FACTORS THAT INFLUENCE HIGH SCHOOL GRADUATES TO CHOOSE SPORT MANAGEMENT AS THEIR UNIVERSITY MAJOR IN TAIWAN

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To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Tao-Hung Yu entitled "Factors that Influence High School Graduates to Choose Sport Management as Their University Major in Taiwan." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Kinesiology.

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DEDICATION

This dissertation is dedicated to my parents. Your love, support, and encouragement have helped me through the dissertation process and to finish my doctoral degree. I also give my deepest expression of love and appreciation to my beautiful wife, Yu-Yi, Grace, Ma, for the encouragement that you gave and the sacrifices you made during this graduate program.

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ABSTRACT

TAO-HUNG HANK YU

FACTORS THAT INFLUENCE HIGH SCHOOL GRADUATES TO CHOOSE SPORT MANAGEMENT AS THEIR UNIVERSITY MAJOR IN TAIWAN

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The purpose of this study was to examine the factors that influence the decision of high school students to choose sport management as their major in selected Taiwanese universities. Freshman students were chosen from eight universities that represented 4 different geographic areas of Taiwan.

In order to understand the motive(s) underlying Taiwanese students' selection of a major, this investigator used the Theory of Planned Behavior (TPB) as the framework for the development of the Theory of Planned Behavior Paired Comparison Instrument (TPBPCI). The Theory of Planned Behavior (TPB) was developed by Ajzen (1991), based on the Theory of Reasoned Action.

The most important factor that influenced the students to select sport management as their university major was 'Interest in the field' (72.8 %). The second most important factor was 'University Entrance Exam Score' (67.2%), and the third most important factor for students to select sport management as their university major was 'Opportunity for Future Employment' (65.1%). Two of the three most important factors for students when choosing sport management as their university major were selected from the category of Attitude Toward Behavior from the Theory of Planned Behavior. It indicated

that 'Attitude Toward Behavior' might have most influence students in selection of sport management as their major than other to categories in the TPB.

The results of this study may provide additional information for faculty in undergraduate sport management departments to use in the development of their recruitment programs for high school students Based on the results of current study, the faculty in sport management departments in Taiwan universities would do well to focus their recruitment strategies on the high school graduates whose homes are close to their schools and who are interested in athletics.

Additionally, evidence from the study suggests that the departments might consider cooperating more closely with the sport industry. Close relationships between the departments and the sport industry, also it could provide more scholarship and internship opportunities for students. Students might have more opportunities to be recruited by those companies for jobs after graduation.

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CHAPTER I

INTRODUCTION

The Sport Management area of specialization at the university level is a relatively new field for students in Taiwan. The first university, Aletheia University, offered an undergraduate curriculum in Sport Management in 1995. According to the Department of Statistics, Taiwan Ministry of Education, the sport management curriculums at the undergraduate level in Taiwan, include sport management, sport business (management), and recreational sport management, has risen from 2 programs in 1999 (2010) to 4 programs in 2005 (2010). In 2010, there were 33 universities offering sport management undergraduate curriculums. In addition, from 1999 to 2005, the total number of students that selected these programs leaped from 340 to 3,663 (Department of Statistics, MOE, 2010). In 2008, there were 233 students enrolled in the Department of Sport Industry Administration, 1,194 students in the Department of Sport Management, and 4,063 students in the Department of Recreational Sport Management (Department of Statistics, MOE, 2010). Based on the data collected since the first sport management curriculum offered in 1995, the major related to the broad area of sport management has increased in popularity in the past 15 years.

According to the College Entrance Examination Center (2009), there were only 141,858 high school graduates registered for the General Scholastic Ability Test

(GSAT) that was given in the summer of 2009 in Taiwan. It was the lowest number of people registered for the examination since 2002 (See Table 1). In addition, the number of universities in Taiwan has increased from 154 in 2000 to 164 in 2010 (Cheng, 2010). In the same time, the birth rate in Taiwan has declined from 23% in 1981 to 8.1% in 2009 (Gu & Chen, 2009). It is anticipated that the number of students in the university will also be reduced from 27.4 million in the 2008 academic year to a maximum of 17.6 million in 2124. Moreover, more and more international colleges and universities are recruiting in Taiwan and an increasing number of Taiwanese students choose to study in the universities in mainland China (Cheng, 2010) and the United States. Those problems mean that universities and colleges in Taiwan will soon be faced with the difficult task of recruiting enough freshmen students to maintain each of their programs. Therefore, each program must develop its own specific area of emphasis, and the school must know how students select their university major, and what factors influence them to make their decision. The schools must decide what program they need to develop and implement, as well as evaluate a marketing strategy to attract more students to enroll in the broad area of sport management. Faculty in sport management departments in Taiwan cannot ignore this situation. The basic elements of a marketing strategy consist of the target market and the marketing mix variables of product, distribution, promotion, and price that combine to satisfy the needs of the target market (Kurtz, MacKenzie, & Snow, 2010). In order to design and efficiently implement their marketing strategies and attract and enroll more students in sport management, the faculties have to know who their population is.

Table 1

Number of People Registered for the Required Subject Ability Examination between 2002-2009

Year	Number of People
2002	146,638
2003	164,521
2004	157,544
2005	160,522
2006	161,567
2007	153,364
2008	150,014
2009	141,858

Note. Adapted from "Numbers of People Applied for Required Subject Ability in Past Years," by College Entrance Examination Center, 2010.

For the students who need to choose their university major, and is often difficult for them to make a decision because there are a lot of options. In Taiwan, if students select sport management as their college major, and then find that it is no longer what they want, it is difficult for them to change their major because they have to take a transfer examination. The process of finding a new, suitable major and then being accepted into that program costs them time and money.

The investigator of this study is a part time instructor and teaches classes in a sport management department at a Taiwanese university. Therefore, it is important to him to understand the factors that influence Taiwanese high school graduates to select sport management as their university major. It is hoped that the results of this research will provide information as well as assist universities and departments that have sports

management programs in Taiwan to modify their recruitment policies and promote their programs more effectively.

Method to Enter a University in Taiwan

In Taiwan, after graduating from junior high school, students have two choices: attend senior high school or senior high vocational school. After graduating from senior high school or senior high vocational school, if students plan to continue their formal education, they can (if eligible) enter a university, a college, or a technical college. A chart which explains the current school system in Taiwan from kindergarten through the doctoral level is presented in Appendix A.

Beginning in 1954, high school graduates in Taiwan had only one method they could enter a university. They had to score successfully on the national university entrance examination. Although taking the university entrance examination is a fair method for everyone, it was continually denounced by educational experts and parents because the high school graduates only had one chance to enter university each year. Moreover, most of the high schools focused on the students' general score, and ignored the students' interests. It also put pressure on the high school students to do well the first time they took the examination. In 2002, the Ministry of Education in Taiwan decided to use a new university and college entrance method, called the College Multiple Entrance Program. Generally, there are now two channels by which students can enter a university, admission by recommendation and screening or admission by examination and placement. Chin (2004) reviewed some of the merits of the new system, and identified three disadvantages of the old entrance method, which led to the need for the change in 2002:

(a) university entrance examination leads the way of high school teaching and misrepresents educational objectives; (b) universities do not have the authority to enroll students independently; and (c) high school graduates select their university and major based on the university entrance examination score rather than on their interests, which provides status to the school and the major rather than on meeting the needs of the students.

According to *Republic of China Yearbook* (2008), the high school graduates who choose 'Admission by Recommendation and Screening' may individually apply to the university they wish to attend and obtain recommendations from their senior high schools. Either way, students must first take the GSAT, which tests knowledge of Chinese, English, Mathematics, and the Natural and Social Sciences. It is used to determine whether high school students have basic knowledge to study successfully at universities in Taiwan.

If high school graduates choose 'Admission by Examination and Placement,' they must take the Department Required Test (DRT). The subjects of DRT include Chinese, English, Mathematics A (the mathematics of natural science group), Mathematics B (the mathematics of social humanities group), history, geography, civics and society, physics, chemistry, biology, and the other 10 subjects. Students may, in accordance with their status or expertise, have the freedom to choose some or all of the subjects on the examination in order to meet the requirements of each department or university they want to attend. They may also need to take the GSAT, depending on the requirements of the individual university they choose to attend (Government Information Office, 2008). The whole procedure of for the College Multiple Entrance Program developed by College

Entrance Examination Center (2009) is depicted on the Figure 1.

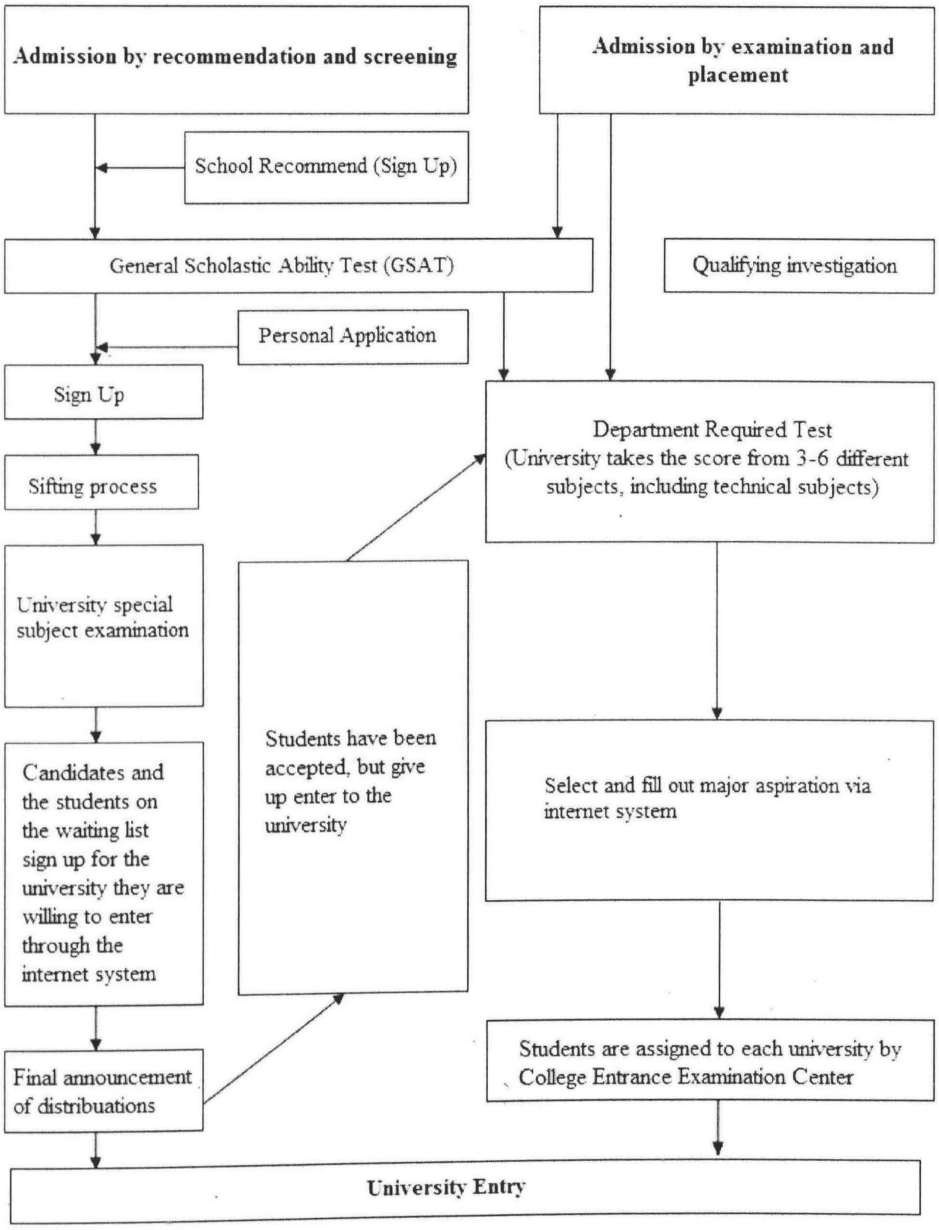

Figure 1 College Multiple Entrance Program

Note. Adapted from Joint Board, College Recruitment Commission Website. Retrieved from http://www.jbcrc.edu.tw/left-32.htm

Purpose of the Study

The purpose of this study is to examine the Theory of Planned Behavior factors that influence high school students' process of decision making in selecting sport management as their major in a Taiwanese university.

Research Questions

1. What is the most important factor that influences students' decision to select the sport management program as their undergraduate major?
2. Which of the factors associated with the Theory of Planned Behavior (TPB) are the most common associated with freshmen who choose a major in sport management?
3. How are TPB factors associated with selected demographic data (i.e., athlete in high school, gender, geographic location of university)?

Limitations

1. The freshmen student participants may not be representative of all freshmen students in Taiwan in the fall semester 2010 who were then majoring in the broad area of sport management.
2. The extent to which the participants answer the questions of instruments truthfully and completely.

Delimitations

1. The 12 factors in the paired comparison instrument adequately reflected those associated with the Theory of Planned Behavior.
2. The freshmen students were volunteers.

Definitions

1. Sports Management major: A sport management program in the 4-year university undergraduate program in Taiwan whose curriculum is related to broad area of the sport management field that includes sport management, sport business (management), and recreational sport management. There were 33 universities in Taiwan that offered the major in this field in the fall of 2010.
2. Theory of Planned Behavior: TPB was designed to predict a human's behavior by the human's attitude toward the behavior, subjective norm, and perceived behavioral control.
3. TPBPCI: Theory of Planned Behavior Paired Comparison Instrument
4. University: Includes the Taiwanese designation of university, college and vocational institution.
5. Areas of Taiwan:
    a. Northern : Taipei County, Taipei City, Keelung City, Taoyuan County, Hsinchu County, Hsinchu City, and Yilan County
    b. Middle : Miaoli County, Taichung County, Taichung City,Changhua County, Nantou County, and Yunlin County
    c. Southern : Chiayi City, Chiayi County, Tainan City, TainanCounty, Kaohsiung City, Kaohsiung County, and Pingtung country
    d. Eastern: Hualien County and Taitung Country

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this study was to examine the factors that influence high school students' decision making process in selecting sport management as their major in Taiwanese universities. The topics addressed in the review of literature for this study are following: (a) Theory of Planned Behavior and (b) Factors that Affect High School Graduates as They Select a University Major.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB), developed by Ajzen (1985), was based on the Theory of Reasoned Action which states that people are relatively thoughtful creatures and are aware of their attitudes and behavior (Bordens & Horowitz, 2002). According to Ajzen (1985), the major goal of the TPB is to predict and explain an individual's behavior. Based on it, TPB sensibly assumes that the best predictor of how we will behave is the strength of our further intentions (Ajzen, 1987). The theory suggests that a human's intention and behavior can be influenced by these three major considerations:

> The first is attitude toward the behavior and refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. The second predictor is a social factor termed subjective norm; it refers to the perceived social pressure to perform or not to perform the behavior.

The third antecedent of intention is the degree of perceived behavioral control which refers to the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience, as well as, anticipated impediments and obstacles (Ajzen, 1991, p. 188).

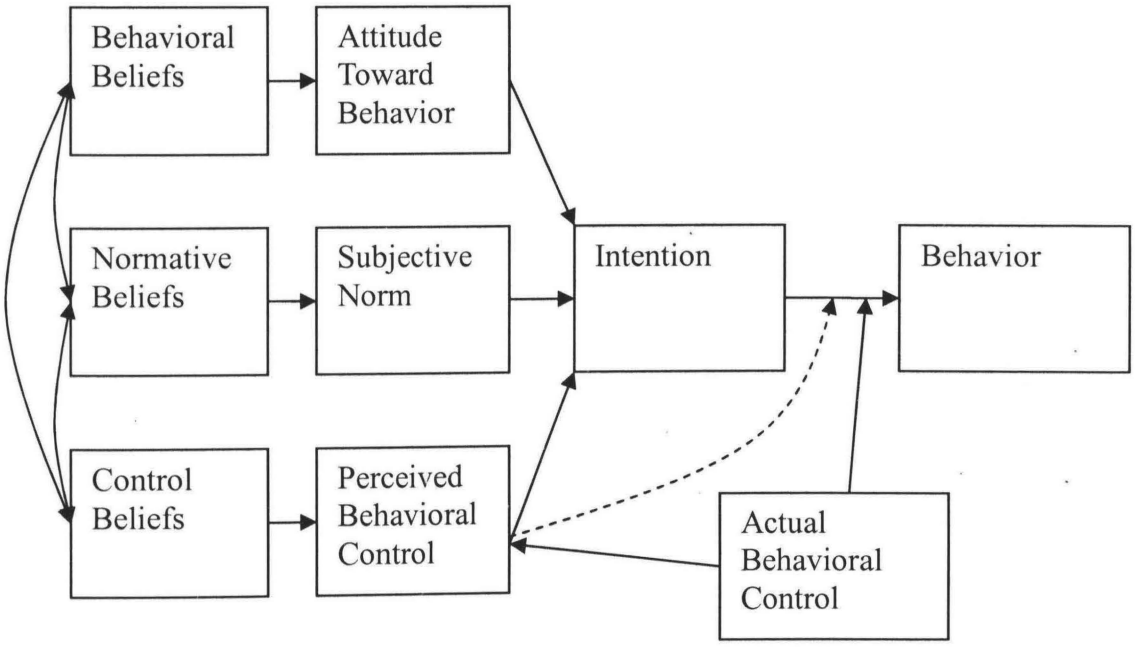

Figure 2 Theory of Planned Behavior

Note. Adapted from Diagram of the Theory of Planned Behavior, by Ajzen, I. (2010)

Since TPB was developed, researchers have used it as framework for different areas of study. For example, researchers have used TPB to examine the decision making process (Barnett, Bass, & Brown, 2001; Randall & Gibson, 1991; Warburton & Terry, 2000); as an intention measure (Barnett, et al., 2001; Conner, Povey, Sparks, James, & Shepherd, 2003; Jones, et al., 2006; Rise, Thompson, & Verplanken, 2003); or to measure a behavior measure (Sheeran, Trafimow, & Armitage, 2003).

Moreover, the TPB has been applied to many professions, such as education (Chedzoy & Burden, 2007; Crawley, 1990), health promotion (Conner, et al., 2003; Sheeran, Conner, & Norman, 2001), physical activities (Courneya, 1995; Rhodes & Courneya, 2003), and international marketing of higher education (Gatfield & Chen, 2006).

Some researchers have applied TPB to test the factors that affect people's behavior. For example, Wu (2008) used TPB to investigate the factors affecting the students' intentions for using online evaluation of instruction. Chen (2009) used TPB to test the factors that influence Taiwanese Americans to attend professional team sport events.

Factors that Affect High School Graduates to Select a University Major

Different factors that affect high school graduates as they select their university major have been identified in pervious research. The following is a discussion of 20 factors that are generally identified in the lifetime:

Distance from Home and School Location

In 2005, 17.3% of the freshmen in Taiwan considered the school being close to their home was a very important factor for selecting a major. Another 11.1% of the freshmen considered of the school being far away from their home was a very important factor for their selection a major (Chao & Lai, 2005). Almost 30% of the freshmen in the Chao and Lai's investigation had considered about the distance between school and home as a very important factor for them when they chose their major. Zeng (2005) also reported that the location of the university was an important factor in the selection of a major and some

students preferred a big city and, to some students, the geographical location in Taiwan was important.

Recruitment Exhibition

Yang (2003) reported that in Taiwan, a recruitment exhibition and a career day was an important factor in the decision making process for high school students. A university recruitment team goes to a high school and talks with students and distributes materials as a recruitment tool. Students receive university and department information directly in recruiting exhibitions. Moreover, in Taiwan, public school students attached more importance to the recruitment exhibition than do private school students. The students who go to the school located in the middle of Taiwan, for example, attached more importance to the recruitment exhibition than did the students who attended schools located in the south of Taiwan.

Interest in the Field

Adams, Pryor, and Adams, (1994) indicated that 'Genuine Interest in the Field' was one of the significant major-selection determinants. DeMarie and Aloise-Young (2003) examined students' ratings of the importance of interest in the subject area for the selection of their majors. 'Interest in the field' was in the top three rankings for both education and business majors. Malgwi, Howe, and Burnaby (2005) reported that for both genders, interest in the subject was the primary influence for selecting the college major. This finding was supported the report of Strasser, Ozgur, and Schroeder (2002) which focused on the major selection by business major students.

Several researchers reported the same results in Taiwan. Chao and Lai (2005) conducted a research study with university freshmen in 2005 and reported that 45.9% of them pointed out that their interest was the most important factor for selecting a university. Luo (2007) and Wu (1997) also reported that the individual's interest was one of the major factors students consider in choosing their major. Accounting students in Taiwan, interest was one of the important factors they used in selecting a major (Chen, 2004). The same result, interest in the field, was found with students selecting construction engineering as their major (Lai, 2007). Similarly, Zeng's research (2005) supported the point that high school graduates eliminate the major that they are not interested in first during the process of selecting a university major.

Family Economic, Parents' Educational and Occupation Background

Ethington and Wolfe (1988) focused on women's selection of a quantitative undergraduate field of study. They found that the socioeconomic status of the participants' families (i.e., father's occupation and education, mother's education, family income, and possessions), directly or indirectly affected their decision making when selecting their major. Davies and Guppy (1997) reported that students from higher socioeconomic households and those with more cultural resources were more likely to enter selective universities and lucrative programs within selective universities. Wu (1997) also reported that the father's education and occupation affected a student's decision on their selection of college major. Researchers have also shown that the higher the parents' income and educational level, the greater chance that high school graduates would select a nontraditional major, based on sex-role expectation (Hsieh, 2005).

In contrast, Wu (1997) found that family income was not an important factor for students in selecting their majors, although the lower the father's educational level, the higher the trend was that students would select a major related to business. Moreover, if their fathers were in business, the students had a greater probability of selecting a business related major.

University Entrance Exanimation Score

Chao and Lai (2005) reported that in Taiwan, more than 70% of the freshmen in the universities mentioned that the university entrance exanimation score was an "important" or "very important" factor for them when selecting a major. Lai (2007) investigated the senior high school students and vocational high school graduates who selected construction engineering related departments for their college major, and found that 31% of them chose their major based on their university entrance examination scores. Zeng's research (2005) also showed that freshmen considered that their university entrance examination score was the most important factor in selecting their major.

Opportunity for Future Employment

Chao and Lai (2005) pointed out that 39.2% of the university freshmen in their study thought that opportunity for employment in the future was a "very important" factor for selecting a major, and 43% of them considered it as an "important" factor. Chao and Lai's study in 2005 supported Wu's finding in 1997 that the opportunity of employment is an important factor that affects students' decision in selecting their major. Job opportunity as one of the important factors affecting high school graduates in selecting a university major has been indicated by numerous researchers (Adams, et al., 1994; Chao & Lai,

2005; Chen, 2004; Huang, 1996; Kimweli & Richards, 1999; Lowe & Simons, 1997; Luo, 2007; Thomas, Allen, Epps, & Haniff, 1991; Wu, 1997; Zeng, 2005).

High School Athlete

Chang (2010) studied high school athletes in Taiwan, and found that 25% of the participants in the study considered choosing careers related to sport management or leisure management. He also reported that 84% of the participants in the study who choose to take the technical subject test to enroll in a university selected the area related to sport management or leisure management as their future career. Mlenga (2005) indicated that females doing their student teaching in an elementary school environment had a definitely affected their choice when selecting their major. Although it was a study that focused on elementary student teachers, it still pointed out that in-school experiences, such as courses taken or athletic participation, might be factors that affect students' selection of university majors.

Gender Differences

High school graduates might select a major that fits society's expectation of their sex-role orientation. Some researchers have stated that gender differences in students' major choice are the result of socialization in traditional gender roles (Porter & Umbach, 2006). For instance, Jacobs (1986) and Lackland (2001) suggested that women are more likely to select majors that have been dominated by women traditionally. For example, there were more female students than male students in nursing, education, and language related majors; however, there were more male students than female students in science and engineering related majors. Males are much more likely than females to enroll in

lucrative fields of study (Davies & Guppy, 1997). The results of another study indicated significant distributional patterns in sex-role and choice of major which vary by gender (Gianakos & Subich, 1988). Men tend to choose male-dominated majors, regardless of sex-role. Ware, Steckler, and Leserman (1985) in a much earlier study, suggested that sex-role orientation was a factor for high school students selecting their major.

Researchers in the United States have supported this point and reported that a higher percentage of males (16.6%) than females (9.7%) were enrolled in the College of Business, while a higher percentage of females (13.8%) than males (6.8%) were in the College of Education. Likewise, a higher percentage of females (9.4%) than males (2.0%) were enrolled in the School of Nursing (Pearson & Dellman-Jenkins, 1997). Similar results were reported by Hsieh (2005) in Taiwan. Fifty-one % of female freshmen selected feminine majors while only 7% selected masculine majors. Fourty-nine49% of male freshmen selected masculine majors while 12% selected feminine majors.

Nevertheless, some researchers have not supported Ware, Stecker, and Leserman's findings (1985). The result of Ethington and Wolfe's research (1988) showed that sex-role orientation did not directly or indirectly influence the field of study selection. Another study, Kimweli and Richards (1999) focused on art major students and also reported that gender is negatively related to choice of major. On the other hand, Porter and Umbach (2006) reported that any gender differences observed in art majors prior to their modeling experiences were not significant after they introduced controls, such as demographics, family influences, academic preparation, academic self-efficacy, and political issues. King (2004), in contrast, reported that the gender identity of the 448

college students in the study did significantly influence their choice of college major above and beyond their biological sex.

Desire for Enhanced Social Status

Huang, in her master's thesis (1990) concluded that occupational prestige and personal prestige affected aspirations for one specific major area over another. Moreover, students who studied law were influenced more by social status attainment than students who studied accounting, engineering, or a medical field.

Ma (2011) reported on her study that the demographic group representations in technical and life/health science occupations at societal level have significant positive influence on choosing corresponding college major fields for students from the same groups. It might indicate that the seemingly individual choice of college major has deep structural roots at the societal level.

Teacher Recommendation

A high school teacher's recommendation might often have a major influence on high school students' selection of a career. Ware and Lee (1988) studies the gender difference on choosing college major and reported that women students, especially women science majors, were distinguished by a tendency to report having been influenced by high school teachers and guidance counselors in making high school plans. Male science majors, in contrast, are especially likely to report having been influenced by high school teachers and guidance counselors in making decisions about college. Mlenga (2005) indicated that a teacher's behavior affected elementary female student teachers in the selection of their

college major. A teacher who is very positive for some specific major, for example, might suggest that students select such a major.

Volunteer/Athletic Part Time Job Experience During High School

Out–of–school experience is a factor that frequently affects a student's selection of their university major (Mlenga, 2005). Therefore, it is reasonable to believe that the experience of being a volunteer or participant in some athletic events during high school might cause the students to select sport management as their university major. Another study focused on college computer science students reported that students' previous experience with computer was the third most influential factor for the students to choose computer science as their major (Carter, 2006). This study also showed that 75% of the students who had participated in more than three computer-related experiences saw this experience as positive (Carter, 2006). These indicated that if students have positive experience with specific field, there are more opportunities that students will chose their university related to the field.

Aptitude/Ability for the Major

Chen Li-Ru (2004) pointed out that aptitude is an important factor for students who select accounting as their major in Taiwan. Cohen and Hanno (1993) found with college accounting students that their skills and background in math was one of the factors that facilitated, or hindered, the choice of accounting as a major. Similar result was reported in another study. Lowe and Simons (1997) studied the relative importance of 13 factors influencing the choice of business major and indicated that ability/aptitude is one of the most important criteria influencing the choice of major across all business student majors.

Expectation for Job Payment in the Future

People's view of higher education as an investment has become commonplace in the last decade and students are willing to choose the major that can help them to build skills in order to increase their earning power. Koch (1972) found that there is a marginal group of students that are influenced in their choice of an undergraduate major by internal rates of return (IRR). Generally, students in Taiwan who select a business major have higher expectations for future payment than students who select a College of Liberal Arts major (Wu, 1997). In support of this finding, Adams et al. (1994), Chen (2004), and Huang (1996) found that 'high earnings potential' was one of the significant major-selection determinants when accounting students selected their major. Lowe and Simons's research (1997) also supported the point that future earning was one of the most important influences on the selection of a major for accounting students. However, Berger (1988) reported that in 1966 the probability of picking one major over others was not significantly affected by the differences in beginning earnings between that major and other majors for males between 14 to 24 years of age.

Self-expectation for Success

Wu (1997) pointed out that self-expectation is an important factor when students select their majors. Similar results reported by Huang (1996), compared accounting major students and students in other majors, and found that a student who selected law or medicine as their major placed satisfaction of self-expectation as a more important factor than accounting major students did. Hung (1996) concluded that one of the factors that

affected a student's selection of university major was the potential for job satisfaction in the future.

Years Required for Program/Degree

For some students, the number of years they have to stay in the university in order to finish their degree is another issue for them when selecting a major (Gul, Andrew, Leong, & Ismail, 1989). For example, some architecture programs and law schools in Taiwan require 5 years to finish the degree, and some areas of medicine may take up to 7 years. This may be a detriment for some students.

Influence from Other People

Researchers have reported that when considering the selection of a university major, many high school graduates are affected by other people's suggestion, (i.e., parents, peers, high school alumni, teachers, coaches, and siblings.) Many researchers have mentioned that almost every one is influenced to some degree by their parents. Simpson (2001) indicated that Asia American students were influenced by their mothers in making the academic decisions, particularly in their choice to major in public service. Further, based on Chao and Lai's study (2005), more than 65% of the freshmen thought that parents' influence or suggestion was an 'important' or 'very important' factor in the selection of a major. In addition, 60% of the freshmen thought that teacher's influence and suggestion was an 'important' or 'very important' factor for them when selecting a university major. In addition, according to Chao and Lai's research (2005), 54.9% of freshmen said the influence or suggestion of friends, classmates, and the alumni also was an 'important' or 'very important' factor for them.

Zeng's research (2005) also indicated that students not only accept their parents influence, but also that of their teachers, and also their friends' suggestions. Lai (2007) studied the factors influencing the selection of construction engineering related departments for senior high school and vocational high school graduates. The results showed that 11% of the students considered that choosing the same major and school as their high school alumni was an important factor when selecting a university major.

On the contrary, some researchers reported that high school advisors and even parents did not appear to be particularly influential in the initial major choice (Malgwi et al., 2005; Strasser et al., 2002). Chen (2004) focused on accounting major students in Taiwan and found that students did not consider other people's opinion, such as parents, friends, or high school teachers in their decision making regarding a major.

Influence from Mass Media

Yang (2003) indicated that mass media, including television, radio, newspapers, magazines, and the internet, were not significant factors for participants in selecting their major. However, Pearson and Dellman-Jenkins (1997) found that the media was ranked third in importance for who, or what, most influenced the students' choice of a college major. Today, because of the national influence of the sport industry and the use of mass media, and the fact that the youth spend much of their time viewing television and surfing on the internet, the influence from the mass media still needs to be considered as a possible factor that might influence a student's choice of a major.

Academic Ability for the Major

When students are in the process of choosing their major, their academic ability is an important factor, especially related to the subjects associated with the major. For example, Jackson (1982) found that the strongest correlate of high school students' aspirations (educational or occupational) was their academic achievement, and selection of a major was related to the student's academic ability in high school. Students who achieve higher scores in math in high school are not only more likely to go to college, but also tend to choose college majors with higher earning potentials (Song & Glick, 2004). Simpson (2001) reported that the higher the math test score for a student of any racial group, the more likely the student was to major in a technical degree rather than in a health, business, public service, or liberal arts degree. Eighty-four % of the Taiwan freshmen studied by Chao and Lai (2005) chose academic ability as an 'important' or 'very important' factor when they made the decision to choose their university.

School/Department Prestige

A university/school or department's reputation has often been identified as an important factor in a student's selection of a major. Chao and Lai (2005) found that 69.5% of the students in Taiwan believed that the school or department's prestige was an 'important' or 'very important' factor for them when selecting a university major. Adams, Pryor and Adams (1994) also indicated that department prestige is one of the factors that influence students on selection their university major. However, Beggs, Bantham, and Taylor (2008) reported that only a few students in their study talked about how the

reputation of the program or strength of the faculty influenced them in making their choice of major.

Scholarship

A university or department scholarship is very important for some students, especially for the students whose family cannot pay for the tuition. A little over 30% of the freshmen in Taiwan thought that a scholarship was an 'important' or 'very important' factor when considering a university major (Chao & Lai, 2005). In addition, the same study also indicated that students with lower family income or graduated from high school with higher grade would hope to get the scholarship more than others (Chao & Lai, 2005).

University Open House or Campus Tour

Another factor that influenced 9% of the students in Lai's study (2007) was visiting a campus or a university open house in selecting their major. Swann and Henderson (1998, p. 136) also indicated that many college admissions professionals suggest that if they can get students and their parents on the campus grounds, the campus will sell itself. Students and their family could have opportunity to know the campus environment and facilities, even meet some professors, which might attract students to choice the school and department. However, Malgwi, Howe, and Burnaby (2005) reported that a college open house had minimal influence on a student's decision of a university major.

CHAPTER III

METHOD

The purpose of this study was to examine the factors that influence high school students' decision making processes for choosing sport management as their major in Taiwanese universities. In this chapter, the methods of the investigation will be discussed under the headings: (a) Participants, (b) Instruments, (c) Data Collection, (d) Data Analyses.

