# A Delphi Method Analysis of Management Strategies for Taekwondo Centers in the United States

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#### **Abstract**

The purpose of this study was to use the Delphi Method to determine management strategies that might enhance the operations of Taekwondo training centers in the US and; to induce management to implement the strategies based on that forecast. A sample of ten Korean masters and fifteen trainers were used in this inquiry. Each participant has an interest in a Taekwondo facility, more than three years of teaching experience and has been practicing Taekwondo for more than ten years. This study followed the protocols for the Delphi Method and consisted of three phases of data collection using questionnaires. The panel of experts achieved a consensus through the process of iteration and ranked the possibility of change in the following items: the location of Taekwondo clubs, methods of publicity and promotion incorporating technology, increasing needs of the investment for club facilities, and development of the programs and Taekwondo skills.

#### Introduction

Data from 2012 indicates that a total of 204 countries are registered with the World Taekwondo Federation (WTF) and more than 80 million people are trained in the sport of Taekwondo (WTF, 2013). Additionally, Taekwondo has been selected by the International Olympic Committee (IOC) as one of the 2020 Olympics' core sports (IOC, 2013). Because of the values taught and educational lessons learned, Taekwondo has grown as a world-wide sport (Kim, 2008).

Taekwondo, is known to build physical strength as well as mental awareness, respect for authority, manners, and allows trainees to further enlighten their own personalities through skill acquisition and physical training (Bang, 2001). The values taught through Taekwondo training are respected and valued in the United States (US). For instance, some US elementary schools have adopted Taekwondo as part of their regular Physical Education curriculum, and in some higher education programs such as Bridgeport University and Concordia University the use of Taekwondo has been included as part of their general education program (Na, 2010). Additionally, George Washington University, Clemson University, UC Berkeley and Yale University have organized and operated Taekwondo clubs.

The practice of Taekwondo has expanded in the US, providing opportunities for club development and expansion. With the exception of Korea, where Taekwondo originated, the US has the greatest number of Taekwondo clubs (Cho, 2015). A recent report by Kukkiwon (2012), the World Taekwondo Headquarters, indicates that 7,624,992 Koreans have black belts,

followed the US members with 205,696. In 2013 The American Taekwondo Association (ATA) conducted 109 championships in the US (ATA, 2013).

Expansion of the sport has brought about challenges particularly in the US. One such challenge is borne out of the lack of regulation of Taekwondo clubs. This has resulted in increasingly large numbers of non-qualified mangers instructing the art of Taekwondo (Seo, 2002). This practice is exacerbated by Kukkiwon, which bestows upon individuals who have earned the fourth degree of black belt, the power to recommend others for a black belt license. This practice has resulted in an exceptionally large number of individuals earning a Taekwondo black belt. Lee (2001) notes there are a large number of American coaches who have simply mastered skills, but are not well acquainted with the spirit of Taekwondo. Na (2010) posited that Taekwondo may soon become recognized merely as a child's game and will lose its origins as a respected art. Korea has also experienced some of these challenges, such as expansion without quality promotion, lack of qualified instructors, and utilization of young trainees. In order to facilitate continuous global expansion coupled with quality growth, research should be conducted to study management strategies and operations of successful, culturally-conscious Taekwondo clubs, not only in Korea but also in other countries.

To properly construct such an inquiry, the main body of work should include a review of the overseas expansion of Taekwondo, a consideration of Taekwondo as a component of Korean foreign relations, and an examination of the cultural-diplomatic roles of Taekwondo (Shin, 1993). Lee (2000) added that a well-framed inquiry should include the effect of globalization of Taekwondo on Korea's sport diplomacy. According to Kim (2007), the advancement of Taekwondo into America and its inclusion in the Amateur Athletic Union (AAU) should be investigated. Moreover, in 2008 Lee indicated a need for a review of the process of globalization of Taekwondo and a study into the achievements of sport diplomacy. While these inquiries are valuable, they focus mainly on the past history of the organization, and not on current trends in the industry.

Na (2010) pointed out that previous studies have insufficient fieldwork data. Additionally, because society changes so rapidly, the environments associated with Taekwondo clubs have also changed considerably. He further explained that the owners of Taekwondo clubs must recognize and embrace change, lest their businesses prove unsuccessful, or even fail. Successful management of Taekwondo clubs, therefore, requires Taekwondo instructors to envisage the rapidly changing environments of Taekwondo clubs and make appropriate changes in order to accommodate them. Oh, Jin, and Kim (2000) agreed and added that Taekwondo clubs could be successful only when they investigate what programs, facilities, public relations, management, and leadership consumer's demand. They should then carry out marketing activities appropriate to their findings.

In order to draw out effective improvement methods for the ever-increasing challenges associated with Taekwondo clubs in the US, we collected opinions (data) from ten Korean masters and fifteen trainers engaged in Taekwondo. Thus, this study was designed to aid in the preparation, expansion and development of Taekwondo professionals seeking careers and/or club ownership in the US. Additionally, instructors who operate Taekwondo clubs in foreign countries will find value in these findings.

#### **Review of Literature**

# History of Overseas Expansion of Taekwondo

- 1) Overseas debut of Taekwondo instructors and demonstration teams: Taekwondo was introduced overseas between 1940 and 1957. Korean instructors traveled to America and Europe with intentions to teach Taekwondo as a means to support their academic studies (Yoon, 2005). Additional expansion occurred when servicemen were stationed in Korea after the Korean War. Here we see where soldiers who participated in the Korean War returned to their mother country and began instructing Taekwondo (Lee, 2002). These individuals played a key role in developing Taekwondo as an international martial art (Yoon, 2005). Another historical event which aided in the expansion of Taekwondo involved Ngo Dinh Diem, the president of Vietnam, who visited Korea in 1958 and was deeply impressed by the sport. He invited the Korean Military Taekwondo Demonstration Team to his country in 1959. The team toured in Vietnam and Taiwan. This resulted in dispatching four Korean instructors to Vietnam to provide training in the sport to Vietnamese military schools (Yoon, 2005). As a result of these expansions, Taekwondo gained popularity and was soon recognized as a polite and powerful martial art. This resulted in European and American governments extending formal invitations to Taekwondo instructors to visit their countries and provide instruction for their military, police force, and among civilians (Lee, 2002).
- 2) Globalization of Taekwondo Organizations: International Taekwondo Federation (ITF). In 1966, the ITF was founded by Hong Hi Choi and included Korea, Malaysia, Singapore, US, West Germany, Italy, Turkey, Egypt, and Vietnam (Yang, 2006). Some collaboration was seen between the ITF and the Korean Taekwondo Federation (KTF); however, in 1971, ITF and the KTF disagreed on the propriety of dispatching instructors to overseas locations. This dispute resulted in president Choi being exiled to Canada in 1972. Further expansion of the sport was seen as the Taekwondo Demonstration Team introduced Taekwondo to the North Koreans in 1980 (Yang, 2006). Because of their continuous effort to expand the market globally, ITF currently has 1.38 million trainees in 120 countries (Yang, 2006).

Kukkiwon (World Taekwondo Headquarters). Kukkiwon was established in 1973 and began hosting The World Taekwondo Championships and established the World Taekwondo Federation (WTF) in an effort to globalize Taekwondo. In 1974 they developed a demonstration team and began dispatching twelve instructors to underdeveloped countries to promote the sport. This action bolstered the movement and helped to make Taekwondo an official Olympic event. Taekwondo Poom/Dan certificates, issued by Kukkiwon, are regarded worldwide as the highest measure of Taekwondo training and are the required certificate to become a qualified participant in international Taekwondo competition or to be a participant in events hosted by the WTF (Kukkiwon, 2013).

World Taekwondo Federation (WTF). On June 3, 1973, the WTF office was established at Kukkiwon (World Taekwondo Headquarters) and on October 8, 1975, the WTF joined the General Association of International Sports Federations (GAISF) current Sport Accord that allowed the WTF to be recognized by the International Olympic Committee (IOC). As a result, Taekwondo was accepted as a demonstration sport for the 1988 Seoul and 1992 Barcelona Olympic Games; it became an official event at the 2000 Sydney Olympic Games and is currently considered one of main events in the summer games.

## Delphi Method

The Delphi Method was developed by Dalkey and Helmer (1963) and later implemented by a research group at the Rand Corporation in the late 1950's. Linstone & Turoff (1975) defined the Delphi technique as "a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (p. 3). The Delphi Method is widely used and serves as a respected method to gather data from a cohort of experts to forecast a specific real-world issue. In other words, the Delphi Method is suitable for consensus-building by utilizing a series of questionnaires to gather data from a panel of selected subjects (Dalkey & Helmer, 1963; Dalkey, 1969; Lindeman, 1981; Linstone & Turoff, 1975; Martino, 1983; Young & Jamieson, 2001).

According to Cyphert and Grant (1971), Brooks (1979), Ludwig (1994, 1997), and Custer, Scarcella, and Stewart (1999), three iterations are sufficient to collect the needed information to gain a consensus. This procedure illustrates the concept that, "two heads are better than one, or...n heads are better than one," (Dalkey, 1972, p. 15) and is particularly valuable when the topic has not been previously studied. Regarding the Delphi process, Hsu and Sanford (2007) stated:

In the first round, the Delphi process traditionally begins with an open-ended questionnaire. The open-ended questionnaire serves as the cornerstone of soliciting specific information about a content area from the Delphi subjects. After receiving subject's responses, investigators need to convert the collected information into a wellstructured questionnaire. This questionnaire is used as the survey instrument for the second round of data collection...In the second round, each Delphi participant receives a second questionnaire and is asked to review the items summarized by the investigators based on the information provided in the first round. Accordingly, Delphi panelists may be required to rate or rank-order item to establish preliminary priorities among items...In the third round, each Delphi panelist receives a questionnaire that includes the items and ratings summarized by the investigators in the previous round and are asked to revise his/her judgments or "to specify the reasons for remaining outside the consensus...In the fourth and often final round, the list of remaining items, their ratings, minority opinions, and items achieving consensus are distributed to the panelists...It should be remembered that the number of Delphi iterations depends largely on the degree of consensus sought by the investigators and can vary from three to five (p. 2-3).

There are three characteristics associated with the Delphi Method: anonymity, controlled feedback, and aggregations of responses. First, anonymity ensures responses are collected anonymously via formal questionnaires. Hsu and Sandford (2007) state that subject anonymity could reduce "the effects of dominant individuals which often is a concern when using group-based process used to collect and synthesize information" (p. 2).

Second, iterations, completed at all stages, and for each exercise, are followed by precisely controlled feedback in an effort to produce positive influences on the interactions. As Ludwig (1994) noted:

Iterations refer to the feedback process. The process was viewed as a series of rounds; in each round every participants worked through a questionnaire which was returned to the researcher who collected, edited, and returned to every participants a statement of the position of the whole group and participants aware of the range of opinions and the reasons underlying those opinions (p. 55).

Lastly, statistical aggregation of responses allows for coupling of anonymous questionnaire units into a whole. Participants' opinions are defined at the final stage by statistical aggregation of individual opinions because, "at the end of the exercise there may still be significant spread in individual opinions" (Dalkey, 1972, p. 21). Summarily, features of the Delphi Method were designed to free participants from: a) prejudiced opinions of controlling individuals, b) unrelated communication, and c) conformity due to group pressure (Dalkey, 1969).

The selection of subjects is the most important step for a Delphi study because it directly relates to the quality of the results generated (Judd, 1972; Taylor & Judd, 1989; Jacobs, 1996). Delbecq, Van de Ven, and Gustafson (1975) specifically point out that three groups of people should be included in a Delphi study—namely:

- (1) the top management decision makers who will utilize the outcome of the Delphi study;
- (2) the professional staff members together with their support team; and
- (3) the respondents to the Delphi questionnaire whose judgments are being sought (p. 85).

Regarding the appropriate number of subjects, Delbecq, Van de Ven, and Gustafson (1975) recommend that ten to fifteen subjects could be sufficient if the background of the Delphi subjects is homogeneous. Hsu and Sandford (2007) stated, "if the sample size is too large, the drawbacks inherent within the Delphi Method consist of potentially low response rates, and the obligation of large blocks of time by the respondents, and the researcher(s) (p. 4).

Some weaknesses are inherent to the Delphi Method. Cyphert and Gant (1971) noted that the Delphi technique could, "be used to mold opinion as well as to collect data" (p. 273), however, Altschuld and Thomas (1991) indicated the results of a Delphi study could be ascertaining a series of general statements rather than an in-depth exposition of the topic. Moreover, Habibi, Sarafrazi, and Sandford (2014) found the shortcoming of the methods are not in the outcomes but rather in execution of the inquiry and the lack of a clear theoretical framework for using this technique.

## Study Purpose

The purpose of this study was to use the Delphi Method to determine management strategies that might enhance the operations of Taekwondo training centers in the US and; to induce management to implement the strategies based on that forecast. In order to draw out effective improvement methods for the ever-increasing challenges associated with Taekwondo clubs in the US, the principal researcher collected opinions from ten Korean masters and fifteen trainers engaged in Taekwondo. Thus, this study was designed to aid in the preparation, expansion and development of Taekwondo professionals seeking careers in the US. Additionally, instructors who operate Taekwondo clubs in foreign countries will find value in these findings.

### Method

### Subjects and Procedures of the Study

Ten Korean masters and fifteen trainers were used in this research. Each participant is familiar with Taekwondo facility operations and has greater than three years of teaching experience. All have been practicing Taekwondo for more than ten years. In addition, the Korean masters were selected because of the knowledge they gained from owning and operating various Taekwondo

facilities. The Korean trainers were selected because of their interest in opening their own facilities in the US (See table 1).

		Frequency (%)
Sender	Male	22 (88)
ender	Female	3 (12)
ımber of years	1 - 10 years	1 (4)
racticing Taekwondo	11- 20 years	9 (36)
	21 – 30 years	13 (52)
	31 – 40 years	2 (8)
ımber of years	3 years	9 (36)
aching Taekwondo	6 – 9 years	6 (24)
	9 – 12 years	7 (28)
	More than 13 years	3 (12)
	Korean Masters	10 (40)
osition	Korean Trainers	15 (60)

This study consisted of three phases of questionnaire data collection. The first investigatory questionnaire consisted of open-ended questions soliciting opinions concerning changes in the management of Taekwondo training centers in the US. The second questionnaire required the participants to answer 53 questions that were developed from the responses to phase one. This phase of the survey was used to distinguish the degree of possibility of changes, as well as the expectation of these changes. Items probing the possibility of changes were measured with the following five scales: 'almost sure,' 'highly sure,' 'there is a possibility,' 'there is a scarce possibility,' and 'changes are impossible'. However, the questions measuring individuals' expectations of changes were measured using a four-degree scale including: 'necessarily required,' 'desirable,' 'undesirable,' and 'harmful' in order to avoid 'neutral' responses. Examples of the measures of the second questionnaire are demonstrated in Table 2. The third phase of the survey allowed respondents to compare their own opinions with those opinions expressed by other experts. This was accomplished by providing the median and the ranges of the quartiles. To further enhance the inquiry, the respondents had to clarify their reasons when their opinions were beyond the ranges of the quartiles.

		Degrees of the possibility of changes				Expectation of changes			
Questions	Almost sure (≥96%)	Highly sure (68- 95%)	There is a possibility. (36-65%)	There is a scarce possibility. (6-35%)	Changes are impossible. (≤ 5%)	Necessarily required	Desirable	Undesirable	Harmful
1) The importance of afterschool activities will become	1	2	3	4	5	1	2	3	4
greater.  2) More focus will be put on programs for physical fitness improvement.	1	2	3	4	5	1	2	3	4

# Data analysis

The first survey used open-ended questions to collect the expert opinions of ten Korean masters and fifteen Korean trainers. The collected replies were categorized into the five marketing mixes (5Ps) and used to create the 53 questions for the second phase of survey. The possibility of changes and degrees of expectation of changes were assessed with a 5-point and 4-point Likert-Type scale, respectively. Excel was used to convert the response scales into a percentage. A utilized linear formula (Lee, 2001) and the results are presented in Table 3. The possibility of changes and expectation of changes were classified and analyzed in Table 4.

_ikert-Type scale	%	
	96.00	
2	73.25	
3	50.50	
1	27.75	
5	5.00	
inear formula	Y= -22.75X+118.5 X: responses on the Likert-Type scale Y: %	

Possibility of changes predicts the possibility of changes in the future for operating Taekwondo facilities. Probability of change is an expression of what percentage changes could occur.

Table 4: Degree of hope	Table 4: Degree of hope for the change in conversion (Lee, 2001)								
Average expectation of changes	Expectation degrees	Probability of the changes	Degrees of the possibility of changes						
2.000 and lower	Agreed	67 or higher	High						
2.001-2.900	Partially agreed and partially opposed	51-66	Extant						
2.901 and higher	Opposed	50 or lower	Low						

<sup>\*</sup> Degree of hope means degree of uncertainty in the possibility of changes that masters and trainers desire for operating Taekwondo facilities.

#### Results

After collection of the expert responses from the initial Delphi investigation, 95 items were created under the five marketing mixes. After combining and correcting contents, the 53 items illustrated in Figure 1 were derived and used for the second phase of the survey. The second questionnaire used 53 questions determined from the results of phase one. The 53 questions in phase two were used to distinguish the degree of possibility for the changes and the expectations of change. The results of the second phase of the survey are illustrated in Figures 2 & 3.

The third questionnaire asked respondents to compare their own opinions with those of other experts. The survey provided information regarding the median (*Mdn*) and interquartile ranges of the second survey results (see Table 5).

The panel of experts achieved a consensus through the process of iteration and ranked the possibility of change in the following items: the location of Taekwondo clubs, methods of publicity and promotion incorporating technology, increasing needs of the investment for club facilities, and development of the programs and Taekwondo skills. Figure 4 and Table 6 represent the items ranked as high and low possibilities of change and the expectation degrees. According to the findings in Figure 4, those areas associated with the highest possibility of change were the development and growth of more varied Taekwondo programs. A priority was seen for the development of after school programs. Participants indicated that in order to facilitate this, Taekwondo clubs should be strategically located in shopping centers, near elementary schools and in residential areas. The questionnaires indicated the proximity of facilities to families with younger children might draw them to programs targeted toward preschoolers three to five years of age. Additional findings included adding more *poomsae* and black belt programs as students remain in Taekwondo, that facility maintenance was important, promotion and marketing were vital to survival, and fiscal health should be attended to in order to operate a successful Taekwondo club.

<sup>\*</sup> Possibility of changes predicts the possibility of changes in the future for operating Taekwondo facilities.

<sup>\*</sup> Probability of change is an expression of what percentage changes could occur.

		Degree	es of the possibility	of changes	
Question contents	Almost sure	Highly sure	There is a possibility.	There is a scarce possibility.	Changes are impossible.
	X				
The importance     afterschool     activities will     become greater.	_	Mdn			
pecome greater.	1	2	3	4	5

\* Mdn: Median; Highlight indicates experts' results and X indicates the survey participant's answer from the

second survey questionnaire.

Ranking	Question Number Possibility Question contents		Expectation Degrees	
1	48	25.02	Some clubs will adopt deferred payment systems.	Opposed
2	11	38.67	Sparring-oriented classes will be carried out.	Partially agreed/opposed
3	31	41.40	Taekwondo club vehicles will collect and deliver trainees to their homes.	Opposed
4	22	46.86	People will prefer clubs run by Americans to ones run by Koreans.	Opposed
5	51	48.68	Afterschool activities will be supported by the government.	Agreed
6	47	49.59	Long term subscriptions will vanish and the monthly fee system will prevail.	Partially agreed/opposed
7	7	50.50	The concept of orthodox martial art will disappear.	Opposed

In summary, Taekwondo clubs could expect growth as a result of these programmatic and demographic changes. Additionally, as Taekwondo clubs respond to the need for growth and after-school care, investors may be more likely to fund Taekwondo facilities. Successful clubs may become competitive and have a positive influence on the community through volunteer events, donations, and local festivals. As Taekwondo clubs partner with the community, both citizens and those looking to franchise will likely take notice, and chains of Taekwondo clubs may develop. In contrast, the lowest ranking categories, and therefore providing the least likelihood for change, included adopting a deferred payment system, providing taxi service for pick-up and delivery of students to their homes, and including a sparring-oriented class.

This study found that six items (3, 15, 16, 17, 18, 21) were highly volatile and only partially agreed upon whereas 17 other items found unanimous agreement except item number 46. Two items (11,47) with low volatility were both partially agreed and partially opposed, but four other items are all opposed except item number 51, which was agreed.

#### **Discussion**

This research collected and analyzed data from a cohort of Taekwondo experts to determine (a) ideas that might positively affect operations at Taekwondo centers in the US and (b) how implementation of changes of the operation of Taekwondo might affect the US market. Using the Delphi Method, the initial opinions from the panel experts were itemized and categorized into the five marketing mixes. Next, the panelists prioritized the addressed items and reviewed their responses and compared them with the opinions of the other experts. Through the process, consensus among the experts was made regarding the ideas for change and implementation of change. The panel of experts achieved a consensus through the process of iteration and ranked the possibility of change in the following items: the location of Taekwondo clubs, methods of publicity and promotion incorporating technology, increasing needs of the investment for club facilities, and development of the programs and Taekwondo skills. In this section, discussions and suggestions were developed with the perspective of each element of the marketing mix.

# 1) Product: Taekwondo program and facilities

The necessity of various types of *poomsae* and programs for black belts was raised. It was determined that American Taekwondo clubs do not maintain a proper standard of *poomsae* and programs for maintaining black belts; this is due to adult trainees' rapid acquisition of *poomsae*. Our findings are in agreement with those of Kim, Cho, & Lee (2003) and Korean Taekwondo Consulting, (1997) who indicate the proportion of trainees with black belts has been increasing in the Taekwondo clubs in the US, indicating the club cannot be successful without satisfying black belts' trainees. Based on these findings, several suggestions for management strategies of Taekwondo clubs in the US are advanced. First, clubs should revive the old type of *poomsae*, and include a variety of training in addition to the old *poomsae*. Because Taekwondo clubs rely on their membership of black belts to provide instruction to their members, it is vital that they learn the spirit of the art as well as the skills. To that end, the next suggestion is that clubs provide special classes that target black belts by providing them with training that emphasizes the spirit of Taekwondo, as well as in-depth instruction on breaking, self-defense skills, poses, and hand and foot skills.

The second result of our inquiry indicates programs should be developed that target early childhood (age 3-5). We therefore advance that physical activities in early childhood can

promote physical and motor skills in children. Through the use of the principles and characteristics associated with Taekwondo, children who are three to five years of age can achieve holistic development appropriate to their physical growth. As Kim (2005) notes, children in this age range require different training from older children, as they are not yet developed enough to master many of the higher-level skills.

Our third find indicates that maintaining facility quality is valuable. This aligns with the findings of Jeong and Lee (2003) who indicate that a club can gain a competitive advantage by focusing on all aspects of Taekwondo facility maintenance. The authors recommend maintaining a safe, clean and pleasant training environment within the Taekwondo club. Attention to these details may result in greater client satisfaction and an increase in prospective customers.

Lastly, we find that fiscal responsibility is necessary for the successful operation of a Taekwondo club in the states. This aligns with the find of Park (2002) who advances that financial pettiness is a main weakness within the operation of Taekwondo clubs; the author suggests franchise strategies as a possible solution to this problem. His study highlighted program development and wealth distribution as two of the benefits of franchising. Although he suggested the franchise model, he also supports Taekwondo clubs developing their own identities that utilizes the unique characteristics of their trainees, market incentives, and the financial capability of its patrons. This process of franchise individualization would allow clubs to simultaneously provide the best marketing and promotions while also allowing for adjustments in training fees.

# 2) Price: Taekwondo costs

Marketers may use various price strategies to increase sales and profit. Marketers, however, are cautioned when adopting price strategies as price is an indicator of product value (Mullin, Hardy, & Sutton, 2014). Price lowering may contribute to a short-term profit increase by maintaining existing trainees and attracting new members; however, it may fail in the long-term. For instance, members may protest and leave a club that initially sets low membership fees and then increases the cost in the future. To insure long-term success, owners of Taekwondo facilities should have a business plan that considers all internal and external factors. Fornell (1992) reported that companies could decrease the level of price sensitivity of their customers if they provide a quality program.

The results suggest that long-term membership programs would be an effective management strategy as it allows the club to provide various options that may result in benefits to club trainees. For example, the Black Belt Club is a three-year program that provides exclusive benefits to the trainees including a special uniform distinguished from regular program members. Additionally, various program options and promotions provided to long-term trainees exclusively may allow Taekwondo clubs to recruit new members while maintaining existing trainees. This will contribute to financial stability and eventually reduce the financial burden experienced by facility owners.

#### 3) Place: Locations of Taekwondo clubs

Lim (1988) identified expensive rent as one of the challenges associated with managing Taekwondo clubs. Most American Taekwondo clubs are located in shopping malls that are associated with high rent costs and may provide crowded spaces. In addition, clubs located close to one another often compete for the same customer base. Because there are no

regulations concerning opening new Taekwondo clubs in the US, this phenomenon has occurred frequently. Cho's (1998) study partially supports the results of this study indicating accessibility of the facility is the most important determinant for the success of Taekwondo clubs rather than factors such as instructors and program.

When compared with the other marketing mixes, adopting the place mix (i.e. location of Taekwondo club) may present more challenges as it may result in higher rents and maintenance costs for preferred locations. If Taekwondo training clubs do not have the resources to invest in a prime location for their facility, alternative options should be explored and acted upon. For instance, Taekwondo clubs could enhance their marketing and promotion by collaborating with elementary schools to provide school-based demonstrations or even distribution of coupons for complimentary lessons. Additionally, clubs could provide complimentary self-defense classes; students may participate in a free class and subsequently develop an interest in the sport inspiring then to enroll in a regular training program.

# 4) Promotion: Promotion of Taekwondo clubs

In terms of promotion and publicity, Taekwondo clubs should expand internet- and smartphone-based advertisements. The need for more smartphone advertisements is supported by the fact that the number of smartphone users exceeded two billion as of December 2015 (Strategy Analytics, 2015). This trend has triggered the purchase of products and advertisements through social network services. Yu (2003) claimed that internet-based marketing promotes conversations between customers and enterprises. Such bidirectional communication promotes more active marketing opportunities. If social network advertisements are well designed and systematically implemented, they are shown to result in higher returns than traditional methods. In terms of overall marketing, Moon (2012) suggested that structure, interactivity, search ability, and accessibility need to be improved in order to enhance Taekwondo websites. Additionally, he emphasized that websites should provide trustworthy information by utilizing an accurate analysis of the preferences and tendencies of Taekwondo participants.

As mentioned earlier, effective advertising can also be accomplished through the use of referral programs and various promotions such as coupons, gift cards and participation in school and local events. This is supported by Mullin et al., (2014). As they state that it is important to create and enhance positive images of products and companies--Taekwondo clubs are no exception.

## 5) People: Taekwondo instructors

The results implied that instructors should be trained in basic first-aid. Lee and Cho's (1998) study indicated that the greatest concern among parents who have children attending Taekwondo clubs is injuries incurred while exercising and training. It is therefore suggested that head trainers or coaches employed at Taekwondo clubs become certified in first-aid and/or possess basic medical knowledge; this action may temper parents' concerns.

Lee, Cho, and Kim (2010) report there are many concerns associated with the employer-employee relationship of Taekwondo clubs in America. The authors indicate that managers and coaches often clash over issues such as wages, verbal communication, and cultural differences. Our data supports this find. In response to these issues, we advance the find of Kang (2008) who asserts that US Taekwondo clubs should use legally-binding contractual measures when hiring Korean coaches to prevent future conflicts. The contracts should include details such as

conditions for wage improvement, visa sponsorship, housing issues, and working hours. Such contracts may help prevent unfair treatment of Korean Taekwondo coaches working in the US.

In Korea, domestic Taekwondo instructors have saturated the market, forcing many people to find jobs in other fields or to consider working in foreign countries. This phenomenon is not without promise, however, as Kang (2008) finds that overseas Taekwondo leaders look for qualified professional personnel. Therefore, graduates of Korean Taekwondo schools may find work in Taekwondo clubs in the US if they are prepared to work overseas.

#### Conclusion

Strategic planning reflecting market environments should be developed for long-term success in any sport organization. Using the Delphi Method, this study collected and analyzed experts' opinions on proposed marketing strategies aimed at expanding and enhancing Taekwondo clubs in the US. The items were then categorized into the five marketing mixes, 5Ps to investigate the degrees of the possibility of changes and hope for changes. The panel of experts achieved a consensus through the process of iteration and ranked the possibility of change in the following items: the location of Taekwondo clubs, methods of publicity and promotion incorporating technology, increasing needs of the investment for club facilities, and development of the programs and Taekwondo skills.

The results provide empirical data supporting effective management strategies for Taekwondo training centers in the US. Since accessibility of the facility and other facility-related elements (e.g., size, structure, quality, safety, cleanness, etc.) are important determinant factors when people choose a training facility (Cho, 1998), the owners should make strategic decisions to maintain a competitive edge regarding the location, investment and maintenance of the facility after carefully reviewing the market environments. In terms of the marketing and promotion strategy, Taekwondo clubs should build partnerships with educational institutions and programs.

Within the marketing perspective, it is important to understand the needs of the parents if the program targets are children and of early childhood age (Mullin, Hardy, & Sutton, 2014). Parents may choose training centers providing more comprehensive educational preparation, not simply teaching technical Taekwondo skills. Accordingly, we suggest the owners hire qualified trainers and place more effort on educating and training their employees and trainers.

One of the projected changes is the continuous escalation of the program cost. Since the price refers to the value of the product, our suggestion is to add more value onto the product instead of discounting the price. In the same vein, Taekwondo clubs should recognize the different needs of the trainees based on their level of performance as well as their demographics and adjust their product accordingly. Similarly, they should develop a variety of Taekwondo poomsae and programs to satisfying the diverse needs of the trainees.

The findings of this research can contribute to developing management strategies of Taekwondo training centers in the US. This study, similar to any inquiry, has its limitations. This research only included panelist from Korean Taekwondo masters and trainers working in the US. Thus, the findings should be carefully interpreted because the experts' cultural bias may lead to similar answers for uncertain questions when using Delphi methods (Dalkey, 1972). The panelists in the study strongly expected that the proportion of American instructors vis-à-vis Korean instructors would continuously increase in the near future. Consequently, future research should be designed to include the opinions of American Taekwondo masters and

trainers. This could make the data more generalizable, as well as increase the reliability and validity of the research.

The findings from this study are limited in their generalization to other contexts including the small sample size (n=25). As a result, the findings of this research may not be applicable to all Taekwondo centers; hence, more research is needed to confirm them. However, it should be stated, that US venues outside the Taekwondo realm may find our findings useful in identifying cultural and structural changes that may enhance their business. In order to determine changes and trends in management strategies, it may also be useful for this study to be replicated every five years.

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OUR

Figure 1: Items created from the first Delphi phase

Area	Question contents
	1) The importance of afterschool activities will get greater.
	2) More focus will be put on programs for physical fitness improvement
	3) Fun-oriented classes will be carried out due to increase of child trainees.
	4) Development of programs for young children (aged 3~5) will be activated.
	5) Family-based classes will prevail.
	6) The number of Taekwondo clubs observing the WTA's <i>poomsae</i> or sparring rules will be decreased.
	7) The concept of orthodox martial art will disappear.
	8) Adult Taekwondo trainees will vanish due to the changing images of Taekwondo.
Taekwondo	9) In order to meet trainees' diverse needs, classes integrating Taekwondo with speeding,
programs and	Pilates, yoga etc. will appear.
facilities	10) Various <i>poomsae</i> and programs for black belts will need to be developed.
	11) Sparring-oriented classes will be carried out.
	12) Spread of Korean culture in terms of Taekwondo will be more active.
	13) Taekwondo programs run in America will be re-exported to Taekwondo clubs in Korea.
	<ul> <li>14) Spaces will increase for afterschool activities, but decrease for Taekwondo classes.</li> <li>15) More attention will be paid to the investment for Taekwondo club facilities due to competition</li> </ul>
	with other clubs.
	16) Facilities will be changed so as to run various programs
	17) The sizes of Taekwondo clubs will bec <mark>ome bigger</mark> and franchising will prevail.
	18) Customers who prioritize club environments and post-management to classes will increase.
	19) Instructors need fundamental medical knowledge to gain confidence from parents.
	20) Instructors' class abilities will be enhanced owing to their frequent attendance at seminars.
	21) The proportion of American instructors will increase due to the decrease of Korean
	instructo <mark>rs migrating to the U.S.A.</mark>
Taekwondo	22) People will prefer clubs run by Americans to ones run by Koreans.
instructors	23) The techniques and spirits of Taekwondo will be westernized due to increase of American coaches.
	24) Agencies will appear that are able to supply Taekwondo coaches.
	25) Instructors' abilities will be leveled.
	26) High quality will be required of instructors.
	27) Competition among companies that produce software programs used by Taekwondo clubs
	will be more serious.
	28) Online advertisement will prevail.
	29) Applications only for Taekwondo clubs will be developed to provide information of such
	clubs.
	30) Personnel in charge only of on-line consulting will be employed.
	31) Taekwondo club vehicles will collect and deliver trainees to their homes.
Promotion of	32) Publicity using images containing the contents of lessons or demonstration will be active.
Taekwondo	33) The number of companies that exclusively manage Internet advertisements will increase.
clubs	34) Public relations in terms of introduction of friends will be active.
	35) Children and infants will be targets of publicity.
	36) Taekwondo will be actively spread owing to demonstrations and classes in schools
	37) Some Taekwondo clubs will begin to make a donation with profits from their demonstrations.
	38) Schools will invest more money and time in teaching Taekwondo.
	39) More money and time will be spent for good relations with school teachers and parents.
	40) Public relations will depend more on educational materials than on demonstrations.
	41) More schools will adopt Taekwondo as part of their physical education.

- 42) The methods of publicity will be activated in which clubs participate in donation events, volunteering, and local festivals.
- 43) Marketing using coupons and gift cards will be activated.

# Locations of Taekwondo clubs

- 44) Due to the development of afterschool activities, Taekwondo clubs will be located in centers around elementary schools and residential areas.
- 45) Taekwondo clubs will find their centers in warehouses rather than spaces in downtowns due to expensive rents and serious competitions.
- 46) Competitions will continue to be more serious among clubs located in downtowns than in suburban areas.
- 47) Long term subscriptions will vanish and the monthly fee system will prevail.
- 48) Some clubs will adopt deferred payment systems.
- 49) Fees for belt tests will rise.

# Taekwondo costs

- 50) Fees will be increased for maintenance of good facilities.
- 51) Afterschool activities will be supported by the government.
- 52) Government subsidiaries will support students from low-income families participating in Taekwondo.
- 53) Fees will be lowered due to competition with other clubs.



Figure 2: Results from the second survey: items relate to prediction

Question Number	Question contents	Average	Quartiles
1	The importance of afterschool activities will get greater.	79.62	1.0-2.0
2	More focus will be put on programs for physical fitness improvement	61.42	1.5-3.0
3	Fun-oriented classes will be carried out due to increase of child trainees.	81.44	1.0-2.0
4	Development of programs for young children (aged 3-5) will be activated.	79.62	1.0-2.0
5	Family-based classes will prevail.	65.06	1.5-3.0
6	The number of Taekwondo clubs observing the WTA's <i>poomsae</i> or sparring rules will be decreased.	56.87	1.5-3.0
7	The concept of orthodox martial art will disappear.	52.32	2.5-3.0
8	Adult Taekwondo trainees will vanish due to the changing images of Taekwondo.	55.05	2.0-3.0
9	In order to meet trainees' diverse needs, classes integrating Taekwondo with speeding, Pilates, yoga etc. will appear.	69.61	1.5-3.0
10	Various <i>poomsae</i> and programs for black belts will need to be developed.	85.08	1.0-2.0
11	Sparring-oriented classes will be carried out.	35.94	3.0-4.0
12	Spread of Korean culture in terms of Taekwondo will be more active.	77.80	1.0-2.0
13	Taekwondo programs run in America will be re-exported to Taekwondo clubs in Korea	66.88	1.5-3.0
14	Spaces will increase for afterschool activities, but decrease for Taekwondo classes.	58.69	2.0-3.0
15	More attention will be paid to the investment for Taekwondo club facilities due to competition with other clubs.	82.35	1.0-2.0
16	Facilities will be changed so as to run various programs	79.62	1.0-2.0
17	The sizes of Taekwondo clubs will become bigger and franchising will prevail.	79.62	1.0-2.5
18	Customers who prioritize club environments and post-management to classes will increase.	73.25	1.0-2.5
19	Instructors need fundamental medical knowledge to gain confidence from parents.	68.70	1.5-3.0
20	Instructors' class abilities will be enhanced owing to their frequent attendance at seminars.	59.60	2.0-3.0
21	The proportion of American instructors will increase due to the decrease of Korean instructors migrating to the U.S.A.	78.71	1.0-2.5
22	People will prefer clubs run by Americans to ones run by Koreans.	46.86	2.0-4.0
23	The techniques and spirits of Taekwondo will be westernized due to increase of American coaches.	58.69	2.0-3.0
24	Agencies will appear that are able to supply Taekwondo coaches.	63.24	2.0-3.0
25	Instructors' abilities will be leveled.	52.32	2.0-4.0
26	High quality will be required of instructors.	62.33	1.5-3.0
27	Competition among companies that produce software programs used by Taekwondo clubs will be more serious.	65.06	1.0-3.0
28	Online advertisement will prevail.	71.43	1.0-3.0
29	Applications only for Taekwondo clubs will be developed to provide information of such clubs.	75.98	1.0-2.0
30	Personnel in charge only of on-line consulting will be employed.	63.24	1.5-3.5
31	Taekwondo club vehicles will collect and deliver trainees to their homes.	40.49	3.0-4.5
32	Publicity using images containing the contents of lessons or demonstration will be active.	75.07	1.0-2.0
33	The number of companies that exclusively manage Internet advertisements will increase.	72.34	1.0-3.0
34	Public relations in terms of introduction of friends will be active.	73.25	1.0-3.0

35	Children and infants will be targets of publicity.	80.53	1.0-2.0
36	Taekwondo will be actively spread owing to demonstrations and classes in schools	74.16	1.0-2.5
37	Some Taekwondo clubs will begin to make a donation with profits from their demonstrations.	58.69	2.0-3.5
38	Schools will invest more money and time in teaching Taekwondo.	65.97	2.0-3.0
39	More money and time will be spent for good relations with school teachers and parents.	70.52	1.5-3.0
40	Public relations will depend more on educational materials than on demonstrations.	56.87	2.0-3.0
41	More schools will adopt Taekwondo as part of their physical education.	61.42	2.0-3.0
42	The methods of publicity will be activated in which clubs participate in donation events, volunteering, and local festivals.	75.07	1.0-2.5
43	Marketing using coupons and gift cards will be activated.	75.07	1.0-3.0
44	Due to the development of afterschool activities, Taekwondo clubs will be located in centers around elementary schools and residential areas.	85.08	1.0-2.0
45	Taekwondo clubs will find their centers in warehouses rather than spaces in downtowns due to expensive rents and serious competitions.	61.42	2.0-3.0
46	Competitions will continue to be more serious among clubs located in downtowns than in suburban areas.	79.62	1.0-2.0
47	Long term subscriptions will vanish and the monthly fee system will prevail.	47.77	2.0-4.0
48	Some clubs will adopt deferred payment systems.	26.84	3.0-5.0
49	Fees for belt tests will rise.	58.69	2.0-3.0
50	Fees will be increased for maintenance of good facilities.	72.34	1.0-3.0
51	After school activities will be supported by the government.	46.86	2.0-4.0
52	Government subsidiaries will support students from low-income families participating in Taekwondo.	54.14	2.0-3.5
53	Fees will be lowered due to competition with other clubs.	57.78	2.0-3.0



Figure 3: Results from the second survey: items related to hope

Question Number	Question contents	Average	Quartiles
1	The importance of afterschool activities will get greater.	1.88	1.0-2.0
2	More focus will be put on programs for physical fitness improvement	1.64	1.0-2.0
3	Fun-oriented classes will be carried out due to increase of child trainees.	2.48	2.0-3.0
4	Development of programs for young children (aged 3-5) will be activated.	1.72	1.0-2.0
5	Family-based classes will prevail.	1.36	1.0-2.0
6	The number of Taekwondo clubs observing the WTA's <i>poomsae</i> or sparring rules will be decreased.	3.32	3.0-4.0
7	The concept of orthodox martial art will disappear.	3.68	3.0-4.0
8	Adult Taekwondo trainees will vanish due to the changing images of Taekwondo.	3.60	3.0-4.0
9	In order to meet trainees' diverse needs, classes integrating Taekwondo with speeding, Pilates, yoga etc. will appear.	2.56	2.0-3.0
10	Various <i>poomsae</i> and programs for black belts will need to be developed.	1.16	1.0-1.0
11	Sparring-oriented classes will be carried out.	2.52	2.0-3.0
12	Spread of Korean culture in terms of Taekwondo will be more active.	1.16	1.0-1.0
13	Taekwondo programs run in America will be re-exported to Taekwondo clubs in Korea	2.68	2.0-3.0
14	Spaces will increase for afterschool activities, but decrease for Taekwondo classes.	3.16	3.0-4.0
15	More attention will be paid to the investment for Taekwondo club facilities due to competition with other clubs.	2.08	1.0-3.0
16	Facilities will be changed so as to run various programs	1.76	1.5-2.0
17	The sizes of Taekwondo clubs will become bigger and franchising will prevail.	2.48	2.0-3.0
18	Customers who prioritize club environments and post-management to classes will increase.	2.88	2.0-4.0
19	Instructors need fundamental medical knowledge to gain confidence from parents.	1.64	1.0-2.0
20	Instructors' class abilities will be enhanced owing to their frequent attendance at seminars.	1.56	1.0-2.0
21	The proportion of American instructors will increase due to the decrease of Korean instructors migrating to the U.S.A.	2.84	2.0-3.5
22	People will prefer clubs run by Americans to ones run by Koreans.	3.52	3.0-4.0
23	The techniques and spirits of Taekwondo will be westernized due to increase of American coaches.	3.64	3.0-4.0
24	Agencies will appear that are able to supply Taekwondo coaches.	2.04	2.0-2.0
25	Instructors' abilities will be leveled.	3.04	3.0-4.0
26	High quality will be required of instructors.	1.64	1.0-2.0
27	Competition among companies that produce software programs used by Taekwondo clubs will be more serious.	1.76	1.0-2.0
28	Online advertisement will prevail.	1.60	1.0-2.0
29	Applications only for Taekwondo clubs will be developed to provide information of such clubs.	1.52	1.0-2.0
30	Personnel in charge only of on-line consulting will be employed.	1.84	1.0-2.0
31	Taekwondo club vehicles will collect and deliver trainees to their homes.	3.12	3.0-4.0
32	Publicity using images containing the contents of lessons or demonstration will be active.	1.72	1.0-2.0
33	The number of companies that exclusively manage Internet advertisements will increase.	1.88	2.0-2.0
34	Public relations in terms of introduction of friends will be active.	1.52	1.0-2.0

35	Children and infants will be targets of publicity.	1.88	1.0-2.0
36	Taekwondo will be actively spread owing to demonstrations and classes in schools	1.60	1.0-2.0
37	Some Taekwondo clubs will begin to make a donation with profits from their demonstrations.	184	1.0-2.0
38	Schools will invest more money and time in teaching Taekwondo.	2.20	2.0-2.5
39	More money and time will be spent for good relations with school teachers and parents.	2.16	1.0-3.0
40	Public relations will depend more on educational materials than on demonstrations.	2.00	2.0-2.0
41	More schools will adopt Taekwondo as part of their physical education.	1.84	1.0-2.0
42	The methods of publicity will be activated in which clubs participate in donation events, volunteering, and local festivals.	1.56	1.0-2.0
43	Marketing using coupons and gift cards will be activated.	2.04	2.0-2.0
44	Due to the development of afterschool activities, Taekwondo clubs will be located in centers around elementary schools and residential areas.	1.80	1.0-2.0
45	Taekwondo clubs will find their centers in warehouses rather than spaces in downtowns due to expensive rents and serious competitions.	2.24	2.0-3.0
46	Competitions will continue to be more serious among clubs located in downtowns than in suburban areas.	3.00	2.0-4.0
47	Long term subscriptions will vanish and the monthly fee system will prevail.	2.80	2.5-4.0
48	Some clubs will adopt deferred payment systems.	3.52	3.0-4.0
49	Fees for belt tests will rise.	2.36	2.0-3.0
50	Fees will be increased for maintenance of good facilities.	1.80	1.0-2.0
51	After school activities will be supported by the government.	1.84	1.0-2.0
52	Government subsidiaries will support students from low-income families participating in Taekwondo.	1.32	1.0-2.0
53	Fees will be lowered due to competition with other clubs.	3.44	3.0-4.0



Figure 4: Items ranked in high possibility of change and expectation degrees

Ranking	Question Number	Possibility	Question contents	Expectation Degrees
1	44	86.90	Due to the development of afterschool activities, Taekwondo clubs will be located in centers around elementary schools and residential areas.	Agreed
	4		Development of programs for young children (aged 3~5) will be activated.	Agreed
	10		Various <i>poomsae</i> and programs for black belts will need to be developed.	Agreed
2	15	83.26	More attention will be paid to the investment for Taekwondo club facilities due to competition with other clubs.	Partially agreed/opposed
	17	0	The sizes of Taekwondo clubs will become bigger and franchising will prevail.	Partially agreed/opposed
	42		The methods of publicity will be activated in which clubs participate in donation events, volunteering, and local festivals.	Agreed
	1	- VA	The importance of afterschool activities will get greater.	Agreed
	3		Fun-oriented classes will be carried out due to increase of child trainees.	Partially agreed/opposed
3	35	81.44	Children and infants will be targets of publicity.	Agreed
	46		Competitions will continue to be more serious among clubs located in downtowns than in suburban areas.	Opposed
	16		Facilities will be changed so as to run various programs	Partially agreed/opposed
4	18	80.53	Customers who prioritize club environments and post- management to classes will increase.	Partially agreed/opposed
5	29	79.62	Applications only for Taekwondo clubs will be developed to provide information of such clubs.	Agreed
6	21	78.71	The proportion of American instructors will increase due to the decrease of Korean instructors migrating to the U.S.A.	Partially agreed/opposed
U	32		Publicity using images containing the contents of lessons or demonstration will be active.	Agreed
7	33	77.80	The number of companies that exclusively manage Internet advertisements will increase.	Agreed
	12		Spread of Korean culture in terms of Taekwondo will be more active.	Agreed
8	36	75.98	Taekwondo will be actively spread owing to demonstrations and classes in schools	Agreed

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	43 28		Marketing using coupons and gift cards will be activated.  Online advertisement will prevail.	Agreed Agreed
9	34	74.16	Public relations in terms of introduction of friends will be active.	Agreed
10	50	72.34	Fees will be increased for maintenance of good facilities.	Agreed
11	39	70.52	More money and time will be spent for good relations with school teachers and parents.	Agreed
12	19	68.70	Instructors need fundamental medical knowledge to gain confidence from parents.	Agreed

