Participation in physically active recreation and sport has been tremendously increased in recent years due to health and fitness consciousness of people. Of various activities, martial arts have become an increasingly popular in Western countries, and they are widely considered as valuable participation activities within diverse contexts, such as prevention of criminal victimization, growth and discovery, life transition, and task performance (Columbus & Rice, 1991). Over a period of 10 years, the number of martial arts participants in the U.S. increased from 3.8 million in 1993 to 4.6 million in 2004 (Sport Business Research Network, 2008). The National Sporting Goods Association (NSGA) (2004) reported that the most significant increase in participants’ sports from 2002 to 2003 was martial arts, which increased by 15%. In spite of its growing popularity, the martial arts industry has faced challenges in a noticeable rate of attrition. For instance, there were about 5.4 million martial arts participants in 2000, compared with 4.8 million in 2003 and 4.6 million in 2004. Another issue is that the elevated interest in martial arts has increased the magnitude of martial arts market. Although the current trends of growth in the martial arts schools are generating new opportunities for martial arts enthusiasts, rapid growth of the martial arts schools has resulted in a highly competitive business environment in North America.

Membership is the primary income source of martial arts programs (Kim, Zhang, & Ko, 2009); yet, member recruitment and retention are the most challenging for programs as they are a complicated process and involve the understanding of many marketing related variables (Grantham, Patton, York, & Winick, 1998). It is critical for the administrators of martial arts programs to identify target market and understand those variables that directly affect individual decision to attend a program. Of various marketing variables, the concept of market demand has received much research attention recently, which is related to consumer expectations towards the attributes of the core product (Kim et al., 2009). Various researchers have indicated that in-depth analyses of market demand variables for a sport product(s) would enhance the understanding of consumer expectations and accordingly formulate an effective marketing mix for the sport program to succeed in a highly competitive marketplace (Hansen & Gauthier, 1989; Schofield, 1983; Zhang, Pease, Hui, & Michaud, 1995; Zhang, Lam, Bennett, & Connaughton, 2003). Business success and future growth in a highly competitive environment depend on how well martial arts programs understand their consumers and adapt to rapid changes in the demand trend (Kim et al., 2009). Previous market demand studies usually examined how market demand factors directly affected consumption behaviors; by this approach, only a limited amount of variance was explained, typically lower than 20%. This direct approach usually did not consider the psychological processes that are typically associated with martial arts participation (Kim et al., 2009; Zhang et al., 1995; Zhang et al., 2003), thus limiting their explanatory power and development of marketing interventions. To date, no study has been found that examined psychological processes associated with market demand of martial arts participation. Through a comprehensive review of literature, the purpose of this study was to fill the void in the literature by developing a theoretical framework that can be utilized to study direct and indirect relationships among market demand, perceived benefits, perceived constraint, perceived value, consumer satisfaction, and consumption behavior in martial arts programs.

Through studying Taekwondo school members, Kim et al. (2009) identified six preliminary dimensions of market demand for martial arts programs: Personal Benefits, School Operation, Instruction Quality, Program Offering, Locker Room, and Cultural Learning. The perceived benefits of martial arts describe the gain in physical fitness and psychological discipline. 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; Weiser, Kutz, Kutz, & Weiser, 1995). In particular, martial arts training tends to emphasize psychological changes in such aspects as (a) spiritual discipline, (b) leadership skills, (c) reducing mental disorder, and (d) mental ability of self-defense. Positive psychological changes may include enhancement in self-esteem and self-concept (e.g., Columbus & Rice, 1991; Daniels & Thornton, 1990; Finkenberg, 1990). Even though participants generally perceive martial arts programs to be beneficial, some participants tend to magnify various uncertainties and constraints that are often
associated with participation in martial arts. Perceived constraints are “... 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) and they are often factors of hindrance to recreation and sport participation. Constraints were once considered barriers that directly resulted in non-participation, but current research findings indicate that participants are also possible to negotiate the participation process through constraints (Alexandris, Kouthouris, & Girgolas, 2007). Perceived value is defined as "consumer's overall assessment of the utility of a product (or service) based on perception of what is received and what is given" (Zeithaml, 1988. p. 14). It has been identified to be one of the critical variables in predicting consumption behavior (Bolton & Drew, 1991; Chang & Wildt, 1994; Kwon, Trail, & James, 2007; Murray & Howat, 2002). 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). However, little research attention has been devoted to examining the effect of perceived value on martial arts participation. In previous studies on the relationship between perceived value and customer satisfaction, perceived value was found to be positively influencing customer satisfaction (e.g., McDougall & Levesque, 2000). Oliver (1997) defined customer satisfaction as consumer's overall pleasurable fulfillment of the response toward a product, service, or benefit, which is being provided to the customer to satisfy his/her need, desires, and goals. In the current study, satisfaction is formed on customers' previous experience and cumulative evaluations of a martial arts program, which is a key determinant of customer retention, positive word-of-mouth, and sales (Bitner, 1990; Cronin & Taylor, 1992; Gotlieb, Grewal, & Brown, 1994). The success of a sport program depends on the extent to which it can satisfy the customers with quality service. High level of customer satisfaction would be helpful in preventing or reducing customer attritions (Ko & Pastore, 2004; Kotler, 1994). Tsuji, Bennett, and Zhang (2007) examined the relationships among service quality, satisfaction, and behavioral commitment in action sport events and found that the structural relationships were statistically significant.

Following Ajzen and Fishbein’s (1980) Theory of Reasoned Action to predict and understand consumption tendencies through studying the sequential relationships of individual beliefs, attitude, and intention to consumption behavior, a theoretical framework was developed as a result of this review of literature study, which illustrates direct and indirect relationships among market demand, perceived benefits, perceived constraint, perceived value, consumer satisfaction, and consumption behavior in martial arts programs. Discussions are centered on the implications of this framework and its application in directing empirical investigations. It is expected that the derived theoretical framework would provide a sound research direction by building linkages from market demand to perceived benefits, perceived constraints, perceived value, satisfaction, and consumption. Administrators of martial arts programs may also consider the derived theoretical framework as a general guide in their marketing efforts to recruit and retain program participants.