Participants

Participants were freshmen enrolled in sports administration or management departments at specific universities in Taiwan during the Fall 2010. Criteria for selection of a university were as follows:

- Offered an undergraduate curriculum in sport management.
- Represented either public or private ownership
- Represented either university or vocational focus as an institution
- Represented one of the four geographic areas in Taiwan: Northern Area, Middle Area, Southern Area, Eastern and other Area of Taiwan

There were 34 universities in Taiwan that offered sport management curriculums in Fall, 2010. One of the universities, Da-Yeh University, did not separate the freshmen students in their College of Business into each department until they become a junior, and freshmen do not have coursework related to the sport management. Therefore, Da-Yeh University was eliminated from this study. Thirty-three (33) universities met the

criteria for selecting freshmen participants. The list of the universities that offered a sport management curriculum is presented in Appendix B.

Two institutions were drawn from each one of the geographic areas of Taiwan, one represented public school ownership and the other represented private ownership. Since there was only one public university, National Taiwan College of Physical Education in the middle of Taiwan, it was selected to represent public ownership in the middle geographic area of Taiwan.

A total of 8 institutions were randomly selected to participate in the study:

Northern Taiwan:

1. Taipei Physical Education College
2. Aletheia University

Middle Taiwan

1. National Taiwan Sports University
2. Chienkuo Technology University

Southern Taiwan

1. National Pingtung University of Science and Technology
2. Tajen University

Eastern Taiwan and Other areas of Taiwan

1. National Dong Hwa University
2. Dahan Institute of Technology

Instruments

The researcher developed a demographic questionnaire and a paired comparison instrument to collect information from the participants for this study.

The Demographic Questionnaire

The demographic items on the questionnaire were: school name, department name, student's age, gender, home location, parents' occupation, parents' educational background, and being a high school athlete. The participants' choices for response regarding parents' occupation were:

- Legislators, Government Administrators, Business Executives and Managers
- Professionals
- Technicians and Associate Professionals
- Clerks
- Service Workers and Shop and Market Sales Workers
- Agricultural, Animal Husbandry, Forestry and Fishing Workers
- Craft and Related Trades Workers
- Plant and Machine Operators and Assemblers
- Elementary Occupations
- Servicemen

Choices for responses related to parents' educational level were:

- Middle school
- High school
- University/ college

- Graduate school
- Post doctoral

Theory of Planned Behavior Paired Comparison Instrument (TPBPCI)

The method of paired comparison is a widely used technique for describing preference behavior, based on the principles described by Thurstone (1927). This method requires participants to compare a pair of two items, and choose the item that best answers the posed question. Garner and Engelhard (1997) indicated that the method can reduce preference behavior to its most basic and most easily grasped element; a person's choice between two objects. The method of paired comparison is most often used to collect data for constructing scales based on comparative judgments (Wixted, 2002). A sum score for the number of times each item (factor) is selected is obtained. A rank order is ascribed to each item based on its sum score, and percentage of the number of times each item is selected by all participants is reported.

Steps followed in developing the TPBPCI were:

1. The researcher reviewed pervious studies in both English and Mandarin regarding students' decision making processes for choosing their university major.
2. The researcher identified 28 most common factors used in choosing a major, which present in the Table 2.

Table 2

Twenty - eight Most Common Factors Used in Choosing a Major

1. Interest in the field	13. Father's occupation
2. Expectation for job payment in the future	14. Teacher recommendation
3. Recruitment exhibition	15. Former students at my high school
4. High school athlete	16. Influence from parents
5. University open house or campus tour	17. Influence from my peers
6. Years required for major	18. Influence from teachers/coaches
7. School/department prestige	19. Influence from siblings
8. Opportunity for future employment	20. Influence from mass media
9. Volunteer/athletic part time job experience during high school	21. Mother's expectation for me
10. Not a gender similar specific profession	22. Desire for enhanced social status
11. Family economic background	23. School Location
12. Father's educational level	24. Distance from home
	25. University entrance exam score
	26. Scholarship
	27. Self-expectation for success
	28. Academic ability for the major

3. The Delphi technique was used by a jury of three professors (one in the United States, and two in Taiwan) who placed these 28 factors within one of the three TPB categories. The Delphi technique is often used in forecasting needs, predicting outcomes, and predicting the future (Jonassen, Tessmer, & Hannum, 1999). It works especially well when the goal is to improve our understanding of problems, opportunities, solutions, or to develop forecasts (Skulmoski, Hartman, & Krahn, 2007). Moreover, it is an efficient method because the members of the panel do not need to come together (Portney & Watkins, 2009). The jury members' efforts resulted in the following TPB classification of 28 factors.

   A. Attitude Toward the Behavior

      - Interest in the field

- Expectation for job payment in the future
- Recruitment exhibition
- High school athlete
- University open house or campus tour
- Years required for major
- School/department prestige
- Opportunity for future employment
- Volunteer/athletic part time job experience during high school
- Not a gender similar specific profession

B. Subjective Norms

- Family economic background
- Father's educational level
- Father's occupation
- Teacher recommendation
- Former students at my high school
- Influence from parents
- Influence from my peers
- Influence from teachers/coaches
- Influence from sibling
- Influence from mass media
- Mother's expectation for me
- Desire for enhanced social status

C. Perceived Behavioral Control

- School location
- Distance form home
- University entrance exam score
- Scholarship
- Self-expectation for success
- Academic ability for the major

A second panel of three experts in Taiwan who were familiar with the TPB and Taiwanese culture used the Delphi Technique to select the 4 most important factors that would influence the students to select sport management as major within each of the 3 different categories of the TPB. These 12 factors that could influence Taiwanese high school graduates to select sport management as their major in a university were used in the paired comparison instrument called the TPBPCI were the following:

A. Attitude Toward the Behavior

- Interest in the field
- High school athlete
- School/department prestige
- Opportunity for future employment

B. Subjective Norms

- Former students at my high school
- Influence from parents
- Influence from my peers

- Influence from teachers/coaches

C. Perceived behavioral control

- School location
- University entrance exam score
- Scholarship
- Academic ability for the major

(The instruments are presented in Appendix C.)

Data Collection

The researcher telephoned the chair of each department within the universities that were selected to participate in this study to ask for permission to invite their students to participate in the study. The researcher explained the procedures to be used in the study to the chairs and asked each chair the number of freshmen in the department. In order to obtain a higher rate of return for potential participants in the study, a follow-up e-mail to each of the eight sport management departments was sent one week after the telephone call. A permission letter was attached to the email message (see Appendix D). Each of the eight chairs was asked to sign the permission letter for their students to be surveyed, and return it to the researcher. The researcher met six of the chairs face-to-face and telephoned the other two chairs to discuss the study and to decide the time to conduct the survey. The researcher made sure that the chairs understood that all the participants would be volunteers and free to leave the room if they were not comfortable in participating. The chairs were asked to give the instrument to the students in the first week of the fall semester during class time. Two weeks before the beginning of the fall

semester, the researcher brought or sent the instruments to the chairs with a stamped envelope. After the freshmen finished the instrument, the chairs sent the completed instruments back to researcher's home in Taiwan.

Data Analyses

Each item on the demographic questionnaire, the sum score, rank order and percentage were obtained and recorded in table format according its sum score, rank order and percentage. The data from the TPBPCI were converted into sum score, rank order and percentage for each of the 12 factors. The TPBPCI data were converted to answer each of the research questions using the appropriate statistical technique associated with the paired comparison instrument.

The reader should note the paired comparison tables in Chapter IV, the n = in the table title represents the numbers of participants who provided the data and the # = under *f* (frequency) represented the numbers of times that factor was available for choice.

CHAPTER IV

PRESENTATION OF FINDINGS

The purpose of this study was to examine the factors that influence high school students' decision making process in choosing sport management as their major in Taiwanese universities. The results of the study are presented in this chapter, under the following headings: (a) Participant Demographics, (b) TPBPCI Value by Participants, (c) Comparison of the TPBPCI Factors Among the Selected Variables, and (d) TPBPCI Conceptualized by the Theory of Planned Behavior.

Participant Demographics

All eight of the universities in Taiwan that were invited to participate agreed to make their freshmen available for the study. There were 419 freshmen that volunteered to participate in the study. Unfortunately, 74 questionnaires were incomplete and had to be excluded from the data analysis. Of the 345 completed questionnaires, 24 were from Taipei Physical Educational College, 56 from Altheia University, 41 from National Taiwan College of Physical Education, 39 from Chienkuo Technology University, 33 from National Pingtung University of Science and Technology, 87 from Tajen University, 41 from National Dong Hwa University, and 24 were from Dahan Institute of Technology (See Table 3).

Table 3

Schools and Numbers of Freshmen Who Participanted in the Study

Schools that Participant in the Study	Participants		Valid participants	
	n	Return (%)	n	%
Taipei Physical Educational College	35	100	24	68.5
Altheia University	68	100	56	82.3
National Taiwan College of Physical Education	52	100	41	78.8
Chienkuo Technology University	48	100	39	81.2
National Pingtung University of Science and Technology	45	100	33	73.3
Tajen University	91	100	87	95.6
National Dong Hwa University	44	100	41	93.1
Dahan Institute of Technology	36	100	24	66.6
Total	419	100	345	82.3

On the 345 freshmen who completed the instrument correctly, 72 (20.9%) were between the ages of 16 to 18 years, 265 (76.8%) were between the ages of 19 to 22, 6 of them were between the age of 23 to 25, and 2 were in a category of 'Other' age. There were 173 male participants and 172 female participants. Of this number (345), 108 participants' home locations were in the Northern area of Taiwan, 67 were in the middle area of Taiwan, 135 were in the Southern area of Taiwan, 29 were in the Eastern area of Taiwan, and 6 were in the other areas of Taiwan (See Table 4).

Table 4

Demographics of Participants

Demographic Groups	Categories	*f*	%
Age	16-18	72	20.9
	19-22	265	76.8
	23-25	6	1.7
	Other	2	.6
Gender	Male	173	50.1
	Female	172	49.9
Home Location	Northern	108	31.3
	Middle	67	19.4
	Southern	135	39.1
	Eastern	29	8.4
	Other	6	1.7
High School Athlete	Yes	81	23.5
	No	264	76.5

Parents Occupation and Education

In regard to parents' occupation, a third (33%) of participants' mothers were 'service workers and shop and market sales workers'. Their fathers' most popular occupations were 'service workers and shop and market sales workers' (22.3%). It is interesting to note that 42 (12.2%) of the fathers were 'legislators, government administrators, business executives and managers,' and there were only 17 (4.2%) mothers identified with these occupations (see Table 5). At least one forth of the mothers (29.6%) and fathers (27.8%) had a junior high school diploma (7-9 grade) and approximately one third (36.8%, 31.3%) had a high school diploma (10-12 grade). Almost one forth of the mothers (23.5%) and fathers (24.6%) had some college experience. Further, several of the parents had college degrees (see Table 6).

Table 5

Parents' Occupation

Categories	Mother		Father	
	f	%	*f*	%
Legislators, Government Administrators, Business Executives and Managers	17	4.9	42	12.2
Professionals	22	6.4	25	7.2
Technicians and Associate Professionals	12	3.5	28	8.1
Clerks	34	9.9	21	6.1
Service Workers and Shop and Market Sales Workers	114	33.0	77	22.3
Agricultural, Animal Husbandry, Forestry and Fishing Workers	16	4.6	24	7.0
Craft and Related Trades Workers	23	6.7	66	19.1
Plant and Machine Operators and Assemblers	11	3.2	20	5.8
Elementary Occupations	96	27.8	35	10.1
Servicemen	0	0	7	2.0

Table 6 *Parents' Education*

Categories	Mother		Father	
	f	%	*f*	%
Junior High School Diploma	102	29.6	96	27.8
High School Diploma	127	36.8	108	31.3
Some College	81	23.5	85	24.6
College Degree	27	7.8	44	12.8
Graduate Degree	6	1.7	8	2.3
Post Graduate	2	.6	4	1.2

Participant's Home Location

Most freshmen selected schools located near their home location: Northern (80%), Middle (61.3%), Southern (75%). The exception to this was in the schools located in the Eastern area of Taiwan where only 29.2% of those freshmen lived in the eastern area (see Table 7).

Table 7

Demographics of Participants Home Location

School Location	Home Location	*f*	%
North	Northern	64	80.0
Taipei Physical Educational College	Middle	5	6.3
Altheia University	Southern	6	7.5
	Eastern	0	0.0
	Other	5	6.3
Middle	Northern	8	10.0
National Taiwan College of Physical Education	Middle	49	61.3
Chienkuo Technology University	Southern	23	28.8
	Eastern	0	0
	Other	0	0
South	Northern	11	9.2
National Pingtung University of Science and Technology	Middle	9	7.5
Tajen University	Southern	90	75.0
	Eastern	10	8.3
	Other	0	0
East	Northern	25	38.5
National Dong Hwa University	Middle	4	6.2
Dahan Institute of Technology	Southern	16	24.6
	Eastern	19	29.2
	Other	1	1.5

TPBPCI Value by the Participants

The participants were asked to choose which of two items was the most important factor on the TPBPCI that influenced their decision when selecting sport management as their university major. Twelve factors were paired with each other. When paired with the other eleven (11) factors, 'Interest in the Field' was chosen 72.8% of the time. The 'University Entrance Examination Score' (67.2%) and 'Opportunity for Future Employment' (65.1%) were the second and third most important factors that influenced

the selection of the major. 'Academic Ability for the Major,' 'School Location,' and 'School/ Department Prestige' were selected as being important 57.9%, 54.1%, and 50.2% respectively. From a recruiting point of view, it is important to note that 'School Location' was selected approximately half (54.1%) of the time. Having been a high school athlete was the least important factor that influenced the participants to choose sport management as their major (see Table 8).

Table 8

TPBPCI Values of the Participants (n = 345)

Rank	Factor	*f* (# = 3795)	%
1	Interest in the Field	2762	72.8
2	University Entrance Exam Score	2552	67.2
3	Opportunity for Future Employment	2469	65.1
4	Academic Ability for the Major	2196	57.9
5	School Location	2052	54.1
6	School/Department Prestige	1905	50.2
7	Influence from my Peers	1823	48.0
8	Influence from Parents	1699	44.8
9	Teach/Coach Recommendation	1673	44.1
10	Former Students at my High School	1406	37.0
11	Scholarship	1294	34.1
12	High School Athlete	946	24.9

NOTE: # is total number of possible responses (n × 12facotrs)

Comparing of the TPBPCI Factors Among the Selected Variables

Gender

The five most important factors for both males and females in selecting sport management as their major were 'Interest in the Field' (male - 74%, female - 71. 3%), followed by the 'University Entrance Exam Score' (male - 64.3%, female - 70.2%), the

'Opportunity for Future Employment' (male - 63.8%, female - 66.3%), 'Academic Ability for the Major' (male - 55.8%, female - 59.9%), and finally, 'School Location' (male - 54.3%, female - 53.9%). 'Influence from my Peers,' was judged as an important factor in the selecting of a major, by the males 50.7% of the time and by females 48.0% of the time. For both males and females, 'Influence from Parents' was chosen less than 50% of the time and 'Being a High School Athlete' was the least important factor in the choice of major among freshmen(see Table 9).

Table 9

TPBPCI Values of the Demographics of Participants: Gender

Factor	Male (n = 173)			Female (n = 172)		
	f	%	Rank	*f*	%	Rank
Interest in the Field	1409	74.0	1	1353	71.5	1
University Entrance Exam Score	1223	64.3	2	1329	70.2	2
Opportunity for Future Employment	1215	63.8	3	1254	66.3	3
Academic Ability for the Major	1062	55.8	4	1134	59.9	4
School Location	1033	54.3	5	1019	53.9	5
Influence from my Peers	965	50.7	6	858	45.3	8
School/Department Prestige	933	49.0	7	972	51.4	6
Teach/Coach Recommendation	845	44.4	8	828	43.8	9
Influence from Parents	809	42.5	9	890	47.0	7
Former Students at my High School	735	38.6	10	671	35.5	10
Scholarship	634	33.3	11	660	34.9	11
High School Athlete	561	29.5	12	385	20.3	12

Home Location

There were 6 students among the participants who did not indicate a home location, so their data were not included in the summarized data. Approximately 70% of the time, freshmen who lived in the Northern area of Taiwan chose the 'University Entrance Examination Score' and the 'Interest in the Field' as the most influential factors in

selecting their major. Clearly, 'Interest in the Field' was the most important factor for students living in the Southern area of Taiwan as it was chosen 75.4% of the time, as compared with their second ranked factor 'University Entrance Examination Score' (63.5%). The same factors were ranked one and two for those in the schools located in the Eastern area but with less difference in the value of two ranks (67.4% and 64.3%). For students living in the Northern area of Taiwan, the same factors had approximately the same influence, in reverse order, 'University Entrance Examination Score' was ranked first (71.6%), and 'Interest in the Field' (70.5%) was ranked second. And, for students living in the Middle area of Taiwan, 'Opportunity for Future Employment,' and 'Interest in the Field' were almost identical in their value (75.0%, 74.1%) for influencing their selection of sport management as a major. No matter where the students' home was located, they agreed the important factors that influenced the selection of their major in sport management were interest in the field, university entrance examination score, opportunity for future employment, academic ability for the major, and school location. No matter where students lived, being a high school athlete had little value in determining the selection of their major in sport management (see Table10).

Table 10

TPBPCI Values Associated with of the Participants' Home Location

Factor	Northern (n = 108)			Middle (n = 67)			Southern (n = 135)			Eastern (n = 29)		
	Rank	*f*	%	Rank	*f*	%	Rank	*f*	%	Rank	*f*	%
University Entrance Exam Score	1	851	71.6	3	498	67.6	2	943	63.5	2	205	64.3
Interest in the Field	2	838	70.5	2	546	74.1	1	1119	75.4	1	215	67.4
Opportunity for Future Employment	3	750	63.1	1	553	75.0	3	928	62.5	5	192	60.2
School Location	4	688	57.9	5	399	54.1	5	750	50.5	6	184	57.7
Academic Ability for the Major	5	679	57.2	4	440	59.7	4	833	56.1	3	201	63.0
School/Department Prestige	6	604	50.8	6	350	47.5	7	723	48.7	4	196	61.4
Influence from Parents	7	556	46.8	7	344	46.7	9	648	43.6	10	113	35.4
Influence from my Peers	8	554	46.6	8	343	46.5	6	736	49.6	7	157	49.2
Teach/Coach Recommendation	9	503	42.3	9	304	41.2	8	714	48.1	9	119	37.3
Scholarship	10	450	37.9	11	238	32.3	11	489	32.9	11	111	34.8
Former Students at my High School	11	409	34.4	10	290	39.3	10	586	39.5	12	106	33.2
High School Athlete	12	268	30.1	12	121	16.4	12	438	29.5	8	121	37.9

School Location

Once the student is enrolled as a freshman, the location of their school they are in does not appreciably change the factors that influenced them choosing sport management as their major. As may be seen in Table 11, the four important factors are: 'Interest in the field,' 'Opportunity for Future Employment,' 'University Entrance Examination Score,' and 'Academic Ability for the Major.' Freshmen in the Eastern area schools indicated 'School/ Department Prestige' in their top five factors (62.8%), but it was chosen less than 50% of the time when compared with the other 11 factors in the other three areas of Taiwan universities.

Table 11

TPBPCI Values of the School Location

Factor	Northern(n = 80)			Middle(n = 80)			Southern (n = 120)			Eastern (n = 65)		
	Rank	*f*	%	Rank	*f*	%	Rank	*f*	%	Rank	*f*	%
University Entrance Exam Score	1	665	75.6	3	620	70.5	3	760	57.6	2	507	70.9
Interest in the Field	2	569	64.7	2	662	75.2	1	1001	75.8	1	530	74.1
School Location	3	565	64.2	5	468	53.2	7	655	49.6	6	364	50.9
Academic Ability for the Major	4	542	61.6	4	509	57.8	4	708	53.6	5	437	61.1
Opportunity for Future Employment	5	513	58.3	1	668	75.9	2	814	61.7	3	474	66.3
Influence from my Peers	6	413	46.9	8	414	47.0	5	687	52.0	7	309	43.2
School/Department Prestige	7	399	45.3	7	427	48.5	8	630	47.7	4	449	62.8
Influence from Parents	8	392	44.5	6	444	50.5	10	568	43.0	9	295	41.3
Teach/Coach Recommendation	9	375	42.6	10	319	36.3	6	682	51.7	8	297	41.5
Scholarship	10	359	40.8	11	287	32.6	11	435	33.0	11	213	29.8
Former Students at my High School	11	307	34.9	9	331	37.6	9	568	43.0	12	200	28.0
High School Athlete	12	181	20.6	12	131	14.9	12	416	31.5	10	218	30.5

High School Athlete

'Being a High School Athlete,' was selected as the second most important factors (69.0%), for both genders who were former athletes in high schools; otherwise, all agreed that 'Interest in the Field,' 'University Entrance Examination Score,' 'Opportunity for Future Employment,' and 'Academic Ability for the Major' were the most important factors in freshmen choosing sport management as their university major (see Table 12).

Table 12

TPBPCI Valued by the Demographics of Participants: High School Athlete

Factor	Yes (n = 81)			No (n = 264)		
	Rank	*f*	%	Rank	*f*	%
Interest in the Field	1	627	70.4	1	2135	73.5
High School Athlete	2	615	69.0	12	331	11.4
University Entrance Exam Score	3	553	62.1	2	1999	68.8
Opportunity for Future Employment	4	535	60.0	3	1934	66.6
Academic Ability for the Major	5	528	59.3	4	1668	57.4
School Location	6	435	48.8	5	1617	55.7
School/Department Prestige	7	421	47.3	6	1484	51.1
Influence from my Peers	8	403	45.2	7	1420	48.9
Teach/Coach Recommendation	9	381	42.8	9	1292	44.5
Influence from Parents	10	303	34.0	8	1396	48.1
Former Students at my High School	11	282	31.6	10	1124	38.7
Scholarship	12	268	30.1	11	1026	35.3

TPBPCI Conceptualized by the Theory of Planned Behavior

Among the three categories of the Theory of Planned Behavior (TPB), Attitude Toward Behavior, Subjective Norm, and Perceived Behavior Control, 'Interest in the Field' (74.0%), which is included in the category of 'Attitude Toward Behavior,' was chosen as the most important factor for the students used when selecting sport management as their university major. In the same category, 'Opportunity for Future

Employment,' (65.7%) and 'School/Department Prestige' (50.2%) were chosen over 50% of the time. Three factors in the category of 'Perceived Behavior Control,' 'School Location' (54.1%), 'University Entrance Exam Score' (67.2%), and 'Academic Ability for the Major' (57.9%), were selected more than 50% of the time. None of the factors in the Subjective Norm category was chosen at least 50% of the time by the freshmen as important in selecting sport management as a university major (see Table13).

Table 13

TPBPCI Conceptualized by the Theory of Planned Behavior

Theory of Planned Behavior	Rank	%
Attitude Toward Behavior		
Interest in the Field	1	74.0
High School Athlete	12	24.9
School/Department Prestige	6	50.2
Opportunity for Future Employment	3	65.1
Subjective Norm		
Former Students at my High School	10	37.0
Influence from Parents	8	44.8
Influence from my Peers	7	48.0
Teachers/Coaches Recommendation	9	44.1
Perceived Behavior Control		
School Location	5	54.1
University Entrance Exam Score	2	67.2
Scholarship	11	34.1
Academic Ability for the Major	4	57.9

CHAPTER V

DISCUSSION

The purpose of this study was to determine the factors that influence high school students' in their decision making process as they choose sport management as their university major in Taiwan. This chapter is presented under the following headings: (a) Summary, (b) Discussion, (c) Implications, (d) Conclusions, and (e) Recommendations for Future Studies.

Summary

The Theory of Planned Behavior (TPB) was used as the framework from which a paired comparison instrument, Theory of Planned Behavior Paired Comparison Instrument (TPBPCI), was developed by the researcher. The first panel of experts determined a total of 29 factors that might affect high school graduates' decisions on selecting their university major in the three categories delimited in of the Theory of Planned Behavior: (a) Attitude Toward Behavior, (b) Subjective Norm, and (c) Perceived Behavioral Control. A second panel of experts reduced the number of factors to 4 in each category of the TPB. From the 33 Taiwanese universities offering an undergraduate curriculum in sport management, eight were randomly selected to participate in the study from 4 different geographic areas of Taiwan to participant in the study. The freshmen who were enrolled in the eight university departments in the Fall, 2010 were invited to participate in the present study. Four hundred and nineteen (100%) of the freshmen who

were invited to participate and returned the instruments. The data analyses were based on a total of 345 correctly completed instruments.

The findings of this study, answered each of the specific research questions:

1. What is the most important factor that influences students' decision to select sport management programs as their undergraduate major?
   a. 'Interest in the Field' (72.8%) was the most important factor that influenced students' decisions to select sport management programs as their undergraduate major in Taiwan universities. 'University Entrance Exam Score' (67.2%) was the second factor and 'Opportunity for Future Employment' (65.1%) was the third most important influential factors in students' selecting a major in sport management programs.
   b. Being a 'High School Athlete' (24.9%) was the least important factor influencing students' decisions to major in sport management programs at the undergraduate level.
2. Which of the factors associated with the Theory of Planned Behavior (TPB) is the most influential with freshmen who choose a major in sport management?
   'Interest in the Field' (74.0%) from the TPB category of Attitude Toward Behavior, was the factor often selected by freshmen who chose a major in sport management.
3. How are TPB factors associated with the selected demographic data (i.e., gender, athlete in high school, geographic location of university) of the participants?

Gender

a. Both male and female freshmen thought that 'Interest in the Field,' 'University Entrance Exam Score,' and 'Opportunity for Future Employment' were the three most important factors that influenced them to choose sport management as their university major.

b. Both male and female freshmen selected two of the four factors, 'Interest in the Field' and 'Opportunity for Future Employment,' in the category of Attitude Toward Behavior' over 60% of the time. Female freshmen selected 'University Entrance Exam Score' in the category of Perceived Behavior Control over 70%.

Home Location

a. The freshmen whose home locations were in the Northern area of Taiwan (71.6%) considered that 'University Entrance Exam Score' in the category of Perceived Behavior Control of the TPB was the most important factor affecting their selection of their major in sport management.

b. The freshmen whose home locations were in the Middle area of Taiwan considered that 'Opportunity for Future Employment' (75.0%) in the category of Attitude Toward Behavior of the TPB was the most important factor affecting the selection of their major in sport management.

c. The freshmen whose home locations were in the Southern (75.4%) and Eastern (67.4%) areas of Taiwan considered that 'Interest in the Field' in the category of Attitude Toward Behavior of the TPB was the most important factor in selecting their major in sport management.

School Location

a. The freshmen who enrolled in the schools that were located in the Northern area of Taiwan selected 'University Entrance Exam Score' (75.6%) in the category of Perceived Behavior Control of TPB as the most important factor for choosing their major in sport management. The two other factors, 'School Location' (64.2%), and 'Academic Ability for the Major' (61.6%), in the same category were selected over 60% of the time by these freshmen. Therefore, 'Perceived Behavior Control' was found to be a predominate deciding factor for them.

b. The freshmen who enrolled in the schools that were located in the Middle area of Taiwan selected 'Opportunity for Future Employment' (75.9%) in the category of Attitude Toward Behavior as the most important factor for choosing their major in sport management. Two factors in the category of Attitude Toward Behavior of the TPB, 'Opportunity for Future Employment' and 'Interest in the Field,' were selected over 70% of the time by this groups of students.

c. The freshmen who enrolled in the schools that were located in the Southern area of Taiwan selected 'Interest in the Field' (75.8%) also in the category of Attitude Toward Behavior of the TPB as the most important factor for choosing their major in sport management. Two of the factors in the Attitude Toward Behavior category of the TPB, 'Interest in the Field' and 'Opportunity for Future Employment,' were selected over 60% of the time, making 'Attitude Toward Behavior ' also an important factor for the group.

d. The freshmen who enrolled in the schools that were located in the Eastern area of Taiwan selected 'Interest in the Field' (74.1%) in the category of Attitude Toward Behavior of the TPB as the greatest influence in selecting their major. Another factor, 'Opportunity for Future Employment,' in the category of Attitude Toward Behavior was also selected over 60% of the time; and two factors, 'University Entrance Exam Score,' and 'Academic Ability for the Major,' in the category of Perceived Behavior Control were selected over 60% of the time. Clearly, 'Attitude Toward Behavior' figured prominently in making the major selection for the group.

e. The freshmen who enrolled in the schools in all of the areas of Taiwan, except the Eastern area, thought that 'Athlete in High School' (30.5%) was the least important reason for them to select their major in sport management. The freshmen who enrolled in the schools in the Eastern area said that a 'Former Student at my High School' (28.0%) had the least influence on them for choosing their major in sport management.

Athlete in High School

No matter whether the students were an athlete in high school or not, all of the freshmen considered that 'Interest in the Field' (70.4%, 73.5%), in the category of Attitude Toward Behavior of TPB, was the most important factor that affected their choice on selecting their major in sport management. However, the freshmen who were high school athletes considered that 'Being an Athlete in High School'

(69.0%), in the category of Attitude Toward Behavior of the TPB, was the second most important factor that affected their selection of a major in sport management.

Discussion

The purpose of this investigation was to examine the factors that influence high school students' decision making process for choosing sport management as their major in a Taiwanese university. The following discussion is based on the findings of this research and a comparison with previous research findings.

The most important factor that influenced the students to select sport management as their university major was 'Interest in the field' (72.8%). This finding supported Adams et al. (1994) who stated that 'genuine interest in the field' was one of the significant major-selection determinants. Moreover, compare with pervious studies, this result indicated that not only the business major students (Strasser, Ozgur, & Schroeder, 2002) or education major students (DeMarie and Aloise-Young, 2003) but also the sport management major students consider their interests first in selection their major.

The second most important factor that influenced students in Taiwan to the select sport management as their major was the 'University Entrance Exam Score'(67.2%), which supported Chao and Lai's study (2005) that in Taiwan, the university entrance examination score was an important or very important factor when students are selecting their major. This indicates that after implementing the College Multiple Entrance Program in 2002, Taiwanese students in the sport management major still consider that the university entrance examination score was very important for them to enter a university and select their major. Initially, the student had only one opportunity to pass

the college entrance exam each year and be admitted to a university. Since the method for entering a university in Taiwan has changed, and now the examination is offered several times each year, if the student does not pass the exam the first time, he or she can study more and take another exam (i.e., the Department Required Test), during their senior year. Chiu (2009) reported that this change in the method may put more pressure on both the students and their families.

The third important factor for students who select sport management as their university major was the 'Opportunity for Future Employment' (65.1%). This is in agreement with the finding of numerous researchers (Adams, et al., 1994; Chao & Lai, 2005; Chen, 2004; Huang, 1994; Kimweli & Richards, 1999; Lowe & Simons, 1997; Luo, 2007; Thomas et al., 1991; Wu, 1997; Zeng, 2005). 'Opportunity for Future Employment' is an important factor for students when they are considering their choice of university major. It seems obvious that they would think about what type of job they could find after graduation.

'Interest in the Field,' 'University Entrance Exam Score,' and 'Opportunity for Future Employment' were the primary influences for selecting the college major for both men and the women in the present study. These finding supports several studies which mention that interest in the field, university entrance exanimation score, and opportunity for future employment were three of the most important factors for students choosing a university major (Chao, & Lai, 2005; Lai, 2007; Zeng. 2005). These three factors were selected over 60% of the time when they were paired with other factors by both genders (see Table 8). However, male students were influenced by their friends more than female

students, and female students were influenced by their parents more than male students when they are selecting their major. This finding might also be reflected on other cultures.

'School Location' was selected only 54.3 % of the time and was ranked as fifth in importance as a factor for students when they were making the decision on choosing their major in sport management. Over 60% of the students who were enrolled in the schools in the Northern, Middle, and Southern areas of Taiwan had homes in the same area as their schools. This finding supported Chao and Lai's research (2005) that indicates that students look for a university with their chosen major that is close to their home. However, in the schools that were located in Eastern Area of Taiwan, only 29.2% of the freshmen students came from the Eastern area of Taiwan. The reason for this finding might be because of the population size in the Eastern area of Taiwan. Based on a 2005 investigation by the Council for Economic Planning and Development, Ministry of the Interior, Republic of China (2010), the ranking of the geographic area by size in Taiwan from 1981 to 2005 was Northern, Southern, Middle, and then Eastern. Additionally, the population size in the Eastern area of Taiwan has been decreasing for the past 20 years. Although most of the freshmen students in the schools in the Eastern area of Taiwan did not come from this area, the home location was still an important factor that affected how most students selected their university and major.

Although 'Interest in the Field' was chosen as the most important factor in selecting a major, students who were high school athletes selected 'Athlete in High School' as their second most important factor in selecting sport management as their major. However, for

the students who were not athletes in high school, 'Athlete in High School' factor was selected only 11.4% of the time, and it was ranked the least important factor for them to select sport management as their university major. This may imply that in addition to the physical education major, sport management has become another field for the students who were high school athletes because it is related to their interests and hoped-for-profession. This finding may have unexpected significance because in Taiwan there are more than 3,000 university graduates who major in physical education every year and the market for physical educators has become almost stagnant in Taiwan (Peng, 2006). High school athletic experience might help some students understand some issues that are related to sport management better than other students, and they possibly could have more job opportunities because of their experience as athletes after they graduate from the university.

In order to understand the motive(s) underlining Taiwanese students selection of a major, this investigator used the Theory of Planned Behavior (TPB) as the framework for the development of the TPBPCI. This theory, explores the reasons (motives) for a particular behavior. The TPB has been used to understand human behavior in a variety of circumstances (see Chapter II). The 12 factors were separated by the experts into three categories based on the TPB (Attitude Toward Behavior, Subjective Norm, and Perceived Behavior Control). There were four factors were included under each category of the TPB. Generally, 'Interest in the Field,' a factor in the Attitude Toward Behavior category, was more of an influence for students selecting sport management as their major in Taiwan than any of the factors in the other two TPB categories. The findings of this study

supported the pervious studies that for both genders, 'interest in the field' is one of the most important factors for students in selecting their college major (Adams et al., 1994; Darlene & Aloise-Young, 2003; Malgwi et al. 2005, Strasser et al, 2002).

The other two factors in the Attitude Toward Behavior category ('School/Department Prestige,' 50.2%, and 'Opportunity for Future Employment,' 65.1%) were also selected over 50% of the time by the students. The factor 'Opportunity for the Future Employment' was selected over 60% by the participants in the study, which indicates that students who select sport management as their university major, considered whether or not there would be job opportunities for them after graduation. This finding supports several pervious studies (Adams et al., 1994; Chao & Lai, 2005; Chen, 2004; Hung, 1996; Kimweli & Richards, 1999; Lowe & Simons, 1997; Luo, 2007; Thomas et al., 1991; Zeng, 2005). However, there were three factors, 'School Location,' 'University Entrance Exam Score,' and 'Academic Ability for the Major,' in the category of Perceived Behavior Control that were selected over 50% of the time by the students. Based on these results, although the College Multiple Entrance Program has been implemented for years, students still considered the 'University Entrance Exam Score' (67.2%) as very important in selecting a university major (Chao & Lai, 2005; Lai, 2007; Zeng, 2005). Compared to these two categories, none of the factors in the TPB category of Subjective Norm was selected over 50% by the students. This finding is contrary to other studies related to selecting a college major (Chao & Lai, 2005; Lai, 2007; Simpson, 2001; Zeng, 2005). The results agree with other studies that students did not consider other people's opinion as influencing their selection of sport management as their

university major (Chen, 2004; Malgwi et al. 2005; Strasser et al., 2002). The findings of this study revealed that the factors in the TPB category of Attitude Toward Behavior and Perceived Behavior Control had more influence than the Subjective Norm category when students selected sport management as their university major.

The factors identified by the Theory of Planned Behavior Instrument and valued by students in selecting a major in the university provide the faculty in sport management departments with helpful suggestions for marketing their programs in Taiwan. The following implications seem warranted from what the freshmen reported in the present study.

Implications

The universities in Taiwan are facing several difficult situations in recruiting students today. First, the number of universities in Taiwan has increased from 154 in 2000 to 164 in 2010 (Cheng, 2010). Second, the birth rate in Taiwan has declined from 23% in 1981 to 8.1% in 2009 (Gu & Chen, 2009). It is anticipated that the number of students in the university will also be reduced from 27.4 million in the 2008 academic year to a maximum of 17.6 million in 2124. Third, more and more international colleges and universities are recruiting in Taiwan and an increasing number of Taiwanese students choose to study in the universities in mainland China (Cheng, 2010) and the United States. Faculty in sport management departments in Taiwan cannot ignore this situation. The basic elements of a marketing strategy consist of (a) the target market and (b) the marketing mix variables of product, distribution, promotion, and price that combine to satisfy the needs of the target market (Kurtz, MacKenzie, & Snow, 2010). In order to

design and efficiently implement their marketing strategies and attract and enroll more students in sport management, the faculties have to know who their population is.

Based on the results of this study, sport management faculty would do well to focus their recruitment strategies on the high school graduates whose homes are close to their schools and who are interested in sport management field. University departments should cooperate with local high schools to help high school students find their interest area and help them understand the types of jobs that are available after graduating with a sports management degree. For high school student athletes, university departments should help them understand that physical education is not the only major that they could select when they go to the universities, and the sport management is an option for them.

Additionally, the university departments might consider cooperating more closely with the sport industry. Once the departments build a close relationship with the sport industry, it could provide more scholarship and internship opportunities for students, and their students might have more opportunities to be recruited by those companies for jobs after graduation.

Conclusions

Based on the results of this study, the most important factor that influenced freshmen to select sport management as their university major in Taiwan was their 'Interest in the Field' in the TPB category 'Attitude Toward Behavior category.' 'Home Location,' in relation to the location of the university and their home was considered an important factor for students when they selected their major in sport management. Further, female students tend to be influenced by their parents more than male students who tend to be

influenced by their friends more than the females.

Recommendations for Future Studies

The following recommendations for future research are suggested:

1. A qualitative research design might be considered to provide information concerning why Subjective Norm factors of the TPB were so unimportant to the present participants.
2. A comparison of the factors that influence students to select sport management in public and in private funded schools or vocational schools could prove to be useful to recruiters.
3. A future study that involves more schools from each area in Taiwan would allowed comparison of the factors that influenced the students to select sport management in a specific geographic area and might provide useful contrasting data.
4. A TPBPCI might be used to gather data from sport management majors in countries other than Taiwan for use in recruitment in those countries.

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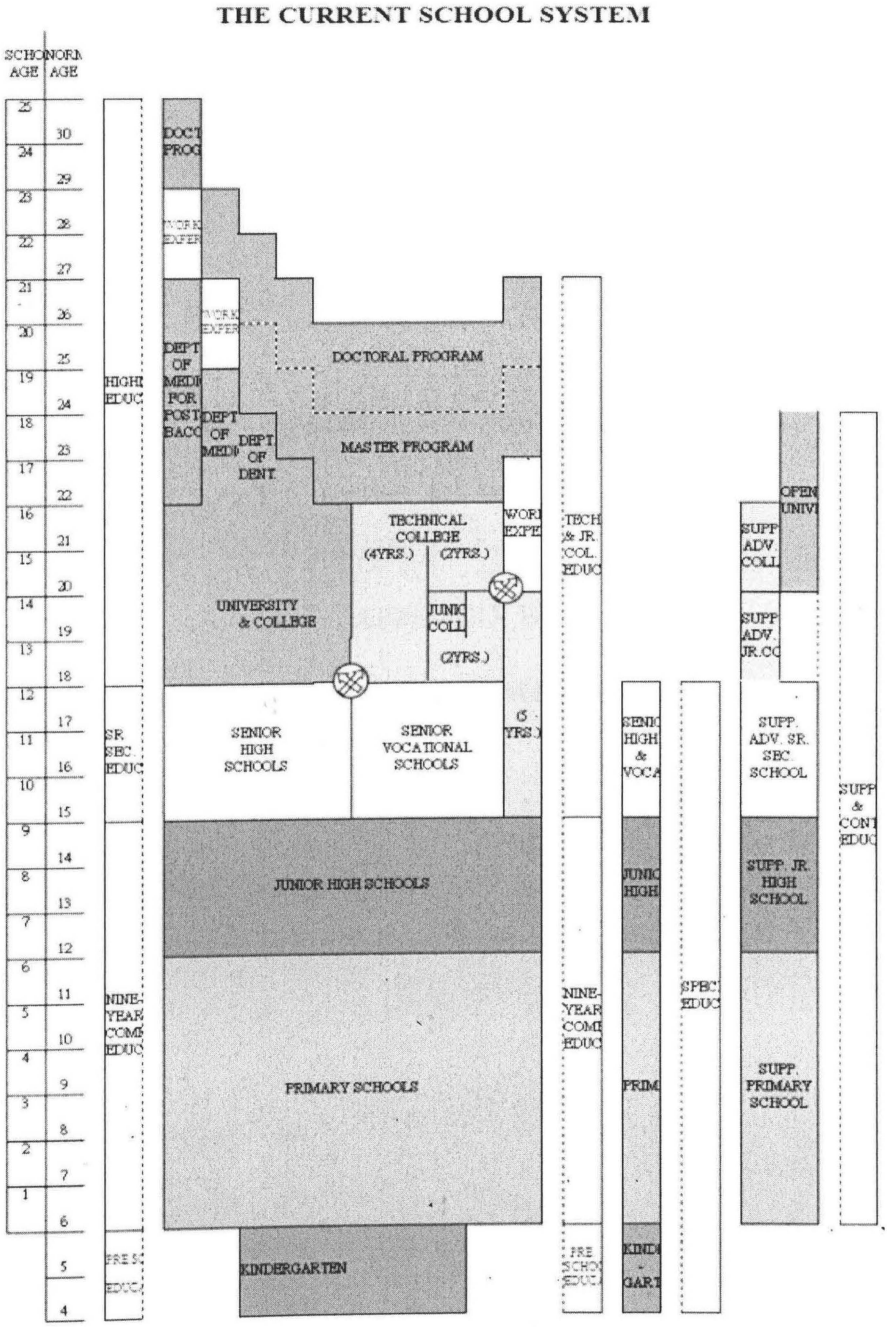
APPENDIX A

The Current School System in Taiwan



The current school system in Taiwan.

Retrieved from http://english.moe.gov.tw/ct.asp?xItem=153&CtNode=499&mp=1

APPENDIX B

List of Universities in Taiwan Offering Sports Management Undergraduate Programs

List of Universities in Taiwan offering Sports Management Undergraduate Programs					
School Name in English	**Department Title**	**Ownership**	**Vocational**	**Location**	**Area**
Taipei Physical Education College	Dept.of Recreational Sports Management	Public		Taipei City	N
National Taipei University	Dept. of Recreation and Sport Management	Public		Taipei County	N
National Taiwan College of Physical Education	Sports Management Department	Public		Taichung City	M
National Pingtung University of Science and Technology	Dept. of Recreational Sports and Health Promotion	Public	Vocational	Pingtung	S
National Kaohsiung University	Dept. of Kinesiology, Health, and Leisure Studies	Public		Kaohsiung County	S
National Dong Hwa University	Dept. of Sports and Leisure Studies	Public		Hualien County	E
National Taitung University	Dept. of Somatics and Sport Leisure Industry	Public		Taitung City	E
National Penghu University	Dept. of Marine Sports and Recreation	Public	Vocational	Penghung County	I
National Kinmen Institute of Technology	Dept. of Sport and Leisure	Public	Vocational	Kinmen	I
Aletheia University (Tamsui)	Dept. of Sports Management	Private		Taipei County	N
Fu Jen Catholic University	Dept. of Physical Education(Group of Sports and Health Management)	Private		Taipei County	N
Ching Kuo Institute of management and Health	Dept. of Sports, Health and Leisure	Private	Vocational	Keelung	N
Chihlee Institute of Technology	Sports, Health and Leisure Department	Private	Vocational	Taipei County	N
Technology and Science Institute of Northern Taiwan	Dept. of Sports Health and Recreation	Private	Vocational	Taipei County	N
St. John's University	Dept. of Leisure Sports and Health Management	Private	Vocational	Taipei County	N
Taipei College of Maritime Technology	Dept. of Aquatic Sport and Recreation	Private	Vocational	Taipei City	N
Da-Yeh University	Dept. of Sports Business Management	Private		Changhu County	M
Ming Hsin University of Science & Technology	Dept. of Sports Management	Private	Vocational	Hsinchu County	M
Yu Da University	Dept. of Recreational Sport Management	Private	Vocational	Miaoli County	M
Chienkuo Technology University	Sport, Health, Leisure and Recreation Department	Private	Vocational	Changhua City	M

Aletheia University (Matau)	Dept. of Sports Industry Administration	Private		Tainan County	S
Chang Jung Christian University	Dept. of Sports and Recreation Management	Private		Tainan County	S
Tatung Institute of Commerce and Technology	Dept. of Sport, Health & Leisure	Private	Vocational	Chiayi County	S
WuFeng Institute of Technology	Dept. of Sport, Health & Leisure	Private	Vocational	Chiayi County	S
Chia Nan University of Pharmacy and Science	Dept. of Sports Management	Private	Vocational	Tainan County	S
Chung Hwa University of Medical Technology	Dept. of Sport, Health, and Leisure	Private	Vocational	Tainan County	S
Far East University	Dept. of Leisure and Sports Management	Private	Vocational	Tainan County	S
Cheng Shiu University	Dept. of Sports, Health, and Leisure	Private	Vocational	Kaohsiung City	S
Kao Yuan University	Dept. of Recreation Sports Management	Private	Vocational	Kaohsiung County	S
Shu-Te University	Dept. of Recreation and Sport Management	Private	Vocational	Kaohsiung County	S
Yung Ta Institute of Technology & Commerce	Dept. of Sports, Health & Leisure	Private	Vocational	Pingtung	S
Meiho Institute of Technology	Dept. of Recreation Sports and Health Promotion	Private	Vocational	Pingtung	S
Tajen University	Dept. of Recreation Sports Management	Private	Vocational	Pingtung County	S
Dahan Institute of Technology	Dept. of Recreational Sports Management	Private	Vocational	Hualien County	E

APPENDIX C

Instruments

Demographic Questionnaire

1. **Are you a college freshman enrolled in fall 2009?**
   - □ Yes
   - □ No
2. **Are you enrolled in sports administration or management major?**
   - □ Yes
   - □ No
3. **Were you student athlete in high school?**
   - □ Yes
   - □ No

Demographics

1. **Age**
   - □ 16~18
   - □ 19~22
   - □ 23~25
   - □ Others
2. **Gender**
   - □ Male
   - □ Female
3. **Home location**
   - □ North of Taiwan (Taipei County, Taipei City, Keelung City, Taoyuan
   - □ County, Hsinchu County, Hsinchu City, and Yilan County)
   - □ Middle of Taiwan(Miaoli County, Taichung County, Taichung City,Changhua County, Nantou County, and Yunlin County)
   - □ South of Taiwan (Chiayi City, Chiayi County, Tainan City, Tainan County, Kaohsiung City, Kaohsiung County, and Pingtung country)
   - □ East of Taiwan(Hualien County, and Taitung Country)
   - □ Others
4. **School name**
   - □ Taipei Physical Education College
   - □ Aletheia University
   - □ National Taiwan College of Physical Education
   - □ National Dong Hwa University
   - □ Dahan Institute of Technology
   - □ Chienkuo Technology University

- ☐ National Pingtung University of Science and Technology
- ☐ Tajen University

5. **Mother's occupation**
   - ☐ Legislators, Government Administrators, Business Executives and Managers
   - ☐ Professionals
   - ☐ Technicians and Associate Professionals
   - ☐ Clerks
   - ☐ Service Workers and Shop and Market Sales Workers
   - ☐ Agricultural, Animal Husbandry, Forestry and Fishing Workers
   - ☐ Craft and Related Trades Workers
   - ☐ Plant and Machine Operators and Assemblers
   - ☐ Elementary Occupations
   - ☐ Servicemen

7. **Father's occupation**
   - ☐ Legislators, Government Administrators, Business Executives and Managers
   - ☐ Professionals
   - ☐ Technicians and Associate Professionals
   - ☐ Clerks
   - ☐ Service Workers and Shop and Market Sales Workers
   - ☐ Agricultural, Animal Husbandry, Forestry and Fishing Workers
   - ☐ Craft and Related Trades Workers
   - ☐ Plant and Machine Operators and Assemblers
   - ☐ Elementary Occupations
   - ☐ Servicemen

8. **Father's education background**
   - ☐ Junior High School Diploma
   - ☐ High School Diploma
   - ☐ Some College
   - ☐ College Degree
   - ☐ Graduate Degree
   - ☐ Post Graduate

9. **Mother's education background**
   - ☐ Junior High School Diploma
   - ☐ High School Diploma
   - ☐ Some College

- ☐ College Degree
- ☐ Graduate Degree
- ☐ Post Graduate

10. Was a high school student athlete

- ☐ Yes
- ☐ No

Theory of Planned Behavior Paired Comparison Instrument

Note: Please select the one of two factors that affects you to select the board area of sport management as your college major in each question.

□High school athlete----------□Former students at my high school

□Interest in the field----------□Teacher recommend

□Opportunity for future employment----------□School location

□School/department prestige----------□University entrance exam score

□Influence from parents----------□Scholarship

□Influence from my peers----------□Academic ability for the major

□High school athlete----------□Teacher recommend

□Former students at my high school----------□School location

□Interest in the field----------□University entrance exam score

□Opportunity for future employment----------□Scholarship

□School/department prestige----------□Academic ability for the major

□Influence from parents----------□Influence from my peers

□High school athlete----------□School location

□Teacher recommend----------□University entrance exam score

□Former students at my high school----------□Scholarship

□Interest in the field----------□Academic ability for the major

□Opportunity for future employment----------□Influence from my peers

□School/department prestige----------□Influence from parents

□High school athlete----------□University entrance exam score

□School location----------□Scholarship

□Teacher recommend----------□Academic ability for the major

□Former students at my high school----------□Influence from my peers

□Interest in the field----------□Influence from parents

□Opportunity for future employment----------□School/department prestige

□High school athlete----------□Scholarship
□University entrance exam score----------□Academic ability for the major
□School location----------□Influence from my peers
□Teacher recommend----------□Influence from parents
□Former students at my high school----------□School/department prestige
□Interest in the field----------□Opportunity for future employment

□High school athlete----------□Academic ability for the major
□Scholarship----------□Influence from my peers
□University entrance exam score----------□Influence from parents
□School location----------□School/department prestige
□Teacher recommend----------□Opportunity for future employment
□Former students at my high school----------□Interest in the field

□Influence from my peers ----------□High school athlete
□Academic ability for the major----------□Influence from parents
□Scholarship----------□School/department prestige
□University entrance exam score----------□Opportunity for future employment
□School location----------□Interest in the field
□Teacher recommend----------□Former students at my high school

□Influence from parents ----------□High school athlete
□Influence from my peers----------□School/department prestige
□Academic ability for the major----------□Opportunity for future employment
□Scholarship----------□Interest in the field
□University entrance exam score----------□Former students at my high school
□School location----------□Teacher recommend

□School/department prestige ----------□High school athlete
□Influence from parents----------□Opportunity for future employment

□Influence from my peers----------□Interest in the field

□Academic ability for the major----------□Former students at my high school

□Scholarship----------□Teacher recommend

□University entrance exam score----------□School location

□Opportunity for future employment ----------□High school athlete

□School/department prestige----------□Interest in the field

□Influence from parents----------□Former students at my high school

□Influence from my peers----------□Teacher recommend

□Academic ability for the major----------□School location

□Scholarship----------□University entrance exam score

□Interest in the field ----------□High school athlete

□Opportunity for future employment----------□Former students at my high school

□School/department prestige----------□Teacher recommend

□Influence from parents----------□School location

□Influence from my peers----------□University entrance exam score

□Academic ability for the major----------□Scholarship

APPENDIX D

Permission Letters From Department

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

Dear Chair of department

I am a doctoral candidate at Texas Woman's University from Taiwan, working on my dissertation. The title of my dissertation as partial fulfillment of the requirements for a Doctor of Philosophy Degree is ***Factors That Influence High School Graduates To Choose The Board Area Of Sport Management As Their University Major In Taiwan***. The freshmen students in your department have been selected as potential participant in my research. The study has been approved by Texas Woman's University Institutional Review Board and Graduate School.

The purpose of this study is to determine the factors that influence high school students' decision making process for choosing the broad area of sport management as their major in a Taiwanese university.

The participant of this study is ANONYMOUS and VOLUNTARY. The participants response to this survey will be saved in secure file. Individual participant cannot be indentified. Confidentiality will be protected to extent possible that is allowed by law. The total time commitment for the participants involved will be approximately 20 minutes.

Thank you very much for considering my request. If you have any question please feel free to contact me. If you agree to participant in this research, please sign your name, title of department, and school below.

Signature: David Chen

Department: Department of Recreation and Sport Management

School: Taipei Physical Education College

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
Email:yutaohung@hotmail.com, yutaohung@gmail.com

Excellence within Reach

TWU
EXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

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Signature: 孫欣德 Alex Hsu

Department: Department of Sport Management

School: Aletheia University

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
Email:yutaohung@hotmail.com, yutaohung@gmail.com

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Signature: 張清源 Ching-Yuan Chang 助理教授 Assistant Professor

Department: 運动健康与休閒系 Department of Kinesiology, Health, Leisure Studies

School: 建国科技大学 Chienkuo Technology University

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
Email:yutaohung@hotmail.com, yutaohung@gmail.com

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Signature: Yen Hsiang Huang

Department: Dept. of sport Management

School: National Taiwan College of Physical Education

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
Email:yutaohung@hotmail.com, yutaohung@gmail.com

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Signature:

Department: Recreation Sports & Health Promotion

School: National Pingtung University of Science and Technology

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Department of Kinesiology
Texas Woman's University
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Signature: Pao-Shih Pan

Department: Dep. of Recreation & Sports Mmanagement

School: Tajen University

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
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Signature: Guo-Ming Jing

Department: Recreational Sports Management Associate professor

School: Dahan Institute of Technology

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
Texas Woman's University
Phone: (02)2321-9519, 0988158563
Email:yutaohung@hotmail.com, yutaohung@gmail.com

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EXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

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Signature: 張喜珍

Department: Department of Sports and Leisure Studies

School: National Dong Hwa university

Tao-Hung (Hank) Yu, MS, MBA
Department of Kinesiology
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Phone: (02)2321-9519, 0988158563
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Excellence within Reach

APPENDIX E

Approved Letter from Institutional Review Board

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 Fax 940-898-3416
e-mail: IRB@twu.edu

August 30, 2010

Mr. Tao-Hung Yu
2421 N. Bell #118
Denton, TX 76209

Dear Mr. Yu:

Re: Factors that Influence High School Graduates to Choose Sport Management as Their University Major

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Another review by the IRB is required if your project changes in any way, and the IRB must be notified immediately regarding any adverse events. If you have any questions, feel free to call the TWU Institutional Review Board.

Sincerely,

Kathy DeOrnellas, PhD

Dr. Kathy DeOrnellas, Chair
Institutional Review Board - Denton

cc. Dr. Charlotte Sanborn, Department of Kinesiology
Dr. Bettye Myers, Department of Kinesiology
Graduate School

APPENDIX F

Approved Letter from Graduate School

TWU
TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

The Graduate School
P.O. Box 425649, Denton, TX 76204-5649
940-898-3415 FAX 940-898-3412

0666887

September 7, 2010

Tao-Hung Yu
2421 N. Bell #118
Denton, TX 76209

Dear Mr. Yu:

I have received and approved the prospectus entitled ***Factors that Influence High School Graduates to Choose Sport Management as Their University Major*** for your Dissertation research project.

Best wishes to you in the research and writing of your project.

Sincerely yours,

Ruth A. Johnson, Ph.D.
Associate Dean of the Graduate School

kb

cc: Dr. Bettye Myers, Kinesiology
Dr. Barney Sanborn, Chair, Kinesiology