

## Taekwondo Participation as Serious Leisure for Life Satisfaction and Health

**Junhyoung Kim**

Winston-Salem State University

**John Dattilo**

The Pennsylvania State University

**Jinmoo Heo**

Indiana University–Indianapolis

### Abstract

This study investigated how different levels of serious leisure qualities are associated with life satisfaction and perceived health. Cluster analysis was used to identify patterns of serious leisure qualities (e.g., perseverance, significant effort, career development, identification, and unique ethos) in a sample of Taekwondo participants ( $N = 168$ ). The Serious Sages expressed many serious leisure qualities and reported having higher levels of life satisfaction and perceived health when compared to the Novices and Journeymen. The study identified that individuals pursuing Taekwondo as a serious recreation activity demonstrated high life satisfaction and perceived health. This study suggests that serious leisure offers rich opportunities for developing personal satisfaction and promoting health. Therefore, serious leisure involvement is related to life satisfaction and health.

*KEYWORDS: Taekwondo, serious leisure, life satisfaction, health perception*

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Junhyoung Kim is in the Department of Human Performance and Sport Sciences, Winston-Salem State University.

John Dattilo is in the Department of Recreation, Park & Tourism Management at The Pennsylvania State University.

Jinmoo Heo is in the Department of Tourism, Conventions, and Event Management at Indiana University – Indianapolis.

Correspondence regarding this article should be sent to: Junhyoung Kim, Department of Human Performance and Sport Sciences, Winston-Salem State University, C022 Anderson Center, Winston-Salem, NC 27110, Email: jhk174@gmail.com

## Introduction

Taekwondo originated in Korea 2,000 years ago as a traditional martial art and is practiced by many people across the globe. Based on a national survey administered in 2005 by the Korean government, there are 70 million Taekwondo practitioners in 190 countries throughout the world (Kim, 2006). Taekwondo has played a major role in disseminating some of the basic philosophical beliefs and cultural principles of Korea. Korea's traditional culture was founded on the basis of the philosophy of *Han*, representing heaven, earth, and human beings, as well as the philosophy of yin-yang and the five elements of the universe (metal, wood, water, fire, and earth) (Lee, 2001). Lee emphasized that participation in Taekwondo often means that a person is determined not only to attain the highest skill level of Taekwondo techniques, but the person is ultimately trying to achieve *simsin-ilyeo* (unity between mind and body), *cheonin-hapil* (oneness with heaven and earth), and then to become a *hongik-ingan* (a humanitarian).

Some studies have analyzed the physical and social benefits of Taekwondo participation. Kim (2009) examined the physical benefits of Taekwondo participation for 80 Korean youth and reported that Taekwondo activity contributed to their physical self-concept, physical strength, perseverance, and flexibility. In addition, Lim (2009) explored the relationships between Taekwondo participation and youths' social skills and found that the youth participating in Taekwondo reported significantly higher levels of perseverance and self-expression than non-participants. This study also suggested that Taekwondo participation provided participants with positive interactions and increased their ability to interact with others. Since Taekwondo principles dictate that participants be trained to enhance their sense of self-control and self-regulation, Choi, Ko, and Lim (2009) investigated self-control and self-regulation between 40 youth participants and 40 non-participants. Choi and his colleagues found that youth participants reported having more self-control and self-regulation when compared to non-participants.

Iso-Ahola and Park (1996) surveyed 252 Taekwondo participants to explore how leisure could buffer the effects of life stress and reported an inverse relationship between leisure-related social support and stress. The authors concluded that social relationships created by Taekwondo participation appear to moderate the effect of life stress; such moderation is positively associated with physical and mental health.

Park (2009) examined 239 elementary school students who were learning Taekwondo in Korea and concluded that the longer students were involved in the activity, the higher their scores on measures of responsibility, self-expression, self-control, and confidence. This study provides support for the contention that people who have a strong commitment to Taekwondo experience the benefits of participation. Many people who pursue Taekwondo do so in a serious manner over an extended period of time.

Stebbins (1982; 1992) used the term "serious leisure" to refer to the orientation of people who are seriously committed to participation in a particular recreation activity. For example, Lee, Kim, and Song (2005) examined the experience of Taekwondo participation as serious leisure by interviewing 12 female college

students in Korea. Four key themes associated with the benefits of serious leisure emerged: (a) develop a sense of perseverance, (b) experience enjoyment, (c) discover the meaning of Taekwondo activity, and (d) increase sense of familiarity of Taekwondo. The women emphasized that Taekwondo training played an important role in cultivating their body and mind as well as promoting their self-development. However, this study was limited because it did not examine how the women's participation was associated with life satisfaction and health and did not fully explore the qualities of serious leisure among participants.

Given the popularity of Taekwondo and the personal and social benefits (e.g., social ability, social skills, self-control, self-expression, confidence) that can be obtained via participation, there is merit in exploring how Taekwondo participation is related to health and life satisfaction. More specifically, participants who differ in their levels of involvement in Taekwondo activity may experience differentiating health-related outcomes. Therefore, there is a need for research exploring the relationship between Taekwondo participation and its associated benefits within the context of serious leisure.

### **Serious Leisure**

Serious leisure is defined as the “. . . systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial and interesting for the participants to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience” (Stebbins, 1992, p. 3). Stebbins has proposed three types of serious leisure including: amateurism, hobbyist pursuits and/or career volunteering. In contrast, casual leisure is an “immediately, intrinsically rewarding, relatively short-lived pleasurable activity requiring little or no special training to enjoy it” (Stebbins, 1997, p. 17). Types of casual leisure include social conversation, passive entertainment, and play.

Taekwondo participation can facilitate serious leisure involvement that captivates participants with its complexity and numerous challenges. For some people, this recreation activity results in a long-lasting commitment to skill and knowledge development. Stebbins (1992) also identified six defining qualities that represent the nature of serious leisure: (a) perseverance, (b) significant effort, (c) career development, (d) durable benefits, (e) strong identification, and (f) unique ethos.

Despite benefits of Taekwondo participation, participants may encounter challenges associated with their participation. Such challenges (e.g., fatigue, anxiety, and injury) require participants to develop a sense of *perseverance* (Stebbins, 1982). To develop a specialized knowledge base and the specific skills associated with Taekwondo participation, individuals must exert *significant effort*. For example, to demonstrate skill and knowledge advancement participants must complete a series of connected movements that require repeated practice and discipline to successfully perform. To achieve success in Taekwondo, participants often commit to career development that begins with acting as an apprentice and then moves into more independent, collegial, and even leadership roles as they gradually gain prowess. Taekwondo participation is designed to provide *durable personal and social benefits* such as self-actualization, self-enrichment, self-expression, recreation or renewal of self, feelings of accomplishment, enhancement of self-image, social inter-

action and belongingness, lasting physical products of the activity, and self-gratification or pure fun, that can be important results of serious leisure participation (Stebbins, 1992). Taekwondo participants may develop a *strong identification* with the martial art and tend to share positive cultural, physical, and mental perspectives with other people. For example, Iso-Ahola and Park (1996) have postulated that Taekwondo participants shared their leisure experiences with others, fostering companionship and friendship. Finally, Taekwondo participants may develop a special social world surrounding their participation in Taekwondo that creates a *unique ethos* associated with Taekwondo participation. These six qualities have been used as elements to distinguish serious from casual leisure.

A variety of activities have been examined relative to their connection to serious leisure, such as bass fishing (Yoder, 1997), mountain climbing (Higham & Hinch, 2009), volunteer fire-fighting (Benoit & Perkins, 1997), dog breeding (Baldwin & Norris, 1999), and adult amateur ice skating (McQuarrie & Jackson, 1996). These participants reflected serious leisure qualities in their engagement with a variety of activities. In addition, a diverse group of individuals have been studied relative to their pursuit of serious leisure including: older golfers (Siegenthaler & O'Dell, 2003), amateur artist groups (Bendle & Patterson, 2009), individuals with disabilities (Patterson, 2000; Reynolds, Vivat, & Prior, 2008), runners (Major, 2001; Shipway & Jones, 2007), shag dancers (Brown, McGuire, & Voelkl, 2008), and fire fighters (Yarnal & Dowler, 2002).

Across these diverse activities and individuals, participants consistently describe experiencing personal and social benefits from their engagement, one of the qualities of serious leisure. For example, participants with chronic fatigue syndrome/myalgic encephalopathy placed more emphasis on deriving hope for the future and maintaining or restoring self-image and self-confidence through the creation of art during their serious leisure pursuits than when compared to their casual leisure pursuits (Frances, Bella, & Sarah, 2008). Siegenthaler and O'Dell (2003) studied older adults who showed an intense commitment to golf and discovered that the core devotees in the study valued their social interactions and development of friendships through their participation in serious leisure.

Stebbins (1997) contended that most casual leisure pursuits do not generate optimal experiences because they normally lack substantial challenges and, therefore, fail to create feelings of control within the activities. According to Stebbins, serious leisure is conceptually distinguished from casual leisure in that when participants are engaged in serious leisure pursuits they become satisfied because they gain personal and social rewards. For example, participants experience “. . . self-actualization by developing skills and ability, self-expression through demonstrating already developed skills and knowledge, linking with other serious leisure participants, promoting group accomplishment, and contributing to the maintenance and development of the group” (Stebbins, 2001, p.13). This implies that serious leisure may play an important role in facilitating personal growth.

### **Study Purpose**

The purpose of this study was to explore the relationship between Taekwondo participation as a possible serious leisure pursuit and associated life satisfaction

and perceived health. To achieve this purpose we established two primary goals. The first goal was to examine patterns of serious leisure qualities (e.g., perseverance, significant effort, career development, identification, and unique ethos) that represent the nature of serious leisure among Taekwondo participants. Therefore, we hypothesized that Taekwondo participants would report experiencing different levels of serious leisure qualities and these variables would cluster. The second goal was to investigate how different levels of serious leisure qualities are associated with life satisfaction and perceived health. Consequently, we hypothesized that Taekwondo participants who report experiencing higher levels of serious leisure qualities report higher levels of life satisfaction and health perception.

A variety of recreation activities can be vehicles for serious leisure. For this study, the researchers selected Taekwondo as a possible form of serious leisure. An examination of the ways in which Taekwondo is associated with serious leisure may provide new insight into the body of knowledge related to serious leisure. While numerous research investigations have been conducted examining the concept of serious leisure and associated emotional and social benefits (e.g., Shipway & Jones, 2007; Mackellar, 2009; Baldwin & Norris, 1999; Major, 2001; Patterson, 2000), no studies have explored the relationship between Taekwondo participation as a serious leisure pursuit and its association with life satisfaction and perceived health.

## Methods

### Participants

The present study was approved by the institutional review board at a Midwestern university (study number: #0904000242). A total of 168 adults who were enrolled at eight Taekwondo academies in different cities in the United States participated in this study. The investigators conveniently selected those academies in the Midwest as they were in relative proximity to the investigators location. The investigators contacted the directors at the respective academies and asked them to participate in this study. Upon their agreement, questionnaires were mailed to the academies and the directors administered the surveys to their participants. Participation in this study was voluntary and anonymous. A total of 189 questionnaires were collected; however, 21 surveys were removed from the data before analysis as they had significant levels of missing data. Thus, a total of 168 questionnaires were used in data analysis.

The sample was composed of 103 males (61.3%) and 65 females (38.7%) with ages ranging from 18 to 65 years ( $M = 30.34$  years;  $SD = 12.75$ ). Most participants reported being Caucasians (72.6%), while 17.3% were Asian, 5.4% were African American, and 2.4% were Hispanic. Although the sample was highly educated with 45.8% of participants reporting having more than a college education, only 58.3% were employed full-time due to many respondents currently being full-time students. With regard to marital status, 39.9% were married and most (60.1%) were single (See Table 1).

**Table 1***Frequencies of Participant Characteristics*

<b>Characteristics</b>	<b>n</b>	<b>%</b>
Age		
18-19	44	26.2
20-29	58	34.5
30-39	18	10.7
40-49	32	19.0
50-59	10	6.0
60-	6	3.6
Gender		
Male	103	61.3
Female	65	38.7
Race		
Caucasian	122	72.6
African American	9	5.4
Asian	29	17.3
Hispanic	4	2.4
Education		
High School	90	53.6
College	44	26.2
Graduate School	33	19.6
Employment		
Employed	98	58.3
Retired	3	1.8
Temporarily unemployed (may include students)	65	38.7
Marital Status		
Married/Partnered	67	39.9
Other (single/divorced/widowed)	101	60.1

## Measures

**Life satisfaction.** Diener, Emmons, Larson, and Griffin's (1985) Satisfaction with Life Scale (SWLS) was used to assess global life satisfaction. This scale has been used extensively and is applicable to adult age groups (Hamarat et al., 2001). Diener and colleagues reported a two-month test-retest correlation coefficient of .82 and an alpha coefficient of .87 for a sample of 176 undergraduate students. The SWLS is a five-item scale that measures perceived life satisfaction. An example item is "In most ways my life is close to my ideal." The SWLS is rated on 7-point Likert scale (1 = strongly disagree to and 7 = strongly agree), and higher scores indicate greater life satisfaction. The average of those five responses was computed and used in the data analysis. The 5-item SWLS showed a good internal consistency with alpha reliability of .84 in this study.

**Health perception.** Perceived health was the global health indicator used in this study and was assessed by asking respondents a single question, "In general, how would you rate your health?" Possible responses ranged from 1 (poor) to 5 (excellent). This question has been used in numerous studies (e.g., Warr, Butcher, & Robertson, 2004) and this brief measure of health perception has been found to be a good predictor of functioning (Noel & Epstein, 2003).

**Serious leisure.** Serious leisure was measured using the Serious Leisure Inventory Measure (SLIM; Gould, Moore, McGuire, & Stebbins, 2008). The SLIM is a 54-item questionnaire with a nine-point Likert scale (1 = completely disagree, 9 = completely agree). Theoretically, it is based on the construct of serious leisure (Stebbins, 1992) and measures five central qualities of serious leisure: (a) perseverance, (b) leisure career, (c) significant effort, (d) unique ethos, and (e) identification with pursuit. Sample questions from SLIM include "If I encounter obstacles in Taekwondo, I persist until I overcome them" (perseverance), "There are defining moments within Taekwondo that have significantly shaped my involvement in it" (leisure career), "I try hard to become more competent in Taekwondo" (significant effort), "Other Taekwondo enthusiasts and I share many of the same ideals" (unique ethos), and "Others that know me understand that Taekwondo is a part of who I am" (significant effort). Although the original SLIM includes subscales that assess durable outcomes, these items were not used in the present study because these items are not necessarily "treated as additive indices of a serious orientation" (p. 63) and could be scored separately. In fact, Gould et al. suggested that scores of durable outcomes should be treated separately from the other five domains of serious leisure. Three items were used to measure each domain with the exception of leisure career (six items). The scores were averaged for each domain and the alphas for the SLIM subscales were .77 (perseverance), .84 (significant effort), .74 (leisure career), .89 (unique ethos), and .91 (identification with pursuits).

**Demographic variables.** The survey also asked participants to provide demographic information (i.e., age, gender, ethnicity, education level, marital status, employment status). Additionally, to examine the extent to which participants were involved in Taekwondo, respondents were asked to report the number of months they have participated in Taekwondo.

## Results

A hierarchical cluster analysis was conducted to segment participants based on their SLIM scores and to determine the appropriate number of exclusive clusters. This process identified the number of clusters that maximized differences between groups and minimized within-group differences. From the hierarchical cluster analysis, it was determined that the appropriate number of clusters according to the Dendrogram was three. Then, a nonhierarchical cluster technique (K-means cluster analysis) was conducted on the SLIM data that divided the study sample into three clusters. These clusters were retained as an independent variable (See Table 2).

**Table 2**

*Means of Serious Leisure Qualities by Clusters*

Cluster	Cluster			Unique		
	Size	Perseverance	Effort	Career	Ethos	Identification
1. Novices	33	7.57	7.70	6.87	7.17	6.51
2. Serious Sages	89	8.23	8.41	8.38	8.20	8.22
3. Journeymen	46	7.57	7.87	8.16	6.00	6.01

When examining the entire sample, the first cluster accounted for 19.6% of the sample ( $n = 33$ ), the second cluster represented 52.9% ( $n = 89$ ), and the third cluster 27.3% ( $n = 46$ ). These three clusters were named: (1) novices, (2) serious sages, and (3) journeymen. Table 3 illustrates the sociodemographic variables by cluster membership. While age was consistent across the clusters, other variables differed on relevant dimensions. However, while they differed somewhat regarding other variables, each group was composed of predominantly males who were Caucasian.

**Table 3**

*Characteristic Comparisons across Clusters*

Characteristic	Cluster 1	Cluster 2	Cluster 3
Age	28	31	31
% female	33.3	40.4	39.1
% received at least college education	36.4	48.3	47.8
% married	30.3	44.9	37.0
% employed	48.5	60.7	60.9
% Caucasians	81.8	68.5	73.9



The term “novice” is typically associated with someone who is beginning or learning an activity. The Novices (Cluster 1) are best described as participants who have relatively limited experience in Taekwondo, on average reporting less than three years (32 months) of participation. They were investing significant effort in the activity and had developed a social world within their chosen pursuit. The number of novices who had obtained at least a college education, were married, and were employed was the lowest across the three clusters.

The word “sage” is often used to describe someone who is regarded as being knowledgeable and having experiences that result in wisdom and good judgment. The Serious Sages (Cluster 2) scored high on every aspect of serious leisure and were the most experienced participants with an average of almost eight years (95 months) of participation. This group is uniquely represented by the least number of Caucasians (68.5%) and most married participants (44.9%) when compared to the other two clusters. Forty percent of the Serious Sages (Cluster 2) were females and 48% reported at least a college education.

The word “journeyman” is used to refer to someone who is competent, qualified, and reliable yet is an average performer. While the Journeymen (Cluster 3) demonstrated persistence and practiced to improve their skills, they were less likely to develop subcultures or identify themselves as Taekwondo devotees despite their average five or more years of experience (67 months).

A one-way multivariate analysis of variance (MANOVA) was employed to explore cluster differences in life satisfaction and health perception. The overall mean SWLS score was 5.68 ( $SD = .87$ ); respondents generally agreed that they were satisfied with their lives and their overall mean health perception was 4.05 ( $SD = .73$ ). MANOVA results revealed significant differences among the clusters on dependent variables [Wilks'  $\lambda = .910$ ,  $F(4, 328) = 3.93$ ,  $p < .01$ , multivariate  $\eta^2 = .046$ ]. Analysis of variance (ANOVA) was conducted on each dependent variable as a follow-up test to the MANOVA. Cluster differences were significant for life satisfaction [ $F(2, 165) = 5.29$ ,  $p < .01$ , partial  $\eta^2 = .060$ ], and health perception [ $F(2, 165) = 5.09$ ,  $p < .01$ , partial  $\eta^2 = .058$ ]. Tukey Post hoc tests for two dependent variables indicated that participants in the Serious Sages (Cluster 2) reported significantly higher life satisfaction and more positive perceptions of health (see Table 4). No significant differences were found between the novices (Clusters 1) and Journeymen (Cluster 3).

## Discussion

This study represents an initial exploration of the relationship between Taekwondo participation as a serious leisure pursuit and associated life satisfaction and perceived health. Much of the research examining the effects of serious leisure has focused on personal and social benefits gained by participants. Although many researchers have examined the topic of serious leisure (e.g., Shipway & Jones, 2007; Mackellar, 2009; Baldwin & Norris, 1999; Major, 2001; Patterson, 2000), this study uniquely explored connections between serious leisure pursuits and associated life satisfaction and perceived health.

**Table 4**

*Mean Scores and Multivariate Analysis of Variance (MANOVA) for Life Satisfaction and Health Perception by Clusters*

	<b>Novices</b>	<b>M (SD) Serious Sages</b>	<b>Journey- men</b>	<b>Total M (SD)</b>	<b>df</b>	<b>F</b>	<b><math>\eta_p^2</math></b>
Life Satisfaction	5.39 (.72)	5.88 (.88)	5.51 (.85)	5.68 (.87)	2/165	5.29*	.060
Health Perception	3.85 (.71)	4.21 (.73)	3.87 (.68)	4.05 (.73)	2/165	5.09*	.058

Notes. Multivariate test is significant (Wilk's Lamda = .91,  $F(4,328) = 3.93$ ,  $p < .01$ )

Note. \* < .01.

This study extends previous research using qualitative data by supporting the contention that involvement in serious leisure is associated with well-being (e.g., Brown, McGuire & Voelkl, 2008; Lee, Kim, & Song, 2005). Findings of this study provide further support for the belief that personally meaningful activity may be positively related to a sense of well-being and a person's reported quality of life. Taekwondo participation may provide a context for the pursuit of serious leisure that contributes to life satisfaction and perceived health.

The hierarchical and k-means cluster analysis revealed three distinct patterns of responding to serious leisure quality variables. The Novices are described as those participants who have limited experience with Taekwondo but who have positive feelings and experience a sense of connection with the subculture associated with the activity. Compared to the Journeymen, the Novices reported a higher level of unique ethos in spite of less training experience with Taekwondo. Stebbins (2001) mentioned that unique ethos implies the existence of distinguishing ideals, values, sentiments, or guiding beliefs that lead to development of a special social world and provision of social network.

Tsaur and Liang (2008) demonstrated that serious leisure participants tend to develop subcultures composed of special beliefs, values, norms, and performance standards. More specifically, Lee, Kim, and Song (2005) concluded that Taekwondo participants who had a strong commitment to this leisure pursuit understood the specific meanings of Taekwondo culture and philosophy and acquired performance standards and techniques. Thus, this study extends the contention by Lee and colleagues that Taekwondo participants may form and understand different subcultures associated with East Asian philosophy.

Results of this study are consistent with previous research on leisure, life satisfaction, and health (Baker & Palmer, 2006; Beard & Mounir, 1980; Caldwell, 2005; Coleman & Iso-Ahola, 1993; Iwasaki, 2001; Passmore, 2003). Serious Sages report-

ed having higher levels of life satisfaction and perceived health as compared to the Novices and Journeymen. Based on this finding, it appears that involvement in a leisure pursuit is associated with life satisfaction and health. Therefore, similar to previous research by Driver and Bruns (1999), Iso-Ahola and Park (1996), and others, it is possible that serious leisure qualities may contribute to a sense of well-being and good health.

Taekwondo participation for the Journeymen seemed to provide them with a leisure career that included stages of involvement and achievement compared to the Novices. This finding reflects a continuum of changing patterns related to skills, knowledge, and abilities that is supported by Brown et al. (2008). Brown and colleagues noted that a leisure career may be an important factor in facilitating successful aging and is associated with well-being and good health among older adults.

This study also suggests that involvement in Taekwondo provided participants with a well-established social network and a meaningful activity. This conclusion is similar to the observation by Iso-Ahola and Park (1996) that companionship and friendship were created and fostered by Taekwondo participation that helped to buffer life stress and enhance psychological well-being.

### **Practical Implications**

Given the positive relationship between Taekwondo and good health and life satisfaction reported in this study, leisure professionals may wish to consider offering similar types of recreation activities that may be associated with serious leisure. Some of these types of activities reported by Stebbins (1992) include golf (Siegenthaler & O'Dell, 2003), arts (Bendle & Patterson, 2009), marathon running (Shipway & Jones, 2007) and shag dancing (Brown, McGuire, & Voelkl, 2008).

Leisure service providers can create contexts that offer the opportunity for participants to engage in serious leisure, as is typically done with Taekwondo instruction. One of the more important aspects of serious leisure is the opportunity to engage in recreation activities over an extended period of time (Stebbins, 1992). To achieve this goal, it is important to set up systems to allow for some recreation activities to be offered for several consecutive years. For example, leisure service providers can create an ongoing system that provides opportunities for members of the community who have specific skills relevant to offering recreation programs to volunteer to assist beginners enrolled in related offerings. As a person gains skills related to his/her volunteer experience, they can be offered a progression of roles that provides them with challenging experiences as they acquire knowledge and skills associated with the activity.

Another important aspect of serious leisure is to provide a venue for demonstration of knowledge and skills (Stebbins, 1986). Therefore, providing special events that allow participants to demonstrate their prowess to members of the community and their families could help promote a commitment to the activity and feelings of inclusion into the community. Furthermore, creating opportunities for social connections between participants who are involved in similar leisure pursuits could be an important factor that helps promote a sense of community, expand their social network, and increase their social supports.

## **Limitations and Need for Future Research**

There are several limitations associated with this study that can be addressed by researchers in the future. One limitation is related to the nature of cluster analysis. Cluster analysis allows researchers a degree of interpretive flexibility because it is not as strictly standardized by statistical regulations as some of the other multivariate procedures such as factor analysis and discriminant analysis (Aldenderfer & Blashfield, 1984). However, this methodology represents an appropriate way to explore an empirical investigation of serious leisure qualities with Taekwondo participants.

Another limitation is that this study did not probe participant responses in an attempt to understand the serious leisure experiences of Taekwondo participants. Gould and colleagues (2008) suggested that the SLIM be refined and tested to enhance its ability to examine the multidimensional complexities of serious leisure. Therefore, it may be helpful for researchers to employ a combination of qualitative and quantitative research techniques to better our understanding of serious leisure concepts encompassing commitment, recreation specialization, and involvement.

Also, we used a one-item scale to measure health perception. It may be helpful to use additional measurement systems to assess health. Future studies could implement the SF-12 Health Survey (Ware, Kosinski, & Keller, 1996) which encompasses a broader concept of health including physical and mental aspects.

Participants in our study were not a representative sample of a given population, rather they were comprised of adults who were accessible to the investigators during the study period. As a result, this restricted the ability to generalize the findings. Hence, self-selection bias may have influenced the data since those who could not be reached by the investigators may have a different attitude toward Taekwondo. Most participants in this study were either Caucasian (72.6%) or Asian (17.3%). Although these demographics are fairly consistent with the traditional composition of Taekwondo classes, if available, it would be interesting if future research included a more diverse sample so that perceptions of other typically underrepresented groups could be examined. Also, since there was a relatively small sample size in this study future research should explore the relationship between Taekwondo and health outcomes with a larger group.

Despite these limitations, the findings suggest that Taekwondo creates an opportunity for participants to engage in an activity that has serious leisure qualities including perseverance, effort, career, unique ethos, and identification. This study also identified that individuals pursuing Taekwondo as a serious leisure demonstrated high life satisfaction and perceived health. Future research examining the effects of Taekwondo on cultural understanding and cultural sensitivity might be useful since specific Eastern cultural values and philosophies are associated with Taekwondo. This activity may expose participants to different cross-cultural settings and educate them about different cultural values and beliefs.

## **Conclusion**

Overall, we found that Taekwondo participants in this study reported high health perceptions and life satisfaction, providing further evidence of the value of

engaging in serious leisure. People who are pursuing leisure with commitment and enthusiasm may find that their participation is positively associated with quality of life and health. The degree to which participants commit to their leisure activities is complex and appears to be associated with life satisfaction and health in a variety of ways. The findings of this study provide some insights that may lead to further investigations of those relationships and the offering of leisure programs, such as Taekwondo classes, that promote serious leisure.

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