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Research Article

DEVELOPING A MODEL OF SPORT CONSUMPTION BASED ON PERCEIVED RISK

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ABSTRACT
An important factor that affects consumer behavior is perceived risk. The purpose of this study was to provide a model of sport consumption based on customers' perceived risk. In this descriptive-analytical research, a researcher-made questionnaire was used for data collection. The population consisted of 4000 male students of Saveh Branch of Islamic Azad University. Using Morgan's Table, 370 questionnaires were randomly distributed among a sample of students which 359 were returned. After determining content validity (by experts), construct validity (by confirmatory factor analysis), and reliability (by Cronbach's alpha), the data were analyzed using structural equation modeling in LISAREL. The results showed that the components of perceived risk (financial/time risk, performance risk, psychological/social risk, and physical risk) are significant predictors of behavioral intentions (attendance, recommendation to others, merchandise purchase, and media consumption) (NFI = 0.94, CFI = 0.94, NNFI = 0.92, RMSEA = 0.05, $\chi 2/df = 2.51$). The results also indicated that managers and marketers must consider the positive and negative effects of perceived risk on sport consumption behavior during all the steps of their planning process.

Keywords: *Sport Consumption Behavior, Perceived Risk, Behavioral Intentions*

INTRODUCTION
Bad economic conditions has significantlyinfluencedthe behavior of sport consumers, including spectators, participants, and buyers of goods and service. Therefore, it is very important to study sport consumer behavior. Consumer behavior focuses on how and why customers choose to spend their money on buying goods and services. However, assessing consumption behavior is challenging, since it is difficult and costly to distribute questionnaires during purchase and consumption. Also based on the theory of planned behavior and the theory of reasoned action, behavioral intention is studied as the referent of actual behavior (Ajzen, 2005; AjzenandFishbein, 1980). These theories state that intention is the main predictor of behavior.

Ajzen defines behavioral intention as an indication of an individual's readiness to perform a given behavior. Thus, behavioral intention can be studied as a determinant of future consumption (Eggert and Ulaga, 2002).

There are many factors that affect consumer behavior and their buying decisions. One of the most comprehensive models for describing consumer behavior is the consumer decision-making model. The inputs of this model are external factors such as marketing activities of organizations within the framework of marketing mix (4Ps)—i.e. product, price, promotion, and place. Other inputs or the sociocultural environment include such factors as social class, culture, and subculture. Process components in this model are internal factors such as motivation, perception, learning, personality, and attitudes. Buying decision process involves three steps: (1) need recognition, (2) information search, and (3) evaluation of alternatives. These steps are followed by purchase decision and post-purchase behavior.

Consumer perception is an important internal factor that affects consumer decisions. This construct has three dimensions: perceived quality, perceived price, and perceived risk. The present research focuses on perceived risk as an important determinant of sport consumer behavior. Haddock (1993) defines perceived riskan individual's subjective assessment of the real risk present at any time, which can be different for each product, service, or activity (Haddock, 1993) Researchers tend to focus on perceived risk instead of actual risk (Bauer, 1960) because people are generally more concerned with the results of a

purchase, not the possible risks associated with it (Budescu and Wallstein, 1980). In fact, perceived risk can affect purchasing decisions even when there is no actual risk (Reiche *et al.*, 2007). Moreover, high actual risk cannot have any effect on purchasing decisions in the absence of perceived risk. Research has shown that people decide based on perceived risk rather than actual risk (Irvine and Anderson, 2006).

Any purchase necessarily involves some amount of risk. Perceived risk has different dimensions, including financial, physical, performance, social, time, and psychological. The amount of perceived risk can affect purchasing behavior.The effect of perceived risk on customer behavior, tourism, and recreation has been examined, but to our knowledge, little attention has been paid to its effect on sport consumers.

In the spectator sports industry, the main product is the sport event that, like any other service, is characterized by intangibility, heterogeneity, and perishability (Mullin *et al.*, 2007; Shank, 2005). Since the sport event is customer-based, it involves a higher level of perceived risk. In addition to the unique characteristics of sports and the distinctive behaviors of sport consumers, the study of perceived risk in the context of tourism and recreation is not applicable to the sports industry.

In the sports industry, perceived risk acts as a barrier to attendance and other behavioral intentions in sport consumers which has not been fully understood. Therefore, this research tries to study the effect of perceived risk (financial, physical, performance, social, time, and psychological risk) on the behavioral intentions of sport customers (attendance, recommendation to others, team merchandise, and media consumption).

MATERIALS AND METHODS

Methodology

The present research is descriptive-analytical. Two questionnaires developed by the researchers have been used for data collection. The first one examines perceived risk with 4 subscales and 26 items (financial/time risk with 9 items, performance risk with 5 items, psychological/social risk with 5 items, and physical risk with 7 items), and the second one examines the behavioral intentions of spectators with 4 subscales and 16 items (attendance intentionwith 4 items, recommendation to others with 4 items, merchandise purchase with 4 items, and media consumption with 4 items). Both questionnaires were rated on a 5-point Likert scale. The population consisted of 4000 male students of Saveh Branch of Islamic Azad University (IAU). Based on Morgan's Table, 370 students were randomly selected as the sample. 359 students completed and returned the questionnaires. Face and content validity of the instruments was confirmed by the researchers andmanagement experts after minor modifications. Structural equation modelling (SEM) was used in LISREL to analyze the data and examine the construct validity of the model. SEM is based on confirmatory factor analysis (CFA) and path analysis (PA).

RESULTS AND DISCUSSION

Results

The descriptive data show that among the participants, 104 students are 18-22 years old (about 29%), 157 students were 21-23 years old (about 44%), 617 students were 25-26 years old (about 17%), and 37 students were older than 26 years (about 10%). Also 111 students were freshmen, 95 students were sophomores, 87 students were juniors, and 66 students were seniors. Furthermore, 66 students studied agriculture (about 18%), 99 students studied humanities majors (about 27%), 52 students studied fundamental sciences (about 14%), and 142 students studied engineering (about 39%).

The results showed that "concern about games being held during business days" (3.66 ± 1.15), "concern about time being wasted before and after the game due to congestion" (3.53 ± 1.30), and "concern about ticket prices" (3.33 ± 1.16) were respectively the most important financial/time risks.

Also "performance of the players" (3.70 ± 1.15), "lack of stars in the games" (3.63 ± 1.12), and "team's position in the league table" (3.34 ± 1.23) were respectively the most important performance risks.

Moreover, "attendance of a specific social class" (2.91 ± 1.22), "being among a group of strangers" (2.74 ± 1.16), and "unexpected concerns as a result of participation in sports" (2.57 ± 1.12) were respectively the most important psychological/social risks. Results also showed that "quality of stadiums" (3.82 ±

1.09), "lack of easy access to game tickets", (3.69 ± 1.12), and "distance to stadiums" (3.48 ± 1.11) were the most important physical risks.

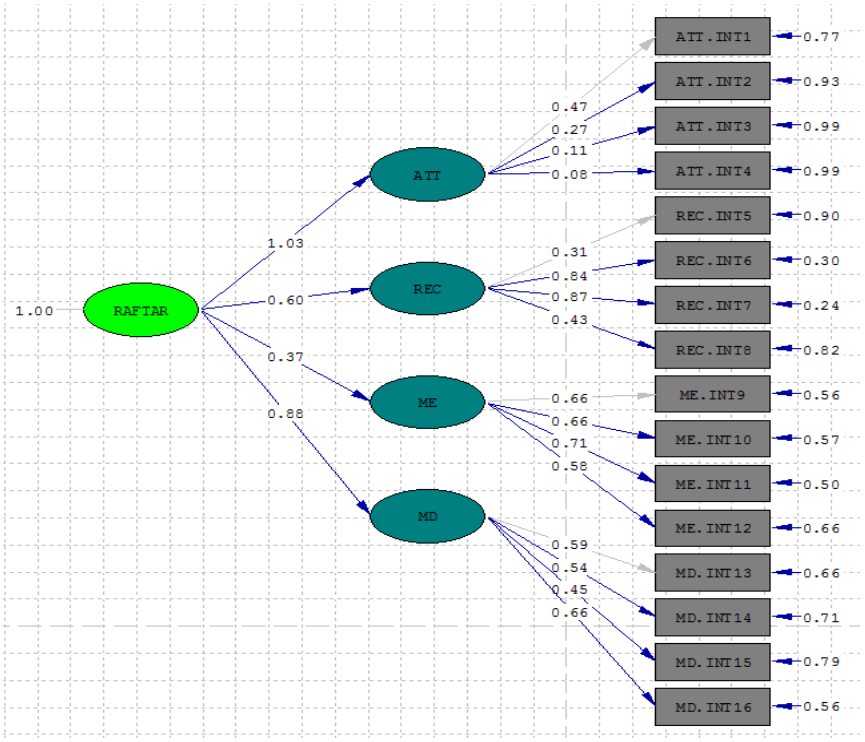
"Tendency to watch the games of one's favorite teams on television" (3.64 ± 1.04) was the most important item in the attendance intention subscale. Further, "the consumer's tendency to talk about the positive aspects of watching the games" (3.43 ± 1.13)was the most important item in the recommendation subscale."Tendency to wear the favorite team's jersey" (2.88 ± 1.27) was the most important item in the merchandise purchase subscale. "Tendency to read about one's favorite team in the newspaper" (3.53 ± 0.95) and "tendency to watch the news about one's favorite team on television" (3.53 ± 10.4) were the most important items in the media consumption subscale. In general, the results indicated that performance risk had the highest mean (3.39) among the components of perceived risk, and media consumption had the highest mean (3.41) among the subscales of behavioral intentions.

