

Reversing the tide of sport globalization from west to east? Examining consumer demand for table tennis clubs in the U.S.

Reversing the
tide of sport
globalization

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Yi Zhang

Department of Physical Education, Shanghai University, Shanghai, China

Minkil Kim

*School of Hospitality, Sport, and Tourism Management, Troy University,
Atlanta, Georgia, USA*

Jerred Junqi Wang

*Department of Sport Management, Wellness and Physical Education,
University of West Georgia, Carrollton, Georgia, USA, and*

Brenda Pitts

*Department of Kinesiology and Health, Georgia State University, Atlanta,
Georgia, USA*

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Abstract

Purpose – By using table tennis as an example and conducting an in-depth investigation into the impact of market demand factors on membership consumption of table tennis club members in the USA, the purpose of this paper is to illustrate the opportunities and marketing efforts needed for Asian sports to survive and thrive in North America, in which consumer demand factors assessing core program features of table tennis clubs were found to be very influential of cognitive, affective, and behavioral consumptions of table tennis club members.

Design/methodology/approach – Through conducting a review of literature, observations of club operations, and interviews of club administrators and club members representing various table tennis clubs, a preliminary questionnaire was formulated for this study. The initial questionnaire was submitted to a panel of five experts, for a test of content validity. By incorporating their suggestions, editing was made to improve a number of the items in the questionnaire. Data collection took place in two national table tennis tournaments, two local tournaments, and six table tennis clubs. Procedures in SPSS 19.0 (SPSS, 2009) and Mplus 5.21 were carried out for data analyses.

Findings – The findings of this study are that market demand factors would be significantly related to consumer perceived benefits and perceived value, and in turn related to consumer satisfaction of table tennis club membership. The market demand factors had a positive impact on perceived value and benefits confirmed the theoretical framework and previous research findings, which also made a practical sense that a table tennis club needs to offer product features and meet expectations of its current and potential members in order to enhance program value and benefits perceived by its members.

Originality/value – The past two decades have marked the speediest rise of a globalized sport production and consumption trend. In an era of globalized sport marketplace, sports have become a business commodity to meet the needs of commerce. For an Asian sport to penetrate into the North American marketplace as table tennis has done, it would be wise to develop regional network, strategies, product, and promotions. It is expected that table tennis as a popular Asian sport will continue being spread to other parts of the world; thus, the findings of this study have potential relevance to promoting table tennis globally.

Keywords Eastern sports, Globalized marketplace, Participant sports, Sport exportation

Paper type Research paper



Introduction

In recent decades Asian countries have experienced powerful boom in both their economies and sport industry. Asian countries, particularly those located in East Asia, have nearly tripled income per capita during the last 30 years, which is one of the most extraordinary

economic phenomena of this century. To a great extent, the “miracle” economic growth is attributed to an accumulation of trade and industrial policies, technological progress, savings and capital accumulation, effective governance, investment in education, and improved provision of health care (Bloom *et al.*, 2000). Successful hosting of mega sport events highlights the achievement, growth, and potential of Asian countries. Sport and recreation are being assumed of a new relevance in the Asian society, attracting attention not just from the residents, but also from political and business sectors. The future holds great promise for Asian countries due to a strong calendar of major events, growth in sponsorship and television rights, and increased number of sport participants and consumers. With economic development, lifestyles in the world society have changed over the past few decades. Today, people are of greater tendency and more prepared to spend more time and resources to maintaining their wellness. Participation in physically active recreational and sport activities has increased tremendously in recent years due to increased fitness and health consciousness (Zhang *et al.*, 2017).

Within a globalized marketplace, international elements have risen to a greater diversity in sport production and consumption. Sports around the world are emerging with certainty in some countries, while other countries struggle under the weight of pressure to embrace their growth. Logically, where there is a high market demand, there is likely capital flow toward meeting the needs of the marketplace. As sport marketing professionals and researchers attempt to understand the mechanism on how sports are spread around the globe, understanding the factors affecting the spread and growth of sports globally would be essential (Pitts and Stotlar, 2012; Zhang *et al.*, 2011).

Not surprisingly, the tide of sport globalization has been from the west to the east. Asia has become a prime target market for the expansionary strategies of some of the world's most powerful professional sports leagues, teams, manufacture companies, and media corporations. In recognition of the strength of making connections between the foreign athlete and the home-country market, sport organizations in the west have made concerted efforts in recruiting and marketing foreign players and coaches. Additionally, there are six basic approaches that sport organizations have demonstrated as part of their internationalization strategies: broadcasting, licensing and merchandising, playing exhibition and formal competitions, marketing foreign athletes, grassroots programs, and establishment of competition systems overseas (exhibition games, youth clinics, media penetration, and educational programming). The influence of transnational broadcasters in Asia and the intensive marketing efforts of western sport organizations provide European and American-based sports leagues with great advantage in dominating the marketplace, which at time could hamper the survive and thrive of indigenous Asian sport product development. Sport consumers in Asia tend to develop a predisposition of choosing globally marketed western sport leagues, teams, stars, and licensed products over those made in Asia. Although media production in general is thriving in Asia, media sports have so far remained to be predominantly western sports (Rowe and Gilmour, 2010). The pressures of globalized culture and sport products could weigh heavily on local cultural and sport elements. Local sport traditions and the need to retain sport identity and domestic product scan clash with increasing capitalist ideals (e.g. wealth, status, stardom). Sometimes, the outside cultural forces are rejected, sometimes they are embraced, and other times hybrids of both are accepted, such as the National Football League in Europe, baseball in Korea, and soccer in the USA. Asian countries are in particular facing challenges and dilemmas in protecting local and national sport interests vs generating consumer sport interests through imported sport products, investment in exporting vs investment in inventing and developing sport products, balancing between importing talents (athletes and coach) vs developing talents, balancing between supporting commercial sports vs developing Olympic sports with medal potentials, and dealing with anxieties and struggles between local administrative control vs the sense of loss of control (Gupta, 2009; Zhang *et al.*, 2017).

