a stepwise and blocking method. Using regression analysis, several methods can be combined, the main goal being to determine the best subset of variables that explain a dependent variable.
Using the stepwise method, variables at each step were included or removed based on the probability of F (p-value). In addition, a blocking method was used to control the sequence of inclusion of variables, the first block being considered before the second etc., while obtaining coefficients and statistics for each block.

For each antecedent of interest (there were four of these), (a) the antecedent is regressed on the mediator (determines whether antecedent is correlated with the mediator; \( X \rightarrow M \)), (b) the antecedent and mediator are regressed on the dependent variable, with the antecedent being entered first (determines whether the mediator has an impact on the dependent apart from the antecedent; \( XM \rightarrow Y \)), and (c) to determine whether mediation is partial or full, the mediator and antecedent are regressed on the dependent variable, with the mediator being entered first (if mediation is full, then the variance accounted for by the antecedent will be zero after the effect of the mediator is controlled; \( MX \rightarrow Y \)).

While Baron and Kenny originally suggested a fourth equation (that would have actually been the first step; i.e., determining whether a relationship between antecedent and the dependent variable existed), this has subsequently been deemed a largely unnecessary step. The two most important steps for determining whether mediation exists are steps (a) and (b); (c) is necessary only to evaluate whether mediation is partial or full.

The first equation regressed the control variables (sex, age and annual income) and the antecedents (alternatives, intrinsic investments, satisfaction and extrinsic investments – home games attended, TV games watched, merchandise purchased and tickets purchased) on the mediator, the PCT scale (see Regression Equation 1). The
second equation regressed the control variables, the antecedents and the mediator, on the outcome, intention to continue commitment to a team (see Regression Equation 2). The third equation regressed the control variables, the mediator and antecedents on the outcome, intention to continue commitment to a team (see Regression Equation 3).
CHAPTER 3: RESULTS

Descriptive Statistics

Cohesion

The mean scores of the subscales were used for the analysis. See Table 1 on the following page for means, standard deviations and correlations. The greatest positive correlation was between satisfaction and PCT and satisfaction and intrinsic investment (both .78). The correlation between satisfaction and PCT scale (.78), as well as the correlation between satisfaction and intrinsic investment (.78) is on the high side and was noted by the researcher. The greatest negative correlation was between PCT and quality of alternatives (-.64). As expected, the correlations between quality of alternatives and all other variables are negative. In general, the correlations between intrinsic investment, PCT scale, and satisfaction on being a bigger fan in 10 years tend to be greater than the correlations between intrinsic investment, PCT scale, and satisfaction on extrinsic investments.
Table 1

Descriptives and Correlation Matrix of All Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>1. PCT Scale</td>
<td>.90**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Satisfaction</td>
<td>.78**</td>
<td>.83**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Quality of Alternatives</td>
<td>-.64**</td>
<td>-.55**</td>
<td>.69**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Intrinsic Investment</td>
<td>.62**</td>
<td>.78**</td>
<td>-.53**</td>
<td>.87**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Bigger fan in 10 yrs (DV)</td>
<td>.42**</td>
<td>.44**</td>
<td>-.33**</td>
<td>.45**</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Games watched on TV</td>
<td>.45**</td>
<td>.48**</td>
<td>-.32**</td>
<td>.47**</td>
<td>.29**</td>
<td>n/a</td>
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<tr>
<td>7. $ spent on merchandise</td>
<td>.37**</td>
<td>.42**</td>
<td>-.33**</td>
<td>.46**</td>
<td>.21**</td>
<td>.32**</td>
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<tr>
<td>8. $ spent on game tickets</td>
<td>.30**</td>
<td>.37**</td>
<td>-.25**</td>
<td>.45**</td>
<td>.16**</td>
<td>.12**</td>
<td>.55**</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>9. Home games attended</td>
<td>.19**</td>
<td>.25**</td>
<td>-.32**</td>
<td>.42**</td>
<td>.17**</td>
<td>.03</td>
<td>.29</td>
<td>.53**</td>
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Mean (SD)

<table>
<thead>
<tr>
<th></th>
<th>5.38</th>
<th>4.92</th>
<th>3.07 (1.2)</th>
<th>4.06</th>
<th>4.73</th>
<th>10.23</th>
<th>209.19</th>
<th>315.94</th>
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<tr>
<td></td>
<td>(1.1)</td>
<td>(1.2)</td>
<td>(1.5)</td>
<td>(1.6)</td>
<td>(5.8)</td>
<td>(402.3)</td>
<td>(490.2)</td>
<td>(4.1)</td>
<td></td>
</tr>
</tbody>
</table>

α in diagonal.

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).
Regression

Table 2

Regression Equation 1: Control + Antecedents on Mediator

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>( R^2 )</th>
<th>( \Delta ) in ( R^2 )</th>
<th>( F ) of ( \Delta )</th>
<th>( \beta )</th>
<th>( t )</th>
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</thead>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.08</td>
<td>.08</td>
<td>5.06*</td>
<td>.02</td>
<td>-.50</td>
</tr>
<tr>
<td>Age</td>
<td>.69</td>
<td>.61</td>
<td>52.56*</td>
<td>.01</td>
<td>.08</td>
</tr>
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<td>Annual Income</td>
<td></td>
<td></td>
<td></td>
<td>.10</td>
<td>1.8</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>.69</td>
<td>.61</td>
<td>52.56</td>
<td>-.36</td>
<td>-6.9*</td>
</tr>
<tr>
<td>Intrinsic Investments</td>
<td></td>
<td></td>
<td></td>
<td>-.06</td>
<td>-.90</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td>.56</td>
<td>7.9*</td>
</tr>
</tbody>
</table>

Extrinsic Investments

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Home Games Attended</td>
<td>-.11</td>
<td>-2.1*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>TV Games Watched</td>
<td>.06</td>
<td>1.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise Purchased</td>
<td>.04</td>
<td>.73</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tickets Purchased</td>
<td>.02</td>
<td>.35</td>
<td></td>
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</table>

DV = PCT Scale

Overall, the first regression equation indicated that a large percentage of the mediator variable (PCT) (Adjusted \( R^2 = .67, F_{(10,188)} = 41.5, p < .01 \)) was accounted for by a combination of the control variables and the antecedents proposed in the model (refer to Table 2). There was a partial correlation between satisfaction (.32), alternatives (-.28), home games (-.08) and PCT. Direction of alternatives is in the correct direction (as alternatives increase, PCT decreases) as is satisfaction (positive).
Table 3

*Regression Equation 2: Control + Antecedents + Mediator on Outcome (Intention d13)*

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>R²</th>
<th>Δ in R²</th>
<th>F of Δ</th>
<th>β</th>
<th>t</th>
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<tbody>
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<td><strong>Step 1</strong></td>
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</tr>
<tr>
<td>Sex</td>
<td>.05</td>
<td>.05</td>
<td>3.3*</td>
<td>-.02</td>
<td>-.30</td>
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<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td>-.20</td>
<td>-2.7*</td>
</tr>
<tr>
<td>Annual Income</td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>.50</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>.33</td>
<td>.28</td>
<td>11.4*</td>
<td>.08</td>
<td>.94</td>
</tr>
<tr>
<td>Intrinsic Investments</td>
<td></td>
<td></td>
<td></td>
<td>.30</td>
<td>2.9*</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td>.11</td>
<td>.96</td>
</tr>
<tr>
<td>Extrinsic Investments</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Games Attended</td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>.83</td>
</tr>
<tr>
<td>TV Games Watched</td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td>.35</td>
</tr>
<tr>
<td>Merchandise Purchased</td>
<td></td>
<td></td>
<td></td>
<td>.03</td>
<td>.35</td>
</tr>
<tr>
<td>Tickets Purchased</td>
<td></td>
<td></td>
<td></td>
<td>-.09</td>
<td>-1.1</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
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</tr>
<tr>
<td>PCT</td>
<td>.35</td>
<td>.02</td>
<td>6.4*</td>
<td>.27</td>
<td>2.5*</td>
</tr>
</tbody>
</table>

*p < .05

The second regression equation indicated that a medium percentage of the dependant variable (Intent) (Adjusted $R^2 = .32$, $F_{(11, 187)} = 9.3$, p. < .01) was accounted for by a combination of the control variables, the antecedents, along with the mediator proposed in the model (refer to Table 3). Partial correlations between age (-.16), intrinsic investment (.17), and PCT (.15) and Intention were also calculated. Direction of alternatives is in the correct direction (as age increase, intention decreases) as is PCT (positive). Direction of alternatives could indicate that younger people actually have greater potential to continue commitment to a team.
Table 4