The next step was to analyze the construct validity of the model using first-order and second-order confirmatory factor analysis. To this end, each of the final constructs of the model (perceived risk and behavioral intentions) was examined using CFA. The results indicated that both perceived risk (NFI = 0.96, CFI = 0.95, NNFI = 0.95, RMSEA = 0.06, $\chi 2/df = 1.05$) and sport consumption intentions (NFI = 0.92, CFI = 0.90, NNFI = 0.90, RMSEA = 0.08, $\chi 2/df = 1$) fit the data (Figures 1 and 2).

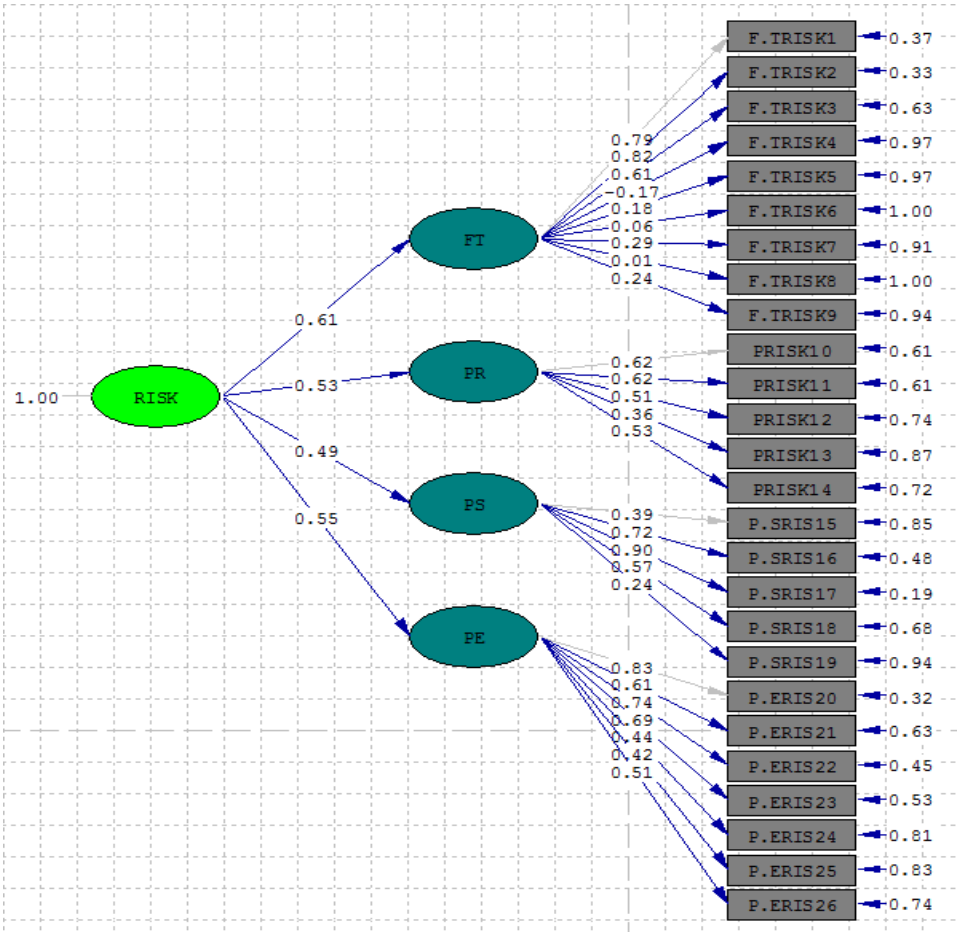
After examining the construct validity of the models, path analysis through structural equation modeling (SEM) was used to test the research hypotheses. Figure 3 (the main model of the research) shows the effect of perceived risk on behavioral intentions. Test values higher than 1.96 or lower than -1.96 indicate the significance of the relationships. The results of SEM (Figure 3) show that the relationship between financial/time risk, attendance intention(r = 0.03 atthe -1.99 significance level), and media consumption (r – 1.19 at the 1.19 significance level) statistically significant.