Increasingly, numerous Asian regions, countries, or organization are becoming exporting institutions of financial resources. Can Asian sport organizations start doing the same to counter the global competitions of western countries and sport organizations? Can the tide from the west to the east be reversed? At least, Asian countries should look into the possibility of adopting grassroots strategies to start reversing overwhelming importation and start developing plans and procedures to increase the presence of eastern sports and their products overseas. According to Gupta (2009) and Zhang and Pifer (2014), within the duality of global and local, sport organization managers must make strategic decisions to establish a brand presence in local markets while identifying ways in which to establish or increase an international presence. Those sport organizations that seek to compete globally must recognize that entry into the global marketplace requires careful market analysis, operational planning, financial investment, and a commitment to succeed. The selection of global strategies must be based on a deep understanding of the culture and respect for the host nation, its community, and residents. Successful foreign expansion often depends on the ability of an organization to balance sound business decisions with cultural sensitivity. Without a doubt, it is time to think reversing the tide. With the development of an effective marketing mix (i.e. product, place, price, and promotions), importing sports from the east to the west can be a possibility although it may appears remote at present time.

By using table tennis as an example and conducting an in-depth investigation into the impact of market demand factors on membership consumption of table tennis club members in the USA, this paper was aimed to illustrate the growth, organization, challenges, and opportunities of Asian sports in North America. In this process, consumer perceived benefits and perceived value of table tennis clubs were examined from the perceptive of their mediating roles in the relationship between market demand and consumer satisfaction that would function as a significant antecedent for continued consumption behaviors. Managerial suggestions for sport organizations are offered based on the discussions.

Background information

Table tennis, also known as ping-pong, is an incredibly popular sport in a lot of Asian countries, like China, South Korea, or Vietnam (Highland, 2011). Though table tennis originated in England, it was developed and became popular in China to the extent that China take this sports as own “national sport.” This sport was introduced to China in 1904. A Chinese businessman bought ten sets of table tennis equipment from Japan and showcased how to play this sport in his store. Rapidly, this sport became widespread in China as it is a perfect sport for an overcrowded China. A ping-pong table is easy to make; if nothing else is available, a piece of plywood or concrete slab with a row of bricks as the net would do as a table, and it does not take up much space. Most importantly, table tennis is a sport that anyone can play. It can be enjoyed by the socially elitist and the financially poorest. All that is required are a pair of paddles and ball, a table, and a net that can easily be provided. Many of the recent Chinese leaders, such as Mao Zedong, Zhou Enlai, and Deng Xiaoping, enjoyed playing this sport. Nearly all schools, factories, and office buildings have a few ping-pong tables ensconced somewhere, with people playing the game whenever it is convenient.

The International Table Tennis Federation (ITTF) initiated and had its first meeting in Berlin, Germany, in 1926. In the same year, the First World Championships held in London, England. From then, European countries dominated in table tennis competitions, which continued for a long period of time until after the Second World War; however, Asian players took over the sport, beginning in the mid-1950s. One major factor in the sudden emergence of Asian superiority was the introduction of the foam rubber paddle by Japan's Horoi Satoh in 1952. The new coating made the game faster and also allowed players to put

even more spins in the ball. From the mid-1990s, Chinese players have been reigning over this sport in international competitions and have won 16 of gold medals since table tennis was introduced as an Olympic sport in 1988 in Seoul. For the Chinese not to sweep any event is regarded as a major upset. The four highest ranking men and the five highest ranking women in world in table tennis at the time of 2008 Beijing Olympics were all Chinese (Hays, 2008). Essentially, China has dominated the world of table tennis for many years. Although this sport did not start in China, it has long been regarded and embraced as the “National Sport of China.” Nonetheless, the long-term monopoly of a state or a continent will definitely restrict the development of this sport in other countries or continents, especially those in Europe and North America where it began with. Because of this, China has been exporting first-class athletes, coaches, and managers to the many countries in recent years, which is aimed to help this sport continue development in the world.

Americans are generally fond of table tennis; for example, it is a theme sport in the famous movie *Forest Gump*, starred by Tom Hanks. The historic event, “Ping-pong diplomacy,” took place between China and the USA in 1971. Table tennis was utilized as a powerful mechanism in international relations, leading to the re-opening of Sino-US relations in the early 1970s. The whole episode began when American table tennis player Glenn Cowan missed his team’s bus after practice, and went on a bus that was filled with Chinese players at the world tournament held in Nagoya, Japan. Chinese player, Zhuang Zedong, came up from his back seat to greet Glenn Cowan and presented him with a silk-screen portrait of Huangshan Mountains, a famous product from Hangzhou (Huang and Gants, 2008). When it was time for them to get off the bus, many photographers and journalists were waiting for them. In the political climate of the 1970s, the sight of an athlete of Communist China with an athlete of the USA was sure to garner the media attention. Photographs of their handshakes were published in the Japanese press, giving Mao Zedong the idea of inviting the US team to visit China (Hays, 2008). *Time Magazine* (1971) called it “The ping heard round the world.” Indeed, the little ping-pong has changed the world thereafter. Not only did the “Ping-pong diplomacy” lead to the restoration of Sino-US relations, but also signified the beginning of the end of the Cold War.

With its surging popularity and the great number of people playing this sport, table tennis was officially recognized and admitted to the Olympic Games by the International Olympic Committee in 1981 and became a medal event at the 1988 Olympic Games. The USA was one of the first countries to develop table tennis in the world. Currently, the United States Table Tennis Association (USATT) has over 9,000 members in over 285 clubs and organizes over 300 tournaments annually (USA Table Tennis, 2013). A majority of table tennis clubs or schools have operated as commercial establishments. The raised interest in this sport has increased the magnitude of the table tennis market and led to the realization that table tennis instruction can be a profitable business when managed properly. Presently, there are over 285 USATT-certified clubs in 31 states of the USA. If the table tennis clubs can arrive the criteria that are constituted by USATT, such as opening for business a minimum four days per week, having certified level I or higher coach, maintaining an active website, and hosting at least two competitions every year, they can apply to become the National or Regional Centers of Excellence. In return, the clubs can get benefits, such as special and more prominent designation on USATT website or magazine, and a recognized place of offering USATT/ITTF coaching course and financial incentive (USA Table Tennis, 2014). To date, there are eight National Centers of Excellence and two Regional Centers of Excellence. Also, there are some distinctive table tennis clubs in America. One of the best known is a club named “SPiN Galactic,” which is owned and managed by an American actress Susan Abigail Sarandon. Actually, SPiN Galactic is a ping-pong entertainment venue, which means a place to hang out with friends, meet new people, and play ping-pong while sipping a cocktail, eating a snack, or perhaps watching a professional match on SPiN’s

center court. One can even host a large scale event or party. Currently, SPiN Galactic (2014) has four branches in New York, Los Angeles, Toronto, and Dubai.