*Regression Equation 3: Control + Mediator + Antecedents on Outcome (Intention d13)*

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>R²</th>
<th>Δ in R²</th>
<th>F of Δ</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Sex</td>
<td>.05</td>
<td>.05</td>
<td>3.3*</td>
<td>-.02</td>
<td>-.30</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td>-.20</td>
<td>-2.7*</td>
</tr>
<tr>
<td>Annual Income</td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>.50</td>
</tr>
<tr>
<td>Step 2 PCT</td>
<td>.26</td>
<td>.21</td>
<td>55.7*</td>
<td>.27</td>
<td>2.5*</td>
</tr>
<tr>
<td>Step 3 Alternatives</td>
<td>.35</td>
<td>.09</td>
<td>6.4*</td>
<td>.08</td>
<td>.94</td>
</tr>
<tr>
<td>Intrinsic Investments</td>
<td></td>
<td></td>
<td></td>
<td>.30</td>
<td>2.9*</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td>.11</td>
<td>.96</td>
</tr>
<tr>
<td>Extrinsic Investments</td>
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</tr>
<tr>
<td>Home Games Attended</td>
<td>.06</td>
<td>.83</td>
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<tr>
<td>TV Games Watched</td>
<td>.02</td>
<td>.35</td>
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<td>Merchandise Purchased</td>
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<tr>
<td>Tickets Purchased</td>
<td></td>
<td>-0.09</td>
<td>-1.1</td>
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<td></td>
</tr>
</tbody>
</table>

* p < .05

Since the third equation, at the last step is mathematically equivalent to equation two, the percentage of variance accounted for in the dependent variable was the same (Adjusted R² = .32, F(11, 187) = 9.3, p. < .01) (as are the beta weights). Of greater interest here was whether the antecedents would account for any variability (and how much) when the mediator was entered first. In other words, are the paths between the antecedents and the dependent variable partially or fully mediated by PCT (refer to Table 4). The evidence suggest partial mediation is taking place, but only intrinsic investments...
would actually have a direct path to intent, the other direct paths would essentially be zero in the population.
CHAPTER 4: DISCUSSION

Findings and Implications

The purpose at the beginning of this study was to use the Investment Model to examine the relationships between satisfaction, investment, quality of alternatives on commitment and the intention to continue that commitment. A review of the literature showed that one’s commitment level can manifest itself both attitudinally and behaviorally. Results showed that fans who demonstrate a stable and persistent attitudinal bias will be persistent in that commitment in turn leading to strong behavioural loyalty, active participation and higher psychological commitment. Fans who did not demonstrate a stable and persistent attitudinal bias, strong behavioural loyalty, or high psychological commitment to any varying degree, were more likely to decrease their relationship commitment with a particular team.

It is evident that not all sport consumers are equally passionate about a team, nor do they share a similar sense of loyalty. Some consumers attend sporting events on a regular basis, some occasionally, and some choose to decrease commitment altogether. The goal of the present research was to develop a conceptual framework for understanding the intention to continue or reduce commitment to a professional sports team, namely the Saskatchewan Roughriders Football team.

Findings provided further evidence the PCT scale is a reliable, valid instrument for measuring behavioural and attitudinal loyalty, or the strength of one’s commitment to a particular sports team. In addition, the correlation between the PCT scale and satisfaction (.78) and intrinsic investment and satisfaction (.78) were shown to be the strongest predictors of commitment. The data shows that there is a strong linear
relationship between commitment level and the PCT scale, satisfaction and investment variables. Therefore, the combined scales appear to be very good predictors of intentions to continue or reduce commitment to the team.

Next, commitment level to the Saskatchewan Roughriders and intentions to continue or reduce commitment to the team were assessed through the use of the Investment Model scale. Correlations of the Investment Model Scale and its items indicate that this measure is also appropriate for assessing intention to predict commitment to a sports team.

Satisfaction, quality of alternatives and investments accounted for nearly two thirds of the variance in commitment. Therefore such variables may be regarded as contributing to attitudinal and behavioural processes via commitment. Although each of these variables is important, results suggest that commitment may be the most important construct when investigating intention to stay or leave a relationship, such as one with a sports team. While there are many factors that may shape a team fan, it is also necessary to identify those factors that may lead to a decrease in future commitment level. In general, both instruments are helpful to sport marketers who wish to better target current fans and accurately assess current feelings and future opinions regarding a particular team.

Three regression equations were calculated following Baron and Kenny’s (1986) three steps. Following Baron and Kenny’s model, if the last step in the regression equation is zero then it is a fully mediated model. Results of the regression equations indicated that this is a partially mediated model. What we were really looking at was
whether or not the Investment Model holds. Results indicated that, for the most part, the model does hold.

The first regression equation showed that intrinsic investment did not have a significant effect on intention to commit. The most significant effect on commitment was satisfaction and quality of alternatives. Simply put, the number of jersey’s you own of your favourite team, the number of years you have been a fan of that team, or even if you are a season ticket holder are not significant predictors to commitment. What is important is whether or not you are satisfied, and also the degree to which there are other quality alternatives to your current situation that will predict your commitment to a sports team.

The second regression equation looked at the intention to continue commitment and the possibility of reducing one’s commitment level. Results showed that there might be a path from intrinsic investment directly to intention to continue to commit ($\beta = .30$). Age also had a significant impact on intention to continue to commit ($\beta = -.20$). This finding indicates that as you age, your intention to continue to commit to a team decreases. One may speculate that as one ages, other aspects of one’s life become more important. That is, the sheer number of quality of alternatives may increase as you get older. For example, family may become more of a focus, your career may become more demanding, or you may simply take an interest in other things, all which lead to a decrease in commitment to a team.

Interestingly, the third regression equation suggested that tickets purchased and merchandise purchased has zero impact on intention to continue commitment. This was a surprise as tickets and merchandise relate to larger monetary extrinsic investments in a
specific team. However, these monetary investments had no effect on intention to continue commitment. As simple as it is to buy season tickets to a team and attend games outfitted in team gear, it is just as easy to not make these types of investments. In addition, if intrinsic investments ($\beta = .30$) decrease, intention to continue commitment to a team also decreases. Therefore, preliminary evidence supports the idea that commitment is not one directional. The data collected supports the notion that intention to continue to commit can move forwards and backwards on a type of sport commitment continuum. As a result, one’s commitment could move forward and backward based on how satisfied they are in that current situation.

In sum, this study has provided insight into the underlying psychological processes with regards to the intention to continue or reduce commitment to a professional sports team. Specifically, intrinsic investments and age both have a direct path on the intention to continue to commit to a team. This research sheds new light on fan loyalty and sport consumers as a whole. For sport marketers, the significance of fan loyalty is very important to a team’s competitive advantage. Rather than merely focusing on behavioural indicators of fan loyalty such as spectator attendance figures, sport marketers must also recognize the importance of attitudinal loyalty and intrinsic investments when examining the full concept of fan loyalty. Consequently, it is important to recognize that you are not just marketing a team to a collective group of people known as “fans”. Fans have differing levels of commitment, quality of alternatives to the team will impact commitment, commitment will change with age, commitment may move forward or backward, and it is imperative that a satisfying product be offered if one hopes to retain and intensify lifelong commitment from a fan.
Limitations

As with any study, there are several limitations worthy of further investigation. First, the Investment Model Scale provides no direct measure of dependence. Therefore, it can only be assumed that dependence is an antecedent quality of commitment. Future studies involving the Investment Model Scale may look to include a measure of dependence when studying commitment.

Second, a convenience sample was used to select men and women that are Facebook.com users and belong to Saskatchewan Roughrider Fan groups. This type of selection of respondents can be expected to produce samples that are reasonably representative of the Saskatchewan Roughrider “fan” population. However this type of selection could have produced a convenience sample that may be biased in ways that are not known to researchers. Moreover, the sample of individuals being only fans of a specific CFL team restricts generalizability to Saskatchewan Roughrider fans only.

Third, the wording of the dependent variable, “I see myself becoming an even bigger fan of the Saskatchewan Roughriders than I am now in 10 years”, could lead to what’s known as a ‘ceiling effect’. A ceiling effect can occur in data gathering when variance is not measured above a certain level (Cramer & Howitt, 2005). In this case, the dependent variable was not measured beyond a 10 year span. When a ceiling effect occurs in data-gathering, there can be a bunching of scores at the upper level reported by a measure which is an instrument constraint. A ceiling effect is a commonly encountered issue in gathering data in many scientific disciplines and is noted by the researcher in this study.
Finally, the data was collected at one time during the study rather than over a period of time. This data collection method provides only a snapshot of the commitment levels of participants. The analysis may have provided different results if commitment had been measured over a period of time.