In other words, financial/time risk has a significant negative effect on attendance intention and a significant positive effect on media consumption. The results of SEM also show that performance risks have a significant negative effect on attendance intention (r = 2.20 at the -5.12 significance level).

Moreover, performance risks have significant negative effect on recommendation to others (r = 0.41 at the -2.70 significance level) and media consumption (r = 0.70 at the -4.44 significance level). Therefore, performance risks are negatively associated with sport consumption behavior.



Research Article



Based on the results of SEM, psychological/social risks have a significant negative effect on attendance intention (r = 1.19 at the -2.12 significance level), recommendation to others (r = 0.20 at the -2.81 significance level), and merchandise purchase (r = 0.12 at the -2.19 significance level). Thus, psychological/social risks generally have a negative effect on sport consumption behavior.

Finally, physical risks have a significant negative effect on attendance (r = -0.01 at the -2.41 significance level) and a significant positive effect on media consumption (r = 0.11 at the 2.01 significance level). Fitness indices for path analysis showed suggested the validity of the results of the model (NFI = 0.94, CFI = 0.94, NNFI = 0.92, RMSEA = 0.05, $\chi 2/df = 2.51$).

Discussion And Conclusion

(Soderlund, 2006) argues that along with repurchase intentions, verbal advertisement (or recommendation to others) is an important factor in examining consumer behaviors (Soderlund, 2006). Recommendation to others is the degree to which a customer recommends a product or service that they have previously used to potential customers (Zeithaml, 2006).

Considering the present findings and consistent with the findings of James and Trail (2008) and Murray and Howat (2002), recommendation to others has no special place in consumer behaviors and perceived financial/time risk does not significantly affect these behaviors, because there are many consumers that sense financial/time risk but still support their favorite team, talk about it constantly, and recommend its games to others (Trail, 2008; Murray and Howat, 2002).

Fans purchase and use team merchandise as a means to increase their self-confidence, because this way they show their association with a sport identity (Kwon *et al.*, 2004; Cialdini *et al.*, 1976) showed that fans of collegiate sports tend to support their favorite team by buying the team's merchandise (Cialdini *et al.*, 1976).

Also Hong and Yi (2012) studied the effect of perceived risk on customer online purchase decisions and found that perceived risk is an important factor that negatively affects purchase decisions. This study showed that financial risks is the most important risk in all the stages of online shopping process (Hong and Yi, 2012). Khedmatgozar *et al.*, (2010) showed that time risk is the most important factor that decreases customers' willingness to accept internet banking in Iran. Also Mullah-Hosseini and Jabarzadeh (2011) examined the effect of risk, value, and price awareness on people's tendency to purchase grey market goods and showed that perceived financial risk has a significant negative effect on consumers' attitudes (Mullah-Hosseini and Jabarzadeh, 2011).

The present findings show that the effect size of financial/time risks on consumption intentions is -0.04 at the -0.41 significance level. Thus, contrary to the above studies and any other study that has focused on non-sports goods, we found that financial/time risks had no significant effect on purchasing team merchandise. By reflecting on the items of the questionnaire and comparing them to those of other studies, we find that buying and collecting a team's goods is a sign of fans' loyalty to the team. Sometimes fans are even willing to spend several times the price of a normal jersey to buy the jersey of their favorite players, and a player's jersey is at times put on auction. Therefore, even if sport consumers perceive the risks of spending much time at an auction or paying a lot of money, they do not consider it an actual risk. However, when buying daily goods and necessities, consumers immediately look for alternatives when they perceived a financial or time risk. Therefore, financial/time risk has no significant effect on purchasing team merchandise.

The present findings showed that financial/time risks have a significant negative effect on attendance intention. This is consistent with the results of Cunningham and Kwon (2003) who examined consumers' intentions to attend collegiate hockey games and noted the importance of perceived risk in collegiate sport attendance (Forsythe and Shi, 2003) Also Forsythe and Shi (2003) found that financial and time loss risks had the greatest effect on online purchase decisions (Murray and Schlacter, 1990). The more the risk perceived by the spectators, the less will be their willingness to attend sport events, and they may search for alternative consumption behaviors such as watching the games from the television or following the game news through television, radio, or internet sources. Thus, financial/time risk has a significant negative effect on attendance intention and media consumption.

Based on the present findings, time loss is one of the most important risks perceived by customers, and this risk is more predominantly felt in Iran. This can be due to the lack of appropriate transportation system, ineffective ticket sale systems, and lack of proper strategies for controlling traffic inside and outside stadiums.

Managers need to reflect and pay attention to these factors in order to benefit from the sponsorship and ticket and merchandise sale revenues.

Sport performance is incontrollable and often unpredictable, and this is a major problem for organizers of sport events. Spectators pay a specific, fixed price for attending games, but the benefits they receive depend on the performance of players. A game may turn into an enjoyable and unforgettable experience for the fans of the winning team, and they may feel satisfied with the results (high-quality competition in an exciting and desirable environment). However, the fans of the losing team may feel that the players' performance has not been worth the money they have spent for attending the game. The uncertainty associated with sport events made us examine performance risk as a central aspect of perceived risk.

Consistent with the results of (Murray and Schlacter, 1990; Carrole *et al.*, 2010), and Forsythe and Shi (2003), our findings showed that performance risks significantly affect attendance intention.The present research showed that sport products such as events have the distinctive characteristics of services, but perceived performance risk can reduce attendance and even media consumption as well as the enthusiasm to follow games and team-related news. Therefore, event managers must pay attention to these risks and their negative impacts on viewership.

The results of the present research, consistent with the findings of (Lee *et al.*, 2006), showed that performance risk has a negative effect on recommendation to others and, as a result, on consumption behavior.Obviously, if fans do not perceive the performance of their favorite players as desirable, they

will never recommend watching their games to others, even on television, because they believe that this will compromise their credibility and reputation.

Contrary to the results of (Sheau-Fen *et al.*, 2012), our findings showed that perceived performance risk has no significant effect on merchandise purchase behavior of fans. That is because fans love their favorite team and players so much that even a short-term period of undesirable performance cannot discourage them from buying the merchandise and brands of their team.

Social risk relates to the consideration consumers give to the thoughts and views of others about their purchase.It is concerned with an individual's ego and the effect that a purchase will have on the opinions of reference groups (Jacoby and Kaplan, 1972). It has been shown that services are associated with higher social risk than products. In sport events, spectators often find themselves among a large group of people that may be total strangers. In addition, spectators supporting a losing team may experience a specific level of social risk by tolerating what others think of them, and this can potentially affect their future attendance and merchandise purchase behaviors.

Social risk can also involve the feeling that participation in a sport event will damage one's personality and self-image. When a person attributes a certain level of risk to the purchase of a product or service, this consciously or unconsciously creates stress in them.

Consistent with the results of (Cunningham and Kwon, 2010; Stone and Gronhaug,1993), we found that perceived social/psychological risks have a significant negative effect on attendance in sport events. If fans feel that the results of their favorite team will damage their personality and social and self-image. As a result, they will refuse to attend these events and may opt for alternative behaviors such as watching the game at home and away from others. This will lead to reduced media consumption. Moreover, contrary to the views of (Smith et al,1981), although fan loyalty can be effective, social/psychological risks may prevent fans from recommending the game to others (Hong and Yi, 2012) came to a similar conclusion. They argued that perceived performance risks does not affect the fans' tendency to purchase team merchandise, but when their personality and reputation are at stake, their purchase behavior will be negatively affected.

Physical risks relate to concerns for personal safety. People may be concerned about attending sport events due to the possibility of physical damage (Murray and Schlacter, 1990). (Laroche *et al.*, 2004) found that intangibility, one of the most important features that distinguish services from products, was the least correlated to the consumers' perception of risk. In a sports viewership context, physical risk include concerns about attending an event. For instance, congestion is an important issue for football fans, and exists inside and outside the stadium and can lead to physical damage, especially when the fans are emotionally charged with their team's win or loss. Physical risk also relates to damages caused by environmental issues. Games are often held in very cold or warm weather as well, and thus proper services must be provided for participants at such times. For instance, in hot summer days cold water can be provided to the spectators for free. Otherwise, people will perceive a great deal of risk in attending sport events, which can negatively affect their attendance.

Our findings, consistent with the results of (Wakefield and Sloan, 1995), showed that if sport fans perceive high levels of physical risk, such as poor stadium conditions, their attendance will suffer and they will choose alternative behaviors. As a result, their media consumption increases. Also consistent with the results of (Sierra *et al.*, 2012), we found that perceived physical risk has no significant effect on recommendation to others and merchandise purchase. This may be due to the fact that recommendation behavior has various dimensions and does not merely include physical attendance in the stadiums. It is a function of fan loyalty and thus it is not affected by physical risks.

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