Table tennis has become a popular leisure sport activity in North America likely due to a large number of reasons, including but not limited to, rapidly expanded Asian population living in North America including students, visitors, business people, and immigrants from Asian countries, increased level of international exchanges between the east and the west (Danylchuk *et al.*, 2015), direct promotions and indirect influences of Asian countries and their sport organizations, and ease of having a table tennis table in a family residential house (Zhang *et al.*, 2016), promotional efforts made by international, national, and local governing organizations of table tennis, American's growing interest in leisure activities, and adoption of healthy lifestyles (Hodges, 1993). The raised interest in this sport has increased the magnitude of the table tennis market and led to the realization that table tennis instruction can be a profitable business when managed properly. A majority of table tennis clubs or schools have operated as commercial establishments. Presently, there are over 285 USATT-certified clubs in 31 states of the USA. If a table tennis club can achieve the criteria that are constituted by USATT, such as opening for business a minimum four days per week, having certified coaches, maintaining an active website, and hosting at least two competitions every year, it can apply to become a National or Regional Center of Excellence (USA Table Tennis, 2014). Rigorous growth of the table tennis industry has resulted in an intense competition in its business environment. Fitness clubs, community centers, and recreational programs are increasingly incorporating table tennis into their programming. External competition exists from other sport clubs, country clubs, community centers, health-fitness centers, and parks and recreational facilities.

Each sport product setting is unique and has unique characteristics and even brand personalities, which need in-depth analyses (Heere, 2010). Zhang (2015) cautioned that directly adopting the findings from one sport product setting to another with no or minimal modification or revision may not be adequately capturing the unique features of the situation. For instance, the sport of table tennis exhibits the nature of requiring athletes to be exceptionally accurate, meticulous, fast, and quick-reacting, which put high demands on the quality of facility in such areas as floor, lighting, tables, nets, racquets, space, and even color; thus, in table tennis club operations, regulations and guidelines postulated by ITTF and USATT should be strictly followed. Compared to other types of health-fitness clubs, table tennis clubs attract a comparatively larger group of youth and Asian consumers (Hodges, 1993). Unlike the traditional health-fitness club membership, hosting intra-club and participating in regional and national tournaments are fundamental operations of table tennis clubs in order to achieve consumer recognitions and generate consumer interest in the club membership (USA Table Tennis, 2014). As operation of a table tennis club mainly relies on the revenue generated from its membership fees, member retention and expansion has been a common challenge in table tennis clubs. In a highly competitive marketing area, how a table tennis club adapts itself to market needs and satisfy the market demand is a key factor to financial success. Marketing actions in table tennis clubs have vastly fallen behind other business industries, including other sectors of the health-fitness industry. There is a general lack of research on table tennis marketing and management. Although a number of studies have explored various aspects of table tennis training mechanisms, techniques, tactics, rules, and cultures (e.g. Durey, and Seydel, 1994; Olsen and Kim, 2013; Chai, 2010), little research efforts have been made to specifically investigate marketing practices of table tennis clubs, which is likely due to the fact that table tennis has primarily been a popular sport in eastern countries. Although previous research findings generated from other health-fitness club settings shed light on the provision and operation of table tennis clubs, they may not be adequate to address the unique marketing environment of table tennis clubs.

Review of literature

Market demand

Market demand is an economic concept and, traditionally, it deals with such critical questions as “how many consumers are there?” “how much to charge?” “who are the consumers?” and “where are the consumers coming from?” (Fort, 2011). More recent inquiries have focused on such questions as “why are the consumers here?” “what do the consumers want?” and “what are the consumers looking for?” (Braunstein *et al.*, 2005; Byon *et al.*, 2013). Market demand relates to consumer expectations toward the attributes of the core product (Zhang *et al.*, 2003). Essentially, it is a cluster of pull factors associated with the game that an organization can offer to its new and returning spectators. It is comprised of a multitude of cognitive-oriented variables that may predict sport consumption behavior (Braunstein *et al.*, 2005; Byon *et al.*, 2013; Hansen and Gauthier, 1989; Schofield, 1983). These pull factors are directly associated with the core product operations. By investigating into market demand of consumers, sport organization can understand the expectation of sport consumers with respect to key factors of their core products and service in an effort to satisfy consumer needs and enhance the success of their businesses (Zhang *et al.*, 1995; Mullin *et al.*, 2014).

Previous studies have conducted market demand studies in the context of spectator sports (e.g. Hansen and Gauthier, 1989; Schofield, 1983; Zhang *et al.*, 1995, 2003) and broadly grouped market demand variables that affect game consumption into the following categories: Game Attractiveness, Game Promotion, and Economic Consideration. Most relevant to a table tennis club setting, Kim *et al.* (2009, 2013) identified various perspectives of market demand associated with Taekwondo schools by developing and revising the Scale of Market Demand for Taekwondo School to measure key market demand dimensions. These studies integrated findings from both qualitative and quantitative research protocols. Seven factors emerged as a result of these studies (personal improvement activities, physical environment quality, instruction staff quality, program activities and offerings, cultural learning, locker-room provision, and economic condition consideration) and were of good measurement properties; in particular, a structural equation model analysis revealed that these factors were influential of member satisfaction and commitment of program participants.

To some extent, findings of previous studies provide useful references to studying consumer demands for table tennis clubs; however, operation of table tennis clubs has its own distinguishing features, such as being an individual sport with fast-paced rally, space efficient, flexible setting, little risk of injury, no age and gender barrier, and custom preference (e.g. high demand for individual lessons, demand for intra-club and inter-club competitions, and being favored by Asian Americans). Even if a particular facet of table tennis club operations can resemble other uni-sport health-related fitness clubs, the ingredients and specific activities constituting the facet can be drastically different from those identified in previous studies. On the basis of a comprehensive review of literature, a preliminary conceptual model has been formulated with five dimensions for studying market demand of table tennis clubs, including Program Offering, Club Operation, Instruction Quality, Locker-room Provision, and Economic Consideration.

Perceived value

As one of the most prominent variables that predict consumption behavior, perceived value has captured great attention from researchers over the past two decades (Chang and Wildt, 1994; Zeithaml, 1988). These researchers view perceived value as a mediating variable in the relationship of program quality to behavioral intentions in different fields, such as leisure (Murray and Howat, 2002), tourism (Petrick, 2003), hospitality (Oh, 1999), business marketing (Cronin *et al.*, 2000), and sport marketing (Byon *et al.*, 2013; Kim *et al.*, 2013).

In marketing research, perceived value is considered a two-dimensional concept being composed of product quality received and price paid for the quality (Monroe, 1990). Holbrook (1994) further indicated that perceived value is the discrepancy between the benefits of a product and its costs. Patterson and Spreng (1997) defined perceived value as “a cognitive-based construct which captures any benefit-sacrifice discrepancy” (p. 4). However, Grewal *et al.* (1998) held a different view on the definition of perceived value and identified perceived value a “get” single-dimensional construct, consisted of acquisition value and transaction value which was adopted by the areas of hospitality (Al-Sabbahy *et al.*, 2004) and tourism (Petrick and Backman, 2002).

Perceived value is influenced by factors such as cost, consumer preferences and characteristics, social value, perceived quality, and monetary value (Bolton and Drew, 1991). Holbrook (1994) indicated that perceived value must be considered in order to explain the essential marketing basis. Besides service quality, perceived value is one of the most powerful constructs that give company its competitive strength in sales (Parasuraman, 1997). Parasuraman and Grewal (2000) further illuminated that perceived value is the most influential predictor of repurchase intentions. Perceived value acts as a significant role in evaluating product quality, satisfaction, and behavioral intention. Customers’ perceived value is determined by service outcome, the purpose of purchase, and the quality of delivery.

Perceived benefits

Perceived benefits were defined as “a combination of different attributes of products (e.g. tangible vs. intangible, intrinsic vs. extrinsic), available in relation to a particular buy and use situation” (Snoj *et al.*, 2004, p. 157). According to Monroe (1990), 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. Based on these definitions, the perceived benefits of table tennis clubs can be interpreted as the participant-perceived gains from participation in table tennis clubs. If members perceive little or no benefits stemming from attendance, recruiting and retaining members would be difficult for club managers.

There are many recognized benefits to participating in table tennis. What attracts participants to a table tennis club is its potential to enhance not only the physical body but also the mind and spirit of participants. Many researchers have discussed the benefits of table tennis participation. Playing table tennis offers many physical benefits, such as improved eye-hand coordination, body-balance, speed, flexibility, physical accuracy, and weight loss. With appropriate training, participants can improve their table tennis skills and techniques, learn the specific footwork, enhance the ability to use various tactics in a game setting, form individual play styles, adapt to the style and tactics of different opponents, and ultimately win games and increase rating (Allen, 1996; Lin, 1998; SharpBrains, 2014). Playing table tennis also offers many mental health benefits, such as stress relief that comes with a workout, formation of a sense of achievement and independence that comes with improving one’s skill at a complex task, improved confidence with enhanced self-image, and enhanced level of responsibility, accountability, dedication, perseverance, and other good characters that are formed from the disciplines and functions of training, competition, and rule enforcement. While one plays table tennis in a club or community center, this sport provides him/her an opportunity to meet and interact with others. Playing with friends or family members is a great way to strengthen friendship and bond. Since people of all ages can enjoy this sport, it can help build relationships and improve communications. Communicating with other people help individuals learn about different culture (Gordana *et al.*, 2010; Kinergety Workshop, 2006; Lin, 1998; SharpBrains, 2014).

Member satisfaction

Stoner *et al.* (2009) indicated that customer satisfaction is a pleasant feeling obtained from realized expectations or an unanticipated surprising and also a high-valued outcome of service quality. Petrick *et al.* (2001) explained that the original expectations should be satisfied if the perceived performance exceeds the original expectations. In contrast, dissatisfaction should happen, if the perceived performance is below expectations. Satisfied customers are more likely to form loyalty, involved often in greater volume, participate in other service provided by the organization, pay for the value they obtain, and tolerate price fluctuation so as to save marketing cost and increase revenue generation (Anderson *et al.*, 1994). Keeping existing customers is more cost effective than attracting new ones for marketing resources and service qualities to fulfill or transcend their expectations.

Theoretical framework

Generally speaking, research findings are population specific (Baumgartner and Hensley, 2012; Hair *et al.*, 2010; Thomas *et al.*, 2011). Although findings from previous studies provide insights into the management of table tennis clubs (e.g. Kim *et al.*, 2009, 2013; Lam *et al.*, 2005), their effectiveness may be limited to the characteristics of table tennis clubs. Adopting Bagozzi's (1992) appraisal → emotional response → coping framework as a theoretical guideline to test the quality-value-satisfaction model, this study examined the relationship between market demand for and satisfaction with table tennis club membership while taking into consideration the mediating roles of consumer perceived benefits and perceived value. This framework suggests that a preliminary appraisal in the evaluation of product quality leads directly and indirectly to consumption-related variables. It also posits that the relationship between appraisal and coping is usually mediated by affective response derived from the initial appraisal. This explanation could be tenable in table tennis club membership. When a member has high regards about core product offerings, the positive evaluation would foster positive perceived value and benefits of the membership, which would in turn drive for membership satisfaction as an antecedent of positive behavior reinforcement, namely renewal of membership and referral of others to the club. Combining the literature reviewed on the concept of market demand, perceived benefits, perceived value, and consumer satisfaction with the quality of table tennis club membership, along with Bagozzi's (1992) general appraisal → emotional response → coping framework, a conceptual structure was proposed for this study (Figure 1). Consequently, the following compound hypothesis was tested in the current study:

- H1.* Market demand factors would be significantly related to consumer perceived benefits and perceived value, and in turn related to consumer satisfaction with the quality of table tennis club membership.

Method

Participants

A convenience sampling method was employed to survey table tennis club participants. The target population for this study was 18 years of age or older, resided in the USA, and have attended a table tennis club. Participation in this study was voluntary and confidential. A total of 223 individuals representing 35 clubs completed a survey. Of them, a majority (93.5 percent) was male. The participants ranged in age from 18 to 87 years old ($M = 48.2$; $SD = 15.9$). Ethnic compositions included Caucasians (41.3 percent), Asians (31.7 percent), African Americans (9.6 percent), Hispanics (4.8 percent), and mixed-racial individuals (3.0 percent). According to a report on sport participation rate by the Sport Business Research Network (2015), the sample represented the ethnic compositions of table tennis consumers well. Over a half of them

(64.6 percent) were married, with at least one child. Approximately, 75 percent of them were of a college or advanced degree and 50 percent had a family annual income of \$75,000 or higher. Individual (80 percent) and family (7.0 percent) were main membership types. Close to 60 percent of the respondents regularly attended a table tennis club two to three times per week, about 58 percent were of USATT rating scores between 1,000 and 1,999 points.

Measurement

Through conducting a review of literature, observations of club operations, and interviews of club administrators and club members representing various table tennis clubs, a preliminary questionnaire was formulated for this study, which had five sections: market demand, perceived value, perceived benefits, member satisfaction, and demographics. To measure market demand, related items in Lam *et al.*'s (2005) and Kim *et al.*'s (2009, 2013) studies were selected, modified, and adapted for the current study. The process of modification and adaption took into account the characteristics of various table tennis club settings through conducting on-site observations of six table tennis clubs, interviewing 12 club managers, and interviewing 30 club members by the primary investigator. A total of 30 items under the five proposed factors (Program Offering, Club Operation, Instruction Quality, Locker-room Provision, and Economic Consideration) were included to assess an individual consumer's perception of core product features that affected his/her decision to join a table tennis club. Each item was phrased into a statement in a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree).

Similarly, items for measuring perceived value were adapted from Sweeney and Soutar's (2001) PERVAL scale and from those items applied in Kim *et al.*'s (2013) study. These items assessed various perspectives of perceived value of joining a table tennis club. The items were preceded with the following statement: "I believe that attending the table tennis club is [...]" and each item was phrased in a seven-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree. A total of 19 items for perceived benefits were written to assess physical, technical, psychological, and social benefits of being a member of a table tennis club. In part, initial formulation of these items took into consideration the measures and research findings of previous studies, mainly those of Byon *et al.* (2013) and Kim *et al.* (2009, 2013). Each statement was preceded with a common statement of "Attending the table tennis helps me [...]" and was phrased into a seven-point Likert scale (1 = strongly disagree

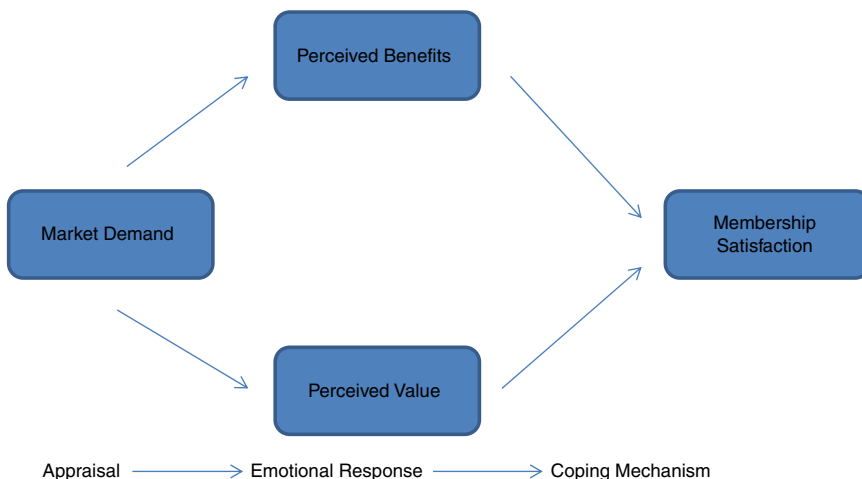


Figure 1.
Application of the
appraisal → emotional
response → coping
framework:
interrelationships
among market
demand, perceived
benefits, perceived
value, and
membership
satisfaction

to 7 = strongly agree). Member satisfaction was measured as a latent construct reflected by overall satisfaction. Five items were adapted from Brady *et al.*'s (2005) scale as this scale was widely recognized and adopted to measure critical affective reaction components toward a consumptive object (i.e. satisfaction, happiness, and delight). Each item was phrased into a statement in a seven-point Likert scale (1 = very unsatisfied to 7 = very satisfied).

Procedures

After the initial questionnaire was formulated, it was submitted to a panel of five experts, including three table tennis club managers and two university professors with expertise in sport marketing, for a test of content validity. The panel members were asked to examine the relevance, representativeness, and clarity of each item for the intended measurement purpose. By incorporating their suggestions, editing was made to improve a number of the items in the questionnaire. The paper-pencil questionnaire was administered at two national table tennis tournaments held in two eastern states and two local tournaments held in a southeastern state of the USA. Data collection also took place in six table tennis clubs located in a major city located in the southeastern state. Participation in the study was voluntary, anonymous, and confidential. A total of 282 copies were distributed and 223 individuals representing 35 clubs actually completed the questionnaire, representing a completion rate of 79.1 percent. Procedures in SPSS 19.0 (SPSS, 2009) and Mplus 5.21 were carried out for data analyses.

Results

A confirmatory factor analysis (CFA) was conducted to determine the goodness-of-fit indices of the nine latent factors to be correlated with each other. Anderson and Gerbing (1998) introduced a two-step approach that involves the testing of a general measurement model and a structural model. Thus, a measurement model with nine latent factors (Instruction Quality, Program Offering, Club Operation, Locker-room Provision, Economic Consideration, Perceived Value, Perceived Benefits, and membership Satisfaction) with a total of 48 observed indicators was tested by conducting a CFA. The results suggest the CFA revealed that overall measurement model was a reasonable fit. The S-B χ^2/df (1,323.1/783) = 1.69, $p < 0.01$ was lower than the suggested standard value of 3.0 (Kline, 2005). The robust CFI value of 0.911 was higher than the recommended cut-off ratio (> 0.90 ; Hu and Bentler, 1999). The RMSEA value (0.061) indicated a close fit. In addition, the SRMR (0.054) was less than 0.09, indicating a good fit of the model (Kline, 2005). Consequently, the revised overall measurement model was tested with nine latent factors and 42 observed indicators. In order to improve model fit, six items had to be eliminated based on further considerations of theoretical relevance, parsimoniousness of the model, and indicator loadings (Table I).