Future Research

One approach that researchers may take in the future is to look at different age groups (pre-teen, teens, adults, and seniors) to determine if there are differential influence factors related to intention to continue or reduce commitment to a particular team. It would be interesting to see if there were different predictors of commitment in relation to age. The degree to which such factors are independent contributors or if they operate via satisfaction, quality of alternatives, or investments would contribute significantly to the development of a more complete model of sport team commitment.

Another area of interest is that of Fantasy Sports. There are millions of fantasy sports players within major leagues in every area of sport. Within these types of leagues, players obtain a fantasy team made up of randomly selected athletes from a selected sports league, for example the NFL. The NFL has invested in fantasy sports to the tune of dedicated television channels for fantasy sports players (i.e. NFL Redzone) that shows all touchdowns, defensive stops, and resulting major plays that could affect fantasy sports scores. It would be interesting to see if avid fantasy sport players have the same levels of commitment to their favourite sports teams as non-players, or if commitment level decreases according to the dispersion of athletes on fantasy teams. That is, do fantasy sports players root for specific athletes or do they still have an allegiance to and root for their favourite team?
Conclusion

Based on these findings of this research project, sport marketers will be able to make use of psychographic information to target marketing strategies more accurately by assessing differing levels of commitment to a team. This framework will be useful in assessing the impact of past and current promotional efforts for sport marketers who wish to move beyond accepting the loss of consumers by developing marketing strategies that meet a diverse range of needs and wants. Research conducted in this context will shed light on a different type of consumer, and the effects this type of consumption has on the sport industry as a whole.
REFERENCES


Appendix A: Psychological Commitment to Team (PCT) Scale – Original Version

1. I might rethink my allegiance to my favourite National Football League (NFL) team if this team consistently performs poorly.

2. I would watch a game featuring my favourite NFL team regardless of which team they are playing.

3. I would rethink my allegiance to my favourite NFL team if management traded away its best players.

4. Being a fan of my favourite NFL team is important to me.

5. Nothing could change my allegiance to my favourite NFL team.

6. I am a committed fan of my favourite NFL team.

7. It would not affect my loyalty to my favourite NFL team if management hired a coach that I disliked very much.

8. I could easily be persuaded to change my NFL team preference.

9. I have been a fan of my favourite team since I began watching professional football.

10. I could never switch my loyalty from my favourite NFL team even if my close friends were fans of another team.

11. It would be unlikely for me to change my allegiance from my current favourite NFL team to another.

12. It would be difficult to change my beliefs about my favourite NFL team.

13. You can tell a lot about a person by their willingness to stick with a team that is not performing well.

14. My commitment to my favourite NFL team would decrease if they were performing poorly and there appeared little chance their performance would change.
Appendix B: Investment Model Scale – Original Version

Satisfaction Level

1. I feel satisfied with our relationship. (Please circle number)

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely

2. My relationship is much better than others’ relationship.

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely

3. My relationship is close to ideal.

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely

4. Our relationship makes me very happy.

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely

5. Our relationship does a good job of fulfilling intimacy needs, companionship, etc.

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely

Quality of Alternatives

1. The people other than my partner with whom I might become involved are very
appealing. (Please circle number)

     0             1             2             3             4             5             6             7             8
Do Not Agree  Agree
At All         Completely
2. My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.).

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3. If I weren’t dating my partner, I would do fine—I would find another appealing person to date.

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4. My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.).

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5. My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship.

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**Investment Size**

1. I have put a great deal into our relationship that I would lose if the relationship were to end. (Please circle number)

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2. Many aspect of my life have become linked to my partner (recreational activities, etc.), and I would lose all of this if we were to break up

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely

3. I feel very involved in our relationship—like I have put a great deal into it.

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely

4. My relationships with my friends and family members would be complicated if my partner and I were to break up (e.g., partner is friends with people I care about).

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely

5. Compared to other people I know, I have invested a great deal in my relationship with my partner.

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely

**Commitment Level Items**

1. I want our relationship to last for a very long time. (Please circle number)

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely

2. I am committed to maintaining my relationship with my partner.

0 1 2 3 4 5 6 7 8
Do Not Agree Agree
At All Completely
3. I would not feel upset if our relationship were to end in the near future.

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4. It is likely that I will date someone other than my partner within the next year.

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5. I feel very attached to our relationship – very strongly linked to my partner.

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6. I want our relationship to last forever.

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7. I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).

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Appendix C: University of Regina Research Ethics Board Approval Memorandum

UNIVERSITY OF REGINA

OFFICE OF RESEARCH SERVICES

MEMORANDUM

DATE: January 15, 2008

TO: Sandra Jackle
    9 Taggart Place, Regina, SK S4S 4G3

FROM: Bruce Plouffe
      Chair, Research Ethics Board

Re: Application of Investment Theory to Sport Consumers: Predicting Intention to Reduce Commitment (3850708)

Please be advised that the University of Regina Research Ethics Board has reviewed your proposal and found it to be:

☑ 1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical approval to proceed with their research as described in their applications. For research lasting more than one year (Section 1F), ETHICAL APPROVAL MUST BE RENEWED BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS. Approval will be revoked unless a satisfactory status report is received. Any substantive changes in methodology or instrumentation must also be approved prior to their implementation.

☐ 2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. **Do not submit a new application.** Once changes are deemed acceptable, ethical approval will be granted.

☐ 3. ACCEPTABLE SUBJECT TO CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. **Do not submit a new application.** Once changes are deemed acceptable, ethical approval will be granted.

☐ 4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or redesign. Please contact the Chair of the REB for advice on how the project proposal might be revised.

Dr. Bruce Plouffe

cc: Dr. Harold Riemer, Kinesiology & Health
**supplementary memo should be forwarded to the Chair of the Research Ethics Board at the Office of Research Services (AH 505) or by e-mail to research.ethics@uregina.ca**
Appendix D: Facebook Email Sent to Potential Research Participants

Subject: Invitation to Complete Saskatchewan Roughrider Fan Survey

Body of Email:

Hello!

As a member of 'I Bleed Green' and a fan of the Saskatchewan Roughriders, I am inviting you to take 5 minutes out of your day and fill out the Saskatchewan Roughrider Fan Survey! Results of the survey are not for commercial purposes, but will be analyzed as part of graduate level research completed at the University of Regina.

For your time, you will be entered to win a game signed football by the 2007 Saskatchewan Roughrider Grey Cup Champion Team. All of the results are confidential but you will need to follow a specific link and use a unique password to log on and complete the survey.

To receive the link to the survey and a unique password simply respond to this message.

The winning entry will be chosen by the password used and I will contact you via email if you are the winner.

Regards,
Sandra
Appendix E: Survey Link and Unique Password

Subject: Link to Survey and Unique Password

Body of Email:

Thank you for taking part in this survey. Your time is appreciated.

Please follow this link to complete the survey:
http://classclimate.cc.uregina.ca/classclimate/online

Your unique password is – HQPS1

Regards,
Sandra
Appendix F: Saskatchewan Roughriders Fan Survey

1. A Research Study of Fan Loyalty to the Saskatchewan Roughriders

Thank you for agreeing to participate in the Fan Loyalty research project. The decision about whether to participate is yours alone. Although you are not obliged to participate in any way, your cooperation (and participation) is very important to the success of this research project.

Based on the information you have received about this study, your consent to take part in this research project is implied since you have chosen to access this questionnaire. Your decision to participate also indicates you are at least 18 years of age.

Participation in the research study will require that you complete and submit the online questionnaire which follows. Survey completion will generally take between 10-15 minutes.

Your responses to all of the questions will remain anonymous. Confidentiality of your responses and the information provided is assured. All data will be analyzed and reported on aggregate basis, not on an individual basis. There are no physical or psychological risks associated with participating in this research. You may withdraw from this study at any time without penalty.

If you have any questions or concerns that have not been answered in the previous statement, you may contact Harold Riemer (306.585.4372 or harold.riemer@uregina.ca) or Sandra Jackie (306.790.1789 at riderfansurvey@gmail.com).

The University of Regina Research Ethics Board has approved this project. If you have any questions or concerns about your rights or treatment as a research participant, you may contact the Chair of the Research Ethics Committee, Dr. Joan Roy at (306) 585-4775 or e-mail: research.ethics@uregina.ca.

Thank you for participating in this important research.

Please continue to the next page for important instructions about completing the questionnaire...
2. General Instructions

Questionnaire items are based on a seven-point scale. For example, the first set of questions has a scale ranging from: 1 (strongly disagree) to 7 (strongly agree).

Please indicate your opinion/feelings by clicking on the dot that best represents you. There are no right or wrong answers.

It is important that you complete every question - even if you think you have answered it before.

If you have any questions about completing the survey, please feel free to contact Sandra at (306) 790-1789 or by email at riderfansurvey@gmail.com.

Thanks again for taking part in this important and timely project.

Please proceed to the next page to begin the questionnaire...
3. This section includes questions about your relationship with the Saskatchewan Roughriders football team.

For the following questions, please mark the box/dot that best represents your view/feeling/opinion. Remember to answer each question.

3.1 I would watch a Saskatchewan Roughriders football game regardless of which team they are playing. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.2 Being a fan of the Saskatchewan Roughriders is important to me. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.3 I am a committed fan of the Saskatchewan Roughriders. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.4 I could easily be persuaded to become a fan of another team, other than the Saskatchewan Roughriders. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.5 If my close friends were fans of another team, I would still be loyal to the Saskatchewan Roughriders. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.6 It would be difficult to change my beliefs about the Saskatchewan Roughriders. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.7 My commitment to the Saskatchewan Roughriders would decrease if the team was performing poorly. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.8 I would rethink my loyalty to the Saskatchewan Roughriders if management traded away its best players. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.9 My loyalty to the Saskatchewan Roughriders would not be affected if management hired a coach that I disliked. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.10 It is unlikely I would change my loyalty from the Saskatchewan Roughriders to another Canadian Football League Team. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.11 My commitment to the Saskatchewan Roughriders would decrease if there was little chance performance would improve. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.12 I have been a fan of the Saskatchewan Roughriders since I began watching professional sports. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.13 I might rethink my loyalty to the Saskatchewan Roughriders if they consistently perform poorly on the football field. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.14 You can tell a lot about a person by their willingness to stick with the Saskatchewan Roughriders when the team is not performing well. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

3.15 Nothing could change my loyalty to the Saskatchewan Roughriders. [Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]
4. This section includes statements about your involvement with the Saskatchewan Roughriders football team.

*For each item, choose the box/dot along the continuum that best describes your own situation.*

<table>
<thead>
<tr>
<th>Class Climate</th>
<th>Saskatchewan Roughrider Fan Survey - Facebook</th>
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<tbody>
<tr>
<td>4.1 I am satisfied with my relationship with the Saskatchewan Roughriders.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.2 Watching other Canadian Football League teams is appealing to me.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.3 I have invested a great deal into the relationship that I have developed with the Saskatchewan Roughriders.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.4 I want my relationship with the Saskatchewan Roughriders to last for a very long time.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<td>4.5 My relationship with the Saskatchewan Roughriders is much better than other fan's relationship with their favourite team.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.6 There are other things I would rather do with my spare time than be a fan of the Saskatchewan Roughriders.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.7 My life has become linked to my relationship with the Saskatchewan Roughriders (conversations, watching games, merchandise purchased).</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.8 I am committed to maintaining my relationship with the Saskatchewan Roughriders.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.9 My relationship with the Saskatchewan Roughriders is close to ideal.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.10 If I stopped cheering for the Saskatchewan Roughriders, I would find another team to call my favourite.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.11 I am very involved in my relationship with the Saskatchewan Roughriders.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<td>4.12 I would not be upset if the Saskatchewan Roughriders were no longer a football team</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.13 The Saskatchewan Roughriders make me very happy.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<td>4.14 Alternatives to being a fan of the Saskatchewan Roughriders are attractive to me (spending time with friends or on my own, cheering for another team, etc.).</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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<tr>
<td>4.15 If I stopped being a fan of the Saskatchewan Roughriders I would lose relationships with others.</td>
<td>Strongly Disagree □ □ □ □ □ □</td>
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</table>
4. This section includes statements about your involvement with the Saskatchewan Roughriders football team.
For each item, choose the box/dot along the continuum that best describes your own situation. [Continue]

<table>
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<tr>
<th>Item</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
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<tr>
<td>4.16</td>
<td>It is likely I will become a fan of a Canadian Football League team other than the Saskatchewan Roughriders within the next year.</td>
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<td>4.17</td>
<td>My relationship with the Saskatchewan Roughriders fulfills my needs.</td>
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<td>4.18</td>
<td>My needs fulfilled by the Saskatchewan Roughriders could easily be fulfilled by another Canadian Football League team.</td>
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<td>4.19</td>
<td>Compared to other fans I know, I have invested a great deal in my relationship with the Saskatchewan Roughriders.</td>
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<td>4.20</td>
<td>I am very attached to the Saskatchewan Roughriders.</td>
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5. This section includes statements about your relationship with the Saskatchewan Roughriders football team.
For each item, choose the box/dot along the continuum that best describes your own situation.

