

THE EFFECTS OF STUDENT INVOLVEMENT AND COLLEGE ENVIRONMENT ON
STUDENTS' LEARNING AND LIVING EXPERIENCE AT WORLD-CLASS RESEARCH
UNIVERSITIES IN CHINA: A COMPARATIVE CASE STUDY OF THE UNIVERSITY OF
HONG KONG(HKU) AND SHANGHAI JIAO TONG UNIVERSITY(SJTU)

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STATEMENT OF DECLARATION

I hereby declare that this dissertation represents my own work and that it has not been previously submitted to this University or any other institution in application for admission to a degree, diploma or other qualifications.

A handwritten signature in blue ink, appearing to read 'Roy Y. Chan', with a long horizontal flourish extending to the right.

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ABSTRACT

This comparative research examined the effects of student involvement and college environment on students' learning and living experience delivered by two aspiring world-class universities in Hong Kong and Shanghai. Few studies have shown how the levels of student involvement and college environment can benefit students at world-class institution. Earlier research done by Pascarella (1985) suggested that college environment impact students' learning and living experience. Research in the field has also shown that through adequate campus facilities and campus resources, college student interaction and involvement can be promoted.

Adapting a quantitative research approach, this comparative case-study utilizes the "Student Involvement Survey" from Ohio State University(OSU) and the "Student Satisfaction Study" from Birmingham City University(BCU) to examine students' learning and living experience at aspiring world-class institutions. The study was conducted at two major research institutions from the *Universitas 21* network: The University of Hong Kong(HKU) and Shanghai Jiao Tong University(SJTU). The finding indicated that: a) student involvement (academic and social) affect students' learning and living experience, b) college environment (academic, campus, and interpersonal) affect students' learning and living experience, and c) students' learning and living experience impact the making of world-class universities in China.

The study extends from earlier research on student involvement and college environment from the U.S. and the U.K. into China's modern higher education. The results of this research suggest that student involvement and college environment plays a salient effect on Chinese students' learning and living experience and its overall progress of delivering world-class education in East Asia. In the end, the researcher provides senior administrators, policy makers and student affairs practitioners a few recommendations to further create an educationally powerful environment and experience for students at aspiring world-class institution in China.

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LIST OF ABBREVIATIONS AND ACRONYMS

Abbreviations/Acronyms	Definition
%	Percent
\bar{x}	Average
AAROP	American Association for Public Opinion Research
ARWU	Academic Ranking of World Universities
BCU	Birmingham City University
CSEQ	College Student Experience Questionnaire
CWU	Center for World-Class Universities
I-E-O	Input-Environment-Outcome
HKU	University of Hong Kong
HR	Hours
MIN	Minutes
N	Number of Total Population in the Study
OECD	Organization for Economic Co-operation and Development
PG	Page
SJTU	Shanghai Jiao Tong University
THE	Times Higher Education
UK	United Kingdom
US	United States of America
WCU	World-Class University
WCU-4	4 th International Conference on World-Class Universities
YR	Year

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CHAPTER I: INTRODUCTION

In this study, the researcher examined the effects of student involvement and college environment on students' learning and living experience delivered by aspiring world-class universities in Hong Kong and Shanghai. The study contributes to the literature on student experience, student involvement, college environment, and China's higher education. In addition, this study extends from previous research on the impact of students in college and the socialization experience of Chinese students at research institutions.

Historical Background

Since the early 1990s, China has made a number of rapid changes in the governmental policies and environmental structures to promote the concept of world-class universities (Min, 2004). This idea started when President Jiang Zemin announced at Peking University during the centennial celebration to incorporate a small group of world-class universities in 1998 (Morhram, 2009). Ever since, several new projects has been established by the Ministry of Education to accelerate the process of building world-class academic institutions, including rapid expansion in student enrolments, structural reforms, and policy initiatives (Wang, 2011). These projects include the Project 211, the Project 985, the 2003-2007 Action Plan for Rejuvenating Education, as well as the development of the C9 League. Though governments are pushing hard to build more world-class research institutions in China, a large number of campus facilities and campus resources are still vastly outdated and overcrowded (Hayhoe & Li, 2011).

Generally, the college environment created by faculty members and students impact the development of an individual experience (Astin, 1993; King & Mayhew, 2002). The time and energy college students devote to educationally purposeful activities is the single best predictor of their learning and personal development (Kuh & Kinzie, 2005). Although studies suggests that faculty involvement towards research is one of the most significant factors in achieving "world-

class” status, few studies has yet to examine how student involvement and college environment are important to the process of making world-class research institutions. Students play a salient role in the development of research institutions. They explore their campus environment and construct meaningful knowledge acquired through their virtual environment (Cronin, 1997). Thus, by creating a rich college environment that aligns with student expectations, Chinese universities can provide learners with a positive learning experience to be mentally active and participative in their academic study (Gunn & Richburg, 2007, p. 119).

