Structural Relationships among Market Demand and Psychological Constructs toward Martial Arts Participation

Min Kil Kim, Troy University
Sophia D. Min, University of Florida
James J. Zhang, University of Florida

Marketing Abstract 2011-225
Saturday, June 4, 2011
4:30 PM
20-minute oral presentation
(Room 35)

Participation in physically active recreation and sports has increased tremendously in recent years, primarily due to the elevated level of individual consciousness of fitness and health. Along with various forms of sport activities, martial arts have increasingly become a popular recreational pursuit in Western countries. Martial arts are widely considered as valuable participatory activities for a variety of purposes, such as prevention of criminal victimization, personal growth and discovery, life transition, and task performance (Columbus & Rice, 1991). According to SGMA International (2010), there are currently about 6.9 million martial arts participants in the U.S., an increase of 28% since 2004. Although the current trends of growth in the number of martial arts schools are generating new opportunities for martial arts enthusiasts, the rapid growth rate has resulted in a highly competitive business environment in North America. Business success and future growth in a highly competitive market environment depends on how well martial arts organizations understand their consumers and adapt to changes in consumer demand. It is important for the administrators of martial arts programs to identify common and unique market demand variables that directly affect an individual's decision to attend a program, where market demand variables are conceptualized as consumer expectations toward attributes of the core product (Kim, Zhang, & Ko, 2009). Previous market demand studies have examined how market demand factors directly affect consumption behaviors; however, with this approach only a limited amount of variance was explained, typically lower than 20% (Kim et al., 2009; Zhang, Lam, & Connaughton, 2003). These previous studies failed to consider the psychological processes typically associated with martial arts participation, thus limiting their explanatory power and usefulness in the development of marketing interventions, which is particularly true for martial arts participation.

The purpose of this study was to develop and test a theoretical framework that specified direct and indirect relationships among market demand, perceived benefits, perceived constraint, perceived value, consumer satisfaction, and consumption behavior of participants in martial arts programs. A comprehensive review of literature was first conducted. Through studying martial arts school members, Kim and Zhang (2010) identified six market demand dimensions of martial arts programs: Personal Improvement Activities, Physical Facility Quality, Instruction Staff Quality, Program Activities Offerings, Cultural Learning Activities, Economic Condition Consideration, and Locker Room Provision. Perceived benefits are constituted of some integration of physical attributes, service attributes, and technical support available in relation to the particular use of a product or offering (Monroe, 1990). Based on this concept, perceived benefits of martial arts training can be interpreted as the participants’ perception of gains from participation in martial arts programs. Martial arts have been widely considered as inculcating physical and mental relaxation, and control of mind and body that are associated with self-confidence and esteem (Mathes & Battista, 1995). Perceived constraints are defined as those variables “perceived or experienced by individuals to limit the formation of leisure preferences and to inhibit or prohibit participation and enjoyment in leisure” (Jackson, 1997, p. 461). Perceived constraints have received increased research attention in recent years because they are one of the most critical factors in predicting consumer behavior in various industrial contexts, such as general business, leisure, tourism, and sport management (Alexandris & Carroll, 1997; Crawford, Jackson, & Godbey, 1991; Kim & Trail, 2010). Perceived value is a “customer’s perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goal and purposes in use situations” (Woodruff, 1997, p. 142). It has been identified to be one of the critical variables in predicting consumption behavior (Bolton & Drew, 1991; Kwon, Trail, & James, 2007). Substantial evidence supports the important role of perceived value as a mediating factor in the relationship between service quality and consumption behavior (Cronin, Brady, Brand, Hightower, & Shemwell, 1997). Perceived value was found to influence customer satisfaction, which subsequently led to positive behavior intentions. Thus, consumer satisfaction was found to be a critical predictor of behavior outcomes as a mediating factor (Eggert & Uлага, 2002). A study on the relationships among customer satisfaction, affective commitment, and consumer perception of risk associated with a service organization revealed that satisfaction had a positive influence on commitment and a negative influence on perceived risk (Johnson, Sivadas, & Garbarino, 2008).

Research participants (N = 595) for this study were Taekwondo school participants, who resided in the U.S. and voluntarily responded to a survey packet that included multiple segments. To measure market demand, Kim et al.’s (2009) was modified, which was accomplished through conducting a CFA. The modified scale contained 37 items under seven factors (Personal Improvement Activities, Physical Facility Quality, Instruction Staff Quality, Program Activities and Offerings, Cultural Learning, Locker Room Provision, and Economic Condition Consideration). The personal benefits section was comprised of two subscales (Psychological Benefit and Physical Benefit) with a total of 12 items (Cheng et al., 2003; Kim et al., 2009). To measure...
perceived constraints, items in the Leisure Constraints Scale (Alexandris & Carroll, 1997) were modified. Perceived value was measured with four subscales (Emotion, Quality, Price, and Social) with a total of 11 items that were adapted from Sweeney and Soutar’s PERVAL scale (2001). Conducting a CFA revealed that the initial overall measurement model was satisfactory (S-B $\chi^2/df$ (4520/2293) = 1.97, $p < .01$; RMSEA = .040; CFI = .920; SRMR = .047). Conducting a SEM analysis, the fit indices revealed that S-B $\chi^2/df$ (5044.8/2391) = 2.11, $p < .01$; RMSEA = .043; CFI = .905; SRMR = .068. The market demand latent variable directly affected perceived benefits, perceived constraints, and perceived value, and indirectly affected perceived value, member satisfaction, and member commitment. All of the direct and indirect paths were statistically significant ($p < .05$). An amalgamation of the market demand factors had positive effects on perceived benefits ($\beta = .73, p < .01$), perceived constraints ($\beta = -.38, p < .01$), perceived value ($\beta = .72, p < .01$), member satisfaction ($\beta = .58, p < .05$), and member commitment ($\beta = .28, p < .01$). In addition, the effect of perceived benefits on perceived value was positive and statistically significant ($p < .05$), where perceived benefits was positively predictive of perceived value ($\beta = .25, p < .001$). On the other hand, perceived constraints were not found to be predictive of perceived value. The tested structure model in this study has provided in-depth information about the relationships of market demand factors to a number of exogenous belief-attitude-intention constructs, which has provided researchers and practitioners with needed evidence to develop effective marketing strategies and campaigns by tapping into such key concepts as perceived benefits, perceived value, perceived constraints, and member satisfaction when highlighting the core attributes of martial arts programs. Administrators of martial arts programs may also consider the resultant theoretical framework as a general guide in their marketing efforts to recruit and retain program participants.