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<tr>
<th>Item</th>
<th>Statement</th>
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<td>5.1</td>
<td>My relationship with the Saskatchewan Roughriders is:</td>
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<td>5.5</td>
<td>My relationship with the Saskatchewan Roughriders:</td>
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6. This section includes questions about your commitment to the Saskatchewan Roughriders football team.

For the following questions, please identify the box/dot that best describes your own view.

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<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
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<tr>
<td>6.1 My relationship with the Saskatchewan Roughriders is important to my self-image.</td>
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<td>6.2 I regret being a fan of the Saskatchewan Roughriders.</td>
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<td>6.3 I am proud to be a Saskatchewan Roughrider fan.</td>
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<td>6.4 I dislike being a Saskatchewan Roughrider fan.</td>
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<td>6.5 I do not identify myself as a Saskatchewan Roughrider fan.</td>
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<td>6.6 I am enthusiastic about being a Saskatchewan Roughrider fan.</td>
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<tr>
<td>6.7 I have invested too much into being a fan of the Saskatchewan Roughriders to consider changing now.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.8 Changing my allegiance from the Saskatchewan Roughriders to another team would be difficult for me to do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.9 Too much of my life would be disrupted if I were no longer a fan of the Saskatchewan Roughriders.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.10 It would be costly for me to stop being a fan of the Saskatchewan Roughriders.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.11 There is no pressure to stop me from becoming a fan of another Canadian Football League team.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.12 It would be a considerable sacrifice to stop being a Saskatchewan Roughrider fan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.13 I see myself becoming an even bigger fan of the Saskatchewan Roughriders than I am now in 10 years.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Saskatchewan Roughrider Fan Survey - Facebook

7. *This section includes statements about change and variation.*

*For the following questions, please indicate the extent the item describes you.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Completely False</th>
<th>Completely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 I like to continue doing the same old things rather than try new and different things.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 I like to experience novelty and change my daily routine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3 I like a job that offers change, variety and travel, even if it involves some risk.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.4 I am continually seeking new ideas and experiences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5 I like continually changing activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.6 When things get boring, I like to find some new and unfamiliar experience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.7 I prefer a routine way of life to an unpredictable one full of change.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. These next few questions ask about television viewing habits and the amount of money you have spent on Rider tickets and merchandise in the past year.

Please fill in the blanks with your answers.

8.1 Please estimate the amount of money you have spent on tickets to Saskatchewan Roughrider games (home and away) during the past season (2007).

8.2 How many Saskatchewan Roughrider HOME games have you attended this past season (2007)?
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10
   - 11

8.3 How many Saskatchewan Roughrider AWAY games have you attended this past season (2007)?
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10
   - 11

8.4 How many Saskatchewan Roughrider games have you watched on television this past season (2007)?
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10
   - 11
   - 12
   - 13
   - 14
   - 15
   - 16
   - 17
   - 18
   - 19
   - 20
   - 21
   - 22

8.5 Please estimate the amount of money spent on Saskatchewan Roughrider merchandise in the past year. (January - December 2007)

8.6 At what age did you attend your first Saskatchewan Roughrider Game?

8.7 At what age did you watch your first Saskatchewan Roughrider game on Television?
8. These next few questions ask about television viewing habits and the amount of money you have spent on Rider tickets and merchandise in the past year.

*Please fill in the blanks with your answers.* [Continue]

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8 Have you purchased a Saskatchewan Roughrider Share?</td>
<td>□ Yes</td>
<td>□ No</td>
</tr>
<tr>
<td>8.9 Are you a member of Riderville?</td>
<td>□ Yes</td>
<td>□ No</td>
</tr>
</tbody>
</table>
9. This final section asks questions about some basic demographic information. All information will be kept confidential, and cannot be related to your personal identity in any way.

Please fill in the blanks with your answers.

9.1 Please state your Age:

9.2 Please estimate your annual personal income (2007):

9.3 Please indicate your Sex:  □ Male  □ Female
10. Please ensure you click the Submit button below for successful completion of the questionnaire.

Thank you very much for taking part in this research project.