The construct reliability (CR) for all factors was greater than the cut-off point of 0.70 (Nunnally and Bernstein, 1994). The CR coefficients ranged from 0.51 (Perceived Benefits) to 0.96 (Instruction Quality). Averaged variance extracted values ranged from 0.51 (Economic Condition Consideration) to 0.82 (Membership Satisfaction). The convergent validity of the overall measurement model was examined by t -values. T -test coefficients for the factor loadings were all statistically significant at the 0.001 level. In addition, discriminant validity was established by examining the interfactor correlations, which should be below 0.85 (Kline, 2005) (Table II). Overall, the findings of the measurement models provided good evidence for the study to proceed with an SEM analysis.

Figure 2 showed the structural relationships among the constructs. The fit indices revealed that S-B χ^2/df (1,365.7/730) = 1.87, $p < 0.01$; RMSEA = 0.059; CFI = 0.905; SRMR = 0.078. The relationship between market demand factors and the latent, general market demand variable was all significantly ($p < 0.05$) different from zero, and all

				Reversing the tide of sport globalization
Construct and items	CR	λ	AVE	
<i>Club Operation (4 items)</i>	0.81		0.53	
The club has capacious table spacing		0.727		
The club's lighting is suitable for playing		0.752		
The club's table tennis tables are of good quality		0.641		
The club's floor condition is just right		0.772		
<i>Locker-room Provision (5 items)</i>	0.95		0.80	
The club offers a good locker room		0.903		
The locker room is of high safety		0.877		
The locker room is convenient		0.963		
The locker room in this club is clean		0.940		
The club offers a good shower room		0.780		
<i>Instruction Quality (8 items)</i>	0.96		0.74	
The club's instructors/coaches have coaching certificates		0.755		
The club's instructors/coaches have a good reputation		0.906		
The club has an adequate number of instructors/coaches		0.860		
The club's instructors/coaches are experienced in coaching table tennis		0.929		
The club's instructors/coaches have a high USATT rating		0.833		
The club's instructors/coaches are very knowledgeable about table tennis		0.919		
The club's instructors/coaches are friendly		0.873		
The club's instructors/coaches handle problems promptly and professionally		0.816		
<i>Program Offering (9 items)</i>	0.94		0.64	
The club offers special lessons for youth/junior		0.815		
The club offers special lessons for adults		0.851		
The club offers special lessons for senior citizen		0.788		
The club offers private lessons		0.767		
The club offers a variety of class sizes		0.821		
The club offers various classes catering for different levels of ability		0.832		
The club offers classes for beginner		0.868		
The club offers classes for advanced level members		0.740		
The club offers classes at several different times		0.696		
<i>Economic Consideration (4 items)</i>	0.80		0.51	
The club has a reasonable refund and cancellation policy		0.706		
The club offers giveaway items (e.g. uniforms, balls, club bag)		0.711		
The club offers flexible payment plans		0.727		
The club offers various payment methods (e.g. credit card, check, and cash)		0.683		
<i>Perceived value (6 items)</i>	0.84		0.64	
I believe that attending the table tennis club is something that I would enjoy		0.835		
I believe that attending the table tennis club is something that I like to participate in		0.877		
I feel comfortable of attending the table tennis club		0.664		
I believe that the table tennis club is reasonably priced		0.735		
I believe that attending the table tennis club is affordable		0.865		
I believe that attending the table tennis club offers value for money		0.681		
<i>Perceived benefits (3 items)</i>	0.78		0.55	
Attending the table tennis club helps me to cope with life's pressures		0.784		
Attending the table tennis club helps me to improve appearance		0.696		
Attending the table tennis club helps me improve relationships with other people		0.734		
<i>Membership satisfaction (3 items)</i>	0.93		0.82	
I am satisfied with the offerings of this table tennis club		0.904		
I am satisfied with the benefits offered by this table tennis club		0.933		
I am satisfied with the core features of this table tennis club		0.877		

Table I.

Summary results for the overall measurement model

standardized loading ranged from 0.37 for Locker-room Provision to 0.89 for Program Offering. Path coefficients were examined among the market demand, perceived benefits, perceived value, and membership satisfaction constructs. The market demand latent variable directly affected perceived benefits, perceived value, and indirectly affected satisfaction.

Table II.
Inter-correlations
among market
demand, perceived
value, perceived
benefits, and
membership
satisfaction constructs

All of the direct and indirect paths were statistically significant ($p < 0.05$). An amalgamation of the market demand factors had positive effects on perceived benefits ($\beta = 0.24$, $p < 0.05$), perceived value ($\beta = 0.21$, $p < 0.05$), and membership satisfaction ($\beta = 0.21$, $p < 0.01$). In addition, the effect of perceived benefits on satisfaction was positive and statistically significant ($\beta = 0.42$, $p < 0.01$) and perceived value was also positively predictive of membership satisfaction ($\beta = 0.41$, $p < 0.001$).

Discussion

With an intention to examine how an eastern sport can find home in the west, this study utilized table tennis as an example and examined the impact of market demand factors on membership satisfaction of table tennis club members while taking into consideration the mediating roles of consumer perceived value and benefits. When compared with the past that the sport is mainly known as “ping-pong” or many Americans call it the “basement game,”

Construct	1	2	3	4	5	6	7	8
CO								
LP	0.286**							
IQ	0.379**	0.238**						
PO	0.281**	0.334**	0.785**					
EC	0.354**	0.435**	0.534**	0.686**				
PV	0.565**	0.047**	0.214**	0.075**	0.154**			
PB	0.460**	0.239**	0.236**	0.085**	0.271**	0.672**		
MS	0.556**	0.095**	0.372**	0.218**	0.249**	0.637**	0.666**	

Notes: CO, club operation; LP, locker-room provision; IQ, instruction quality; PO, program offering; EC, economic consideration; PV, perceived value; PB, perceived benefits; SA, membership satisfaction.
**Correlation significant at 0.05 and 0.01 levels (two-tailed)

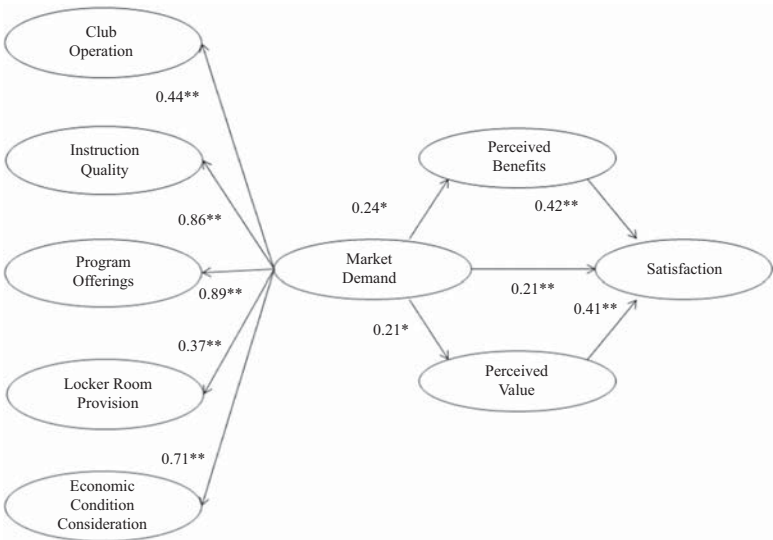


Figure 2.
The finalized
structural model
depicting the
relationships among
market demand,
perceived value,
perceived benefits,
and membership
satisfaction constructs

Notes: S-B χ^2/df (1,365.7/730) = 1.87, $p < 0.01$; RMSEA = 0.059; CFI = 0.905; SRMR = 0.078. * $p < 0.05$; ** $p < 0.01$

as they play with their family or friends in their basements at times, today table tennis has increasingly become a popular leisure and competitive sport activity in North America. There are over 20 million participants in the USA, even more than soccer or baseball (Hodges, 1993). Rigorous growth of the table tennis industry has resulted in an intense competition in business environment. In America, table tennis clubs are facing internal competitions with other table tennis clubs. For instance, there are over ten table tennis clubs in the greater city perimeter of Atlanta, Georgia. Also, the fitness clubs, community centers, and recreational programs are increasingly incorporating table tennis into their programming. Furthermore, external competition exists from other sport clubs, country clubs, community center, health-fitness centers, and parks and recreational facilities (Parks and Zanger, 1990). Thus, in an effort to grow an “eastern sport” in North America, it is necessary to study those factors affecting the consumer demand for the core product features of the sport.

The findings of this study supported the hypothesis that market demand factors would be significantly related to consumer perceived benefits and perceived value, and in turn related to consumer satisfaction of table tennis club membership. Although it may appear that this study merely examined an existing theoretical scheme, the measurement items specifically phrased in the context of table tennis clubs led the findings to be uniquely valuable to the management and marketing of table tennis clubs, a growing sector of both recreational and competitive sport industry in the USA. It is expected that due to the rapid economic growth in Asian countries and increased migrations of Asian people in recent years, table tennis as a popular Asian sport will continue being spread to other parts of the world; thus, the findings of this study have potential relevance to promoting table tennis globally.

The findings that the market demand factors had a positive impact on perceived value and benefits confirmed the theoretical framework and previous research findings (e.g. Kim *et al.*, 2013; Lam *et al.*, 2005; Zhang *et al.*, 1995), which also made a practical sense that a table tennis club needs to offer product features and meet expectations of its current and potential members in order to enhance program value and benefits perceived by its members. Essentially, the core product features in the areas of Instruction Quality, Program Offering, Club Operation, Locker-room Provision, and Economic Consideration should be paid particular attentions by club managers. As an individual sport, members of a table tennis club put a high demand for high instructional quality. A club needs to employ a coaching staff team that is composed of highly reputable and experienced coaches, instructors, or trainers. Preferably, these coaching staff members have achieved elite status in table tennis competitions. They should have been trained with pedagogical and managerial knowledge, skills, and capabilities, and are expected to be professional and possess the needed social and communication skills. A high-experienced instructor is able to develop targeted drills with different purposes and goals for various participants of different needs for improvement. For example, training is usually focused on the basic stroke movements for kids and beginners; training on the combined usage of fundamental strokes in game situations is needed for junior players; and simulated competition in game situations is very useful training approach for adults who are preparing for a tournament.

As speculated before conducting this study, a variety of well-planned, well-organized program offerings are key to draw consumers to a table tennis club and satisfy the wants and expectations of different groups club members. Program offerings that match and challenge the USATT rating level of a player are usually most desirable. As revealed in the resulted items measuring the Program Offering factor, programs may be formed based on age groups, such as youth, junior, adults, and senior citizens. They can also be catered to different skill levels, such as beginning, intermediate, advanced, and elite skill groups. For group lessons, class size is a sensitive issue, where each individual member demands attention; so, offering multiple sessions of group lessons and having assistant instructors and trainers to be present would help alleviate the high attention demand during group lessons.

Kids, youths, adults, and senior citizens may be respectively grouped and trained together in addition to considering their skill level. The after-school program, school break camp, and summer camp may be designed for school-aged children, depending on their school schedule. Many clubs organize intra-club competitions, divide members into different tiers and teams, form advancement or relegation procedures, establish inter-club competitions, and take a part in local and regional tournaments, which would provide selected members with actual combat training experiences and opportunities to prepare for authorized tournament. As table tennis clubs attract many Asian Americans and Asian visitors, curriculum construction, lesson plans, instructional process, and even grouping procedures should take into consideration cultural backgrounds of club members. During a private lesson, a coach naturally becomes a playing partner or opponent in addition to his/her instructional roles. A coach's preparation for the training session, communications with the club member before and during the training session, technical analyses, and full attention and devotion to the individual are necessary to satisfy the expectation of him/her. The private lesson is usually desired by beginners, junior players who aim for play professional, and adults intended to quickly enhance skills. In private lessons, players would get strong one-on-one attention and training from the coach or trainer, offering an opportunity to practice drills and work on particular techniques and tactics by individual club members.

Due to the high velocity of stroked ping-pong balls, facility conditions in a table tennis club have an important impact on a member's experience, safety, performance, and even success at the facility, ultimately affecting their satisfaction level and decision to join and continue with the club membership. All safety measures need to be constantly reinforced, including providing educational programs and promotional messages on risk preventions. One common hazard is the presence of many ping-pong balls on the floor resulted from intensive training by using baskets of balls. Frequent collections and adoption of a mechanical ball collector could help ease this problem. As table tennis clubs typically do not have seats built for audience, traffic control should be well planned and arranged, which is particularly necessary during peak operation hours and when hosting intra- and inter-club competitions. Satisfying consumer demands for high-quality facilities should also include providing a good, clean, safe, and convenient locker room, containing functional shower, toilet, and storage spaces. As a table tennis training session can sometime last three to four hours, a good locker room would make it convenient for club members, particularly those youth who attend the club before or after school and those working professionals who often attend during lunch hours or right after work. For table tennis clubs, in order to cater the operation schedule to members with diverse backgrounds and needs, the operation schedules need to be convenient for various groups; for instance, after-school hours are convenient for school-aged children and youth, evening hours are attractive to adults, morning hours are attractive to those players of "advanced" to "elite" ranks who want to be trained one-on-one in a quiet environment, and weekend days are convenient for hosting competitions. Additionally, club operation variables such as convenient club location and transportation should be taken into account by club managers.

The retained items under the Economic Consideration factor indicated that club members cared much about the club offering flexible payment plans and allowing various payment methods. As close to 25 percent of club members are from families with an annual income less than \$50,000, the flexibility and convenience issues associated with paying for the membership are high desired by club members. Such desires could hint an underlining expectation, namely trust. While this study did not study the concept of "trust," it appears to be an important topic to explore in future studies. This is evidenced by the retained item on consumer demand for having a well-thought and well-developed refund and cancellation policy. Due to the great mobility in today's society, people are often on the move and change. For instance, table tennis players also change club affiliations to seek new coaches, instructions, training or competition

partners, and even opportunities for competition or advancement opportunities. How best to accommodate the changing marketing environment and frequent relocations of people is a challenging issue for business managers and marketers. For traditional health-fitness club chains, this would not be much a problem; yet, for individual table tennis clubs, which are the norm of table tennis club operations, having a reasonable refund and cancellation policy would be attractive to club members. Alternatively, developing collaborations between comparable clubs in the local community and conducting joint membership promotions can be a creative way to add value to membership and reduce attritions. Additionally, price promotion is a frequently utilized marketing tool (i.e. family membership, sibling discount, free goods, and membership renewal discount). Lesson package (i.e. price discount) is a popular way to encourage private lessons and group lessons.

As evidenced in many previous studies, provision of high product quality is critical to the profitability of an organization because it enhances customer satisfaction and in turn it earns customer loyalty and retention. Marketing resources are better spent by keeping existing customers than attracting new ones. In order to satisfy customers, both product quality and its delivery process have to meet or exceed their expectations. Satisfied customers are most often repeat customers. High customer satisfaction results in a better reputation of the organization, lower costs of attracting new customers, less resources devoted to handling and managing complaints, and more customer referrals. Satisfied customers are more likely to become involved more frequently in larger volume, to take part in other services offered by the organization, to pay for the benefits that they receive, and to be more tolerant of price increases (Anderson *et al.*, 1994; Byon *et al.*, 2013; Lam *et al.*, 2005; Kim *et al.*, 2013; Zhang *et al.*, 2004). Given these strong indications on the consequence of consumer satisfaction, this study did not make an effort to study the consequential constructs of membership satisfaction, such as consumption intention membership renewal. This choice was intended to ensure that the selected antecedent concepts, including market demand, perceived value, and perceived benefits, were fully focused and studied in detail and depth. Generating what-to-do and how-to-do implications that were specific to table tennis club management and marketing practices were the priority of the investigators of this study. Nonetheless, future studies may choose to do so. Surely, including consequential constructs in the model that are caused by membership satisfaction would help provide a full picture that can be visualized. If future researchers choose to do so, the multiple perspective of membership satisfaction may be considered. Additionally, the current study investigated the general perspective of member satisfaction as a criterion variable and the focus of study was actually on the core product features of table tennis clubs. As indicated by previous researchers (e.g. Lam *et al.*, 2005; Zhang *et al.*, 1998, 2004), when studying member satisfaction as an independent or mediating concept, its specific functions and multiple perspectives could provide useful details for managerial practices.

The current study included a sample of members from 35 table tennis clubs, primarily located in the eastern states of the USA. Future studies may consider expanding the geographical representation by recruiting participants from other geographic locations of North America and even other parts of the world in order to enhance the generalizability of the research findings. Research generalization can be further enhanced through enlarging the sample size, conducting cross-validation studies, and/or incorporating other concepts and variables pertinent to the consumption of table tennis club membership, such as cultural identity (e.g. Kim *et al.*, 2009, 2013), social motivation (Sloan, 1989), and market competition (e.g. Mullin *et al.*, 2014).

Conclusion

The past two decades have marked the speediest rise of a globalized sport production and consumption trend. In an era of globalized sport marketplace, sports have become a

business commodity to meet the needs of commerce. This commodity relies on sports being popular for many people to play, watch, or do both. These consumer behaviors lead to a high market demand, producing capital flows toward meeting the needs of the marketplace (Pitts and Stotlar, 2012; Zhang *et al.*, 2011). As in the above illustrations, table tennis is a successful Asian sport being promoted in the North American because a relatively high market demand has been developed through creating consumer awareness, tying with consumer needs for fitness and self-protection, recruiting club members, and establishing a well-designed competition system.

As sport marketing professionals and researchers attempt to understand the mechanism on how sports are spread around the globe, understanding the factors affecting the spread and growth of sports globally would be necessary. Internationalization must be based on careful strategic planning and procurement of resources required for its successful implementation. One must have a clear strategic purpose for entering into the global marketplace. A strategic plan along with clearly articulated goals and objectives serves as the cornerstone of a successful global expansion. For an Asian sport to penetrate into the North American marketplace as table tennis has done, it would be wise to develop regional network, strategies, products (e.g. leagues, tournaments, club network), and promotions. Adaptation of nonlocal elements to the local context would be essential when operating grassroots programs, such as exhibition games, youth clinics, media penetrations, and educational programming.

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Corresponding author

Yi Zhang can be contacted at: zhangyi3270@i.shu.edu.cn

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