Astin (1984) previous research suggests that certain environmental factors like on-campus residence have a significant positive impact on student development (Astin, 1973, 1977, 1982; Chickering, 1974). Simply by eating, sleeping, and spending their waking hours on the college campus, students develop strong identification and attachment to undergraduate life (Astin, 1984, p. 301). Subsequently, students who remain involved on-campus tended to devote larger amount of hours studying on-campus, participate actively in student organizations, as well as spend more time interacting with faculty members and staff (Min & Chau, 2011). On the other hand, students who remain uninvolved neglect their studies overtime, spend little time on campus, abstain from extracurricular activities, and rarely initiate contact with faculty or students (Astin, 1984). Consequently, failure to become involved with on-campus activities, organization, and extracurricular activities that promotes student involvement to college life can ultimately affect an individual learning and living experience at research institutions. As a result, Chinese universities should strive to seek ways to improve student involvement and college environment on students’ living and learning experience in order to establish an educationally powerful environment and experience for students at aspiring world-class research institutions in China.

Significance of the Study

The intent of this research is to make a contribution to the theoretical understanding of students' learning and living experience delivered by aspiring world-class universities in China as well as to inform policy-makers and senior officials how the socialization experience of Chinese students affect their overall development. An additional purpose of this research is to make a significant contribution to an understanding of the student affairs profession, an area that has been largely unstudied at Chinese universities. The primary aim of this study is to provide senior officials and student affairs practitioners in China with a comprehensive and inclusive overview of students' learning and living experience, as well as several possible ideas to enhance the socialization experience of Chinese students to meet the many challenges facing globalization and massification within China's higher education sector. This study has been written for both academics and administrators working in college student affairs programs.

From earlier research, there have been a large number of studies on student involvement and college environment between faculty members, active learning, and academic performance with students in the U.S. (Chickering, 1989). However, limited study have examined the impact of college students involvement and environment and its socialization effect on students' learning and living experience at aspiring Chinese world-class institutions (Min & Chau, 2011). The research was designed to gain vital information surrounding the various types of collegiate experiences among Chinese students as well as the similarities and differences of their overall university experience at these institutions. This study also addresses the extent to which the college environment at aspiring world-class institutions contribute to students' sense of involvement on-campus and whether these involvements affected China's overall progress of building and creating world-class universities by the year 2020.

The study is based on the assumption that when students are involved with their college environment (academic, campus, and interpersonal), students are more likely to acquire a positive learning and living experience at their institution. This research was conducted at two prestigious comprehensive research universities in China: The University of Hong Kong(HKU) and Shanghai Jiao Tong University(SJTU). Both HKU and SJTU are current members of the elite international network *Universitas 21* and are considered to be classified as an ‘aspiring’ world-class institutions according to the 2011 Academic Rankings of the World Top Universities(ARWU), published by the Shanghai Jiao Tong University on August 15, 2011.

Definition of Terms

The following definitions of terms are offered to provide the reader clarification and consistency in the research. Each term is also discussed in greater detail in the literature review.

- 1) Student involvement: “the amount of physical and psychological energy that the student devotes to both academic and social activities, such as, program, personnel, curricula, instructor, facilities, institutional climate, courses, teaching style, friends, roommates, extra-curricular activities, and organizational affiliation” (Astin, 1993).
- 2) College environment: the effects of academic (courses, program, teaching, curriculum), campus (facilities, resources, services), and interpersonal (faculty-student relationship, student-student relationship) environment on students’ learning and living experience.
- 3) Students’ learning and living experience: the effects of student involvement and college environment on teaching & learning, curriculum, degree program, student-faculty relationships, student development programs, and student activities.

- 4) World-class university: “A first-class research institution that seeks to create an atmosphere of intellectual excitement for students to easily produce cutting-edge research and make outstanding contributions to the country’s social and political development” (Altbach, 2004).

CHAPTER 2: REVIEW OF THE LITERATURE

Student experience has been a main indicator in assessing the quality of campus life. Experience refers to students learning and living development at a higher education institution from the start of freshman to graduation. When studying college student experience, many theories often exclude the effects of student involvement and college environments in which students gain various perceptions of themselves. A large portion of this literature has linked student involvement and college environment on students' learning and living experience. As many universities in the world are moving towards internationalization, understanding student experience has been proved to be a critical factor to college students' development. With the continuous expansion of higher education (massification), improving students' learning and living experience is essential for all universities in China.

This chapter focuses on the review of literature about students' learning and living experience. Specifically, the review provides an extensive overview on the various debates and challenges surrounding students experience in university: student involvement, college environment, and students' learning and living experience. Attention is given to past studies in the U.S. to assess college student educational experiences. The research assessing students' learning and living experience section examines how student involvement and college environment are linked. The student involvement section examines the relationship on students' learning and living experience. While the college environment further reviews the relationship between student involvement and student experience. Later, a review on China's higher education section is provided to further understand how students learning and living experience are delivered by world-class institutions. The portion of the review will further extend research to how world-class universities in Hong Kong and Shanghai can better deliver a more powerful education environment and experience for Chinese students at aspiring world-class institutions.

Research Assessing Students' Learning and Living Experience

Educators, policymakers, and taxpayers all have their concerns about the impact of colleges because a huge number of students are now taking larger roles on interacting with the college environment to further enrich their learning and living experience at their universities. Salmi (2011) once identified that having an 'abundance of resources' is one of the three most important features of building a world-class university. Earlier study emphasized that the college environment and student involvement affect students' learning and living experience (Pascarella, 1985; Pascarella & Terenzini, 1991; Tinto, 1987; Weidman, 1989). Historically, over the past few decades, there have been a large number of studies that examined the relationship between student involvement and college environment at U.S. higher education institutions (Astin, 1993; Bean & Metzner, 1996; Pascarella & Terenzini, 1991, 2005; Feldman & Newcomb, 1969; Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, & Jalomo, 1996; Tinto, 1993, 1998, 2004). However, a small number of studies had been implemented to investigate students' learning and living experiences and development at Chinese universities (Min & Chau, 2011). The purpose of this literature is to answer key questions about the impact of Chinese student experience that have been raised by many parents, public officials, and educators themselves. Pascarella, Kuh and Tinto are the primary scholars utilized in the review. All three scholars suggest that student must invest more time and effort interacting with their environment in order to grow both academically and socially.

Pascarella's Research on Student Experience

Students are responsible for any kinds of gains and development that they derive from their college experiences. Generally, students experience has a large impact towards their cognitive and intellectual growth. Based on previous studies in the 1980s, Pascarella (1985) suggest that students' learning and living experience are affected by many factors, such as,

students' background characteristics, the interactions with major agent on-campus, as well as the quality of campus life (p. 184). Pascarella (1985) divides the idea of students' learning and living experience into five major variables. These five variables are: 1) students background and pre-college characteristics, 2) structural and organizational features of the institution, 3) college or university environment, 4) student interactions with the major socializing agents on campus, and 5) quality of effort by students (p. 185). Through these five constructs, Pascarella (1985) claims that both student involvement and college environment has the largest impact on students' collegiate experiences (p. 21).

The primary aim of Pascarella (1985) research is to assess the effects of different environmental factors on students' learning and living experience. From past studies, Pascarella (1985) divides the college environment into five categories: 1) academic, 2) campus, 3) interpersonal, 4) institutional, and 5) structural (p.36). Through these different types of environment, Smart (1985) believes that the college environment plays a substantial role on students' interaction with faculty and peers. Moreover, the college environment influences college structures and organizational characteristics of which the students interact (p. 34). Thus, the importance of understanding how an institution is able to promote college student development is becoming more and more apparent today (Pascarella & Terenzini, 2005).

Kuh's Research on Student Experience

Unlike Pascarella's earlier research on student experience, Kuh (1991) study examines the importance of students' out-of-class experience. His construct observe that student involvement is a key factor to students' learning and living experiences. Moreover, Kuh (1991) suggests that students who are involved both in-class and out-of-class activities would gain the most from their college experiences than those who are not involved. He writes, "When out-of-class experiences complement the institution's education purposes, they contribute significantly

to student learning and personal development” (Kuh 1991: 6). Consequently, Kuh (1991) observes that more institutional effort to deliver out-of-class experience is needed to enhance students’ learning and living experience. He believes that university should push harder to promote effective learning opportunities that would enhance student experience.

Generally, out-of-class experiences can be extremely helpful to further enrich their learning and living experience of which cannot be gained from in-class experiences. Out-of-class experience consists of academic and social events that are typically not a part of the university curriculum but are rather parts of the institution educational purpose. Kuh (1991) observes, “By identifying the factors and conditions shared to varying degrees by colleges and universities reputed to provide unusually rich out-of-class learning environments, policy makers could gain a better understanding of ways to promote students learning and personal development” (p. 16). In other words, he claims that formal administrative process, institutional resources, policies and programs all significantly impact students’ learning outcomes.

Tinto’s Research on Student Experience

Contrary from Pascarella’s and Kuh’s, Tinto’s (1993) research on student experience examines the environmental conditions in which departures are likely to occur at U.S. institutions. His study examines how student interact with their college environments, and outlines possible assumptions to how those specific environmental conditions impact student decision to leave or stay at their higher education institution.

Tinto’s primary research is to create “interactions among different individuals within the academic and social systems of the institution and the communities comprise them to lead individuals of different characteristics to withdraw from that institution prior to degree completion” (Tinto, 1993: 113). Thus, one can identify Tinto’s research as "sociological in character” (p. 113). His study places heavy emphasis on the essential role of classroom

involvement to facilitate positive learning and living experience. He writes, “The classroom is the primary place where students and the faculty meet over matter of academic and intellectual substance” (Tinto, 1993: 210). Subsequently, should educators fail to promote active involvement within the classroom environment, students’ learning and living experience will be affected that can significantly impact their educational growth both academically and socially.

For many students in China, a large number of their college experience is classroom-based. Students generally live and study on-campus, and typically have multiple responsibilities in their academic work (Cohen & Brawer, 2003). As a result, the value of promoting student involvement in the classroom is one of the most significant factors for Chinese universities because they are viewed as socializing agents of students’ intellectual growth. Tinto (1993) writes, “Classroom represents the small community of learning in which both faculty and students participate” (p. 210). Thus, Pascarella and Terenzini (1991) suggest that negative interactions and experiences in the classroom tended to reduce involvement of which generally would distance them from academic and social communities.

Nevertheless, Tinto (1993) claims that a university who fails to improve students’ learning and living experience is likely the result of the university goal to alienate them from education, viewing college completion as a barrier to overcome rather than an experience to be valued. Earlier research clearly suggests that student experience is based on the institution abilities to actively involve students on their intellectual and social life. Hence, Tinto's primary research is to assist college officials and decision makers to understand how a university can best promote student involvement and college environment on students’ learning and living experience until the degree of completion (Tinto, 1993).

Research Assessing Student Involvement and College Environment

Research assessing student involvement and college environment has been a growing topic in the field of higher education because these two factors play a salient impact on students' learning and living experience (Astin, 1993; Carini, Kuh, and Kein, 2006; Porter, 2006). With more and more students attending higher education and the increasing competition of university admission throughout the world, the need to further enhance student involvement and college environment on-campus should be a valid priority for educators, policymakers, teachers, students, and taxpayers.

Previous research done have shown that a large number of studies that examine student involvement and college environment focused students' learning and living experience (Astin, 1993; Bean & Metzner, 1996; Pascarella & Terenzini, 1991, 2005; Feldman & Newcomb, 1969; Tinto, 1993, 1998, 2004). Student involvement refers to both academic involvement and social involvement. On the contrary, college environment refers to academic environment, campus environment, institutional environment, interpersonal environment, as well as structural environment. This latter part of the literature further summarizes the two variables (student involvement and college environment) and its overall effect on students' learning and living experience. The review will also examine how student involvement and college environment plays an invaluable role in shaping students' learning and living experience.

Research Assessing Student Involvement

Alexander Astin's (1984) conceptual framework for studying student involvement, the input-environment-outcome (I-E-O) model, is one of the first and most durable frameworks to suggest that students learn best by being involved on-campus. The Input-Environment-Outcome (I-E-O) model measures the impact of various environmental conditions on students' learning and living experience (p. 11). Astin (1984) model is divided into three sub-areas: 1) Input, 2) Environment, and 3) Outcome.

Input refers to student background characteristics when students enter into the institution; environment refers to the various programs, policies, peers, faculty, and experiences to which students are exposed; and outcome refers to the student background characteristics after their exposure to the environment (Lily & Schwartz, 2009). From earlier research, Astin (1984) suggest that student experience is determined by comparing outcome characteristics with input characteristics. He observe that failure to become involved in on-campus activities, organizations, and extracurricular activities that promote student involvement and integration on-campus can ultimately impact students' career development and aspirations in regards to values, beliefs, behaviors, personality, and lifestyle (p. 26).

Based on his studies, Astin (1984) found that student involvement in learning and college campus life are two components in academic success. He asserts that certain environmental factors like on-campus residence have a significant positive impact on student involvement (Astin, 1973, 1977, 1982). He defines involvement as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1993: 297). Astin's student involvement theory has five postulates:

1. Involvement refers to the investment of physical and psychological energy in various objects. The object or activity can be general, such as, preparing for a basketball game or studying for an examination.
2. The degree of involvement varies depending upon the activity. Students will exert different degrees of involvement in different objects at different times.
3. Student involvement can be measured both quantitatively (number of hours spent on an activity) and qualitatively (the seriousness and attention a student devotes to the activity.)

4. Student learning and personal experience relates to the quality and quantity of student involvement in that program.
5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (Arnold & King, 1997, p. 252).

Thus, from these five postulates, Astin (1984) portrays that the theory of student involvement is primarily the study on behavioral mechanisms or processes that facilitate student experience (p. 301). Similarly, Tinto (1993) identifies that student involvement is a sense of “competent membership” (p. 208) resulting from, among other factors, student interaction with faculty and staff. Though these two definitions are viewed quite differently, the two authors suggested that student educational experiences (e.g., student performance, faculty/student interaction, and extracurricular activities) are expected to influence student involvement (Barnett, 2011).

Scholars also noted that for learning to take place in the classroom, students need to be actively engaged with their college environment. This can be active participation through academic activities (e.g., contacts with advisors and faculty, trips to the library), social activities (e.g., extracurricular activities and interactions with other students), or goals and adjustment to college (e.g., progress toward academic goals, graduating from the University of Hong Kong).

Nevertheless, student involvement at colleges increase students’ learning and living experience in residence halls, participation in courses, as well as engagement in campus activities (Barnett, 2011). On a few occasion, student involvement can be measured by the level of energy or time students spent studying and preparing for a class. Min and Chau (2011) suggest that academic and social involvement best occurs when “students play a proactive role in making judicious choices and decisions about their social experiences, and establishing a sense of

congruence with sub-cultures of communities of university” (p. 8). Hence, those who are generally involved on-campus make drastic gains towards their learning compared to those who are less involved (Flowers, Osterlind, Pascarella, & Pierson, 2001). Astin’s theory of student involvement is different than other development theories in that his primary study deals with how the college environment impact students' learning and living experience. His theory allows researchers to better understand how to achieve educational outcomes in the long run (p. 7).

Research Assessing College Environment

The college environment has the ability to foster student involvement and enrich students’ learning and living experience in many ways (Holland, 1985). According to Astin (1996), the college environment refers to the “various programs, policies, faculty, peers, and educational experiences to which the student is exposed” (p. 7). He suggests that “the real issue in research is to determine what difference does college environment makes in the development of the individual experience” (p. 5). In other words, key environmental factors, such as, relationships with faculty, active learning, and collaboration among students and campus facilities are essential elements to enhance the college environment (p. 9).

Generally, Astin (1996) observes that the college campus environment is particularly important when working with students and attracting the brightest students to study on-campus. Creating an enriched environment that allows the university to provide more opportunities for the learner is an essential part for students to remain mentally active and participative both in and out of the classroom (Gunn & Richburg, 2007: 119). Cronin (1997) suggests that students typically explore their college campus environment and construct meaningful knowledge acquired from their virtual environment. Moreover, Chickering (1987) observes that the education environment exerts powerful influences on students’ learning and living experience. Thus, David & Murrell (1993) claims that great university are able to push harder to create a

safe and powerful intellectual climate that promotes higher interaction and active learning within their classroom. Campus facilities, campus resources, and campus services should also remain adequate for a number of students because college campus environment can impact the socialization experience of students in any given setting.

Like David and Murrell, King and Mayhew (2002) study indicates that institutional environment created by faculty and students impact students' learning and living experience. The institutional environment generally encompasses both institutional types and certain aspects of student involvement. Based on Pascarella (1985) earlier research, selected institutional environments and structural characteristics impact college students' learning and living experience. Studies have also shown that students' perceptions of a supportive institutional environment are also needed to enhance the socialization experience of students. Pike, Kuh, and Hu (2001) believe that institutional environment affect students' learning and living experience. They gained further understanding through the use of the "College Student Experience Questionnaire(CSEQ)". From a sample of 1,500 students at six different institutions, the scholars claim that undergraduates attending different types of universities had reported different types of socialization experiences. They also found that those students who are most involved with the college environment had reported higher gains in their personal learning and intellectual development (p. 12). Thus, Pike, Kuh, and Hu (2001) suggest that student perceptions of the college environment are positively related to student academic and social involvement.

In addition to Pace, Kuh, and Hu (2001), Strauss and Volkwein (2004) research examined the difference between two and four year institutions in terms of pattern of student involvement and university commitment. One difference they noted is that four-year student normally live on-campus while two year students live off-campus, or are normally commuters. In the end, the

study suggest that two-year college students might spend less time in academic or out-of-class activities than those attending four-year institutions. Hence, students attending four-year institutions are generally more likely to develop higher educational experience through the involvement of their academic and social experiences compared to two-year institutional students (Strauss & Volkwein, 2004).

Contrary from Strauss and Volkwein, Toutkoushian and Smart (2001) examine the effects of structural environments upon student involvement. Toutkoushian and Smart (2001) found mixed effects of structural characteristics on student gains in learning. They discover that only diversity and cost of education are positively inter-related to student gains in learning. In addition, they suggest that students in more selective institutions normally reported lower gains in interpersonal skills (p. 12). Research on this topic usually included selectivity, tuition, student-faculty ratio, and faculty average salary. Like Toutkoushian and Smart (2001), Porter (2006) suggest that structural environments, including size, mission and selectivity had a positive effect on student involvement. They believe that student involvement is higher when they attended universities with high performing students. Thus, students who attend prestigious institutions generally have more active students both academically and socially.

Summary of Student Involvement and College Environment

In sum, Astin's (1993) theory of student involvement, Tinto's (1993) study on the academic and social experience, Pascarella's (1985) research on student quality of effort, and Kuh's (1991) model of student experience are all derived from Pascarella earlier research on student experience. According to Astin (1997), student involvement is based on the assumption of how student development occurs in directing educators' attention towards students' motivation. Like Astin, Tinto (1993) identify several key elements in the college environment of which may affect students' involvement on-campus. He theorizes that student change, academic

skill acquisition, and major field changes promote students' educational growth. Additionally, Pascarella (1985) observe that the quality of student involvement influence academic environment and student interaction with major agents on-campus. He stresses that the effects of students' learning and living experience and their perceptions of college environment correlates to their achievement outcomes. All scholars suggest that students learn best from their out-of-class experiences as much as from their in-class experiences.

From the review, many researchers believe that students must take an active role in their college experiences. Learning occurs best when students are actively involved in various academic and social activities. Thus, institutions who seek to improve student involvement and college environment are generally the ones that educators, students, parents, and taxpayers value most. Students typically make their choice in learning through their own socialization experiences. They understand that their overall university experience will impact their career development and personal goals. Hence, best ranked institutions are usually those capable of creating powerful environments in which students' involvement can be promoted. Because students enter college with many personal characteristics and skills as well as different types of educational experiences and achievements, studying the overall effects of student involvement and college environment on students' learning and living experience is a valuable study for all institutions both locally, regionally, and internationally.

China's Higher Education

With over 1.3 billion people, China is the most populated country in the world today. (Bray & Li, 2007). One of China's most deep-rooted values is the belief in higher education as a major instrument for achieving the highest good for both individuals and society (Li, 2011: 60). Higher education in China is divided into two systems: Hong Kong and Mainland China. Hong Kong is structured more like a British colonial model while Mainland China is emulates more

towards the Western model. Because China's higher education system is completely different compared to those from the United States, the importance to understand students' learning and living experience between both systems is significantly valuable to conceptualize how universities are specifically meeting the needs for all students in China.

Over the last few decades, a large number of studies on China's modern higher education institutions have focused on the need to create new programs, develop international collaborations, and recruit international world-class scholars to help better prepare universities for the many challenges facing globalization, internationalization, and massification in Chinese universities. A number of studies have also stressed the need to improve campus facilities, to update physical infrastructures and to create an atmosphere of intellectual excitement to strengthen the internationalization position of China's modern higher education sector (Altbach, 2004). Although significant progress has been made to improve the intellectual culture and environment for Chinese college students, a small number of research in Hong Kong and Shanghai has yet to examine how these rapid changes help promote student involvement and college environment on students' learning and living experience when developing world-class universities and nurturing students in China (Min & Chau, 2011).

This section here examines the conceptual idea of creating an educationally powerful environment and experience at those aspiring to become world-class research institutions in China. From past literature review, the study hypothesizes that students' learning and living experience play a salient affect on the development for world-class university and the making of China's modern higher education system.

Building World-class Universities

Since the early 1990s, China's Ministry of Education has been firm to improve the quality of its university system as they inspire to build and create world-class universities.

Chinese President Hu Jintao's recently pledged to turn China's higher education institution into a "Research Superpower" country by the year 2020 (Xueqin, 2010). It is known that building world-class universities has been the dream of Chinese generations not only for pride, but also for the future of China (Cremonini, 2011). As of today, a few scholars suggest that the Ministry of Education is heading into the right direction to acquire at least one or two world-class universities in China. According to Min (2004), the Ministry of Education outlines that China will seek no fewer than ten universities to reach "world-class" status, with top priority going to Peking University and Tsinghua University. These universities will not only help the country to raise their level of expectations but also help guide administrators and policymakers to reprogram and restructure university curriculum in order to attract more world-class talents to study and work within mainland China (Tai, 2006). But does all university need to become "world-class"? And to how many world-class universities should there be globally?

Jin Yaoji, former Vice-Chancellor and President of Chinese University of Hong Kong, once stated out that if China is to win in the 21st century, it must have a number of world-class universities (Shijing, 2010). Generally, the paradox of what constitutes a world-class university has been vaguely defined overtime. Marginson (2011b) identifies 'world-class university' as an aspirational concept (p. 3). He views the notion of world-class university as the Global Research University phenomenal (Ma, 2008; Marginson, 2008). Like Marginson, Altbach (2004) identifies 'world-class university' as a catch phrase concept rather than a stature. He writes, "Everyone wants one, no one knows what it is, and no one knows how to get one" (p. 11). Though most institution aspires to become "world-class", there has been little to yet no universal formula to define what constitute a world-class university. Chinese Premier Wen Jiabao (2010) once reportedly stated that "a great university is to have its own unique soul, which is independent

thinking and freedom of expression” (Cao, 2010). Like Wen Jiaobao, Professor Cheng Kai Ming (2010) once suggested that “a great university has the capacity to create a small environment, where people inside are capable enough to handle a larger environment and work under pressure.” Hence, Levine (2006) identified that great universities, such as, Harvard, Princeton and Yale, typically contribute to three major functions: (1) excellence in education of their students; (2) research, development and dissemination of knowledge; and (3) activities contributing to the cultural, scientific, and civic life of society (p. 16). These significant features allow universities to attract the top scholars and students to further enhance the institutional prestige status. Although investment in public and private higher education are recognized as having “a positive effect on economic growth and regional competitiveness as well as on individual employment prospects and well-being” (OECD, 2006), Morhram (2005) suggest that making admission more selective, raising the tuition cost, or increasing the number of enrollments will not help universities to quickly achieve “world-class” status (p. 5).

Ngok and Guo (2008) once observed that world-class university should have first-class academic disciplines, first-class teaching contingent, first-class student resource, first-class talent training, first-class scientific research results, and first-class administrative and operating mechanisms (p. 3). These institutions normally must have strong leadership, a bold vision of the universities mission and goals, and an articulated strategic plan to translate that vision to reality. Recently, Wang (2011) portray world-class university as the “cornerstone institutions in the context of supporting the global knowledge-based economy and are ultimately expected to play a crucial role in developing the nation’s international competitiveness” (p. 1). In other words, these institutions are able to produce significant contributions to the knowledge based economy through the quality and quantity of journal publication; make research an integral component of

undergraduate teaching; and develop graduates who stand out the most because of their success after graduation (Salmi, 2009: 23). In addition, Altbach (2004) illustrate that top world-class research institutions are able to create an atmosphere of intellectual excitement that consists of outstanding college environment, adequate funding, and institutional self-governance (p. 31). Thus, institutions who aspire to become “world-class” are generally capable to produce highly sought graduates, cutting-edge research, and make outstanding contributions to the country’s social and political development.

Fifteen years ago, the Chinese government had made a major decision to bolster higher education (Cohen, 2011). Now, in this new century, China is continuing to dominate the world’s economic and social power today. A large number of studies recently suggest that China is making remarkable progress of making world-class university (Hayhoe, 2011; Li, 2011; Marginson, 2011a; Yang, 2011). Some argue that the Chinese model of higher education may one day replace the “American model”. Yang (2011) insists that Chinese universities today are constantly looking to their most elite counterparts for standards, policy innovation and solutions to their own development problems. Many of the education reforms are based on perceived U.S. experience. While Chinese government leaders and university administrators have all embraced the Western model to create elite institutions in the 21st century, Mohrman (2009) emphasize that China must not simply replicate elite universities like Harvard or Yale when developing their institution (p.2). Zha (2011) once wrote "The ethos of Chinese universities must find its own expression and identity in the modern world" (p. 471). Subsequently, rather than simply copying the Western university model, Cohen (2011) suggests that Chinese government officials should find their own identity to create what they think is best for “world-class” universities. Yang (2011) emphasize that the central purpose of China’s modern higher education is to combine

Chinese and Western elements at all levels including institutional arrangement, research methodologies, educational ideas, and cultural spirits. Hence, by adopting both Western and Chinese characteristics, China's higher education can receive stronger praise and recognition needed for them to contribute to and influence their educational system in the long run.

Requisites for World-Class Universities: Environment

Every world-class research university should aim to create a powerful intellectual environment for all students, whether they are undergraduate or postgraduate. The Oxford dictionary defines the word 'world-class' as "ranking among the foremost in the world; of an international standard of excellence." Thus, one can identify that a world-class university environment is classified as a top level research institution that seeks to deliver the highest international standard of excellence towards the college environment. This idea revolves around many factors, such as, the degree of faculty collegiality (academic), campus facilities resources and services (campus), administrators' attitudes toward students (interpersonal), as well as institutional interaction with its campus surrounding (institutional). Pascarella & Terenzini (2005) earlier outline that the best college environments are institutions that have: 1) clear institutional missions and educational purposes, 2) are compatible with the institutions mission and philosophy, 3) are capable to create opportunity for meaningful student involvement in learning and personal development activities, 4) are supportive to set an institutional culture (history, tradition, rituals, language) that reinforces the importance of student involvement, and 5) have clear policies and practices consistent with institutional aspirations, mission and culture (p. 120). Hence, a world-class university environment can be identified as the university capability to create a supportive institutional environment that allows students to easily pursue cutting edge research, scholarly activities, and economic development for intellectual inquiry and cultural literacy at higher education institution. Moreover, world-class university has a

supportive institutional culture (history, tradition, rituals, language, etc.) that allows students to freely express their own opinions at universities (Yu, 2009). Additionally, these institutions have the capacity to promote the highest international quality of campus facilities (e.g., accommodation, classroom), campus resources (e.g., computers, books, library), and campus services (e.g., career, parking) for all students at their research institutions.

From earlier literature conducted by Astin (1984), Chickering (1987) and Pascarella (1985), a powerful college environment clearly promotes student involvement and enriches students' learning and living experience. Pascarella and Terenzini (2005) emphasize that structural and environmental characteristics have a substantive impact on student's academic and social experience in college (p. 418). These socialization experiences typically play a larger extent on students' educational attainment, aesthetic and cultural values, levels of authoritarianism, internal locus of control, psychosocial adjustment, as well as career choice (p. 604). Thus, Baird (1988) suggest that it is more practical for faculty, administrators, and researchers to conceive the environment of any given campus not as unitary and global phenomenon but rather as an amalgam of many diverse sub-environments each with its own influence (p. 21). Because the college environment can impact college students in many ways, research universities must invest more energy and time that tailors to the needs for students.

In general, Altbach (2004) estimates that the total cost of building world-class universities are roughly U.S. \$500 million (p. 62). Half of this cost is largely spent on improving campus facilities, campus resources and campus services needed to develop a world-class university. From recent studies, Salmi (2009) categorizes 'abundance of resources' as one of the most important elements of creating intellectually powerful environment because he observe that high quality resources can lead to student involvement and integration on-campus needed to

enrich students' learning and living experience. Salmi (2009) proposes that there are four main resources research institutions should act upon in order to create a world-class university environment: 1) government budget funding for operational expenditures and research, 2) contract research from public organizations and private firms, 3) the financial returns generated by endowments and gifts, and 4) tuition fees (p. 23). A few world-class institutions in Asia, such as, the National University of Singapore and Tokyo University are easily able to create a powerful college environment because they normally receive a substantial amount of endowment through effective fund-raising and public sources (Altbach, 2004). These endowments have allowed Singapore and Tokyo to attract the best and brightest international scholars into their institutions needed to deliver a world-class university environment (Salmi, 2009).

Consequently, for Chinese institutions to create a powerful university environment, more money must be invested into China's modern higher education system, specifically towards improving college campus environment, such as, campus facilities, campus resources, and campus services (Yu, 2009). Although this idea may come with high financial cost, investing greater funds towards the college campus environment comes with far larger value in the process of promoting internationalization among Chinese universities needed to enhance students' overall learning and living experience at their institution (Shijing, 2010). These benefits and a lot more can help strengthen China's position of attracting more world-class talents from abroad, recruiting more renowned international scholars, as well as acquiring more public and private funding needed to meet the many challenges facing globalization and internationalization at those inspiring "world-class" universities (Hayhoe & Zha, 2004).

Requisites for World-Class Universities: Experience

Similar to environment, a world-class university must have a strong and powerful educational experience. A world-class student experience involves more than just campus

facilities, campus resources and campus services. It also consists of curriculum and teaching in the classroom, student involvement on-campus, students' academic performance, faculty qualifications, as well as interpersonal interactions with faculty and peers. As a result, a world-class student experience can be classified as at a top level research institution that seeks to promote an atmosphere of intellectual excitement for all college students (Altbach, 2004). These institutions normally allow university students to easily work with faculty members who are genuinely interested with their research and are willing make the necessary personal efforts to engage them both academically and personally in and out of the classroom. A world-class student experience also allows students' to easily pursue knowledge wherever it leads and to publish their work without fear of sanction by academic or external authorities (Di Giulio, 2006).

From recent research, Zhang (2008) study suggested that a large number of Chinese students view higher education as a critical phase towards their professional development; rarely do they consider the student experience as an important component towards their cognitive development. This may be due to many factors, such as, tight government regulations, climate and geography, physical infrastructure, institutional practices, as well as climate (Clugston, 2004; Di Giulio, 2006; Fien, 2002). Kuh (1967) and Pascarella (1980) once observed that faculty members play a strong substantial value to student attitudes and behaviors. Moreover, Astin (1984) observed that the interpersonal interactions between student peers and faculty members indirectly influence intellectual growth by enhancing students' level of involvement experiences (p. 42). Thus, Astin (1984) claims that the levels of student involvement are enhanced through the conscious and systematic efforts of academic departments that seeks to create environments to attract and engage students both intellectually and interpersonally (p. 653). One's level of involvement in extracurricular activities have a strong, positive influence on persistence,

educational aspirations, bachelor's attainment, and research performance (Pascarella, 1980: 418). Hence, prestigious research universities who do not seek to enhance student involvement and college environment on-campus are strongly discouraging college students to gain knowledge acquisition and ill-structured problem solving skills for future employability.

Nowadays, a large number of world-class research universities places heavy emphasis on publishing scholarly articles to various journal companies rather than meeting the needs of student learning and living experience. According to Yang (2011), he suggested that the number of peer reviewed academic papers published by Chinese researchers rose 64-fold over the past 30 years. With the rise of published papers in China, it is commonly known that many academics at top research institutions typically hide behind closed doors in order for them to produce more high quality papers. This practice creates limited access for student to interact with Professors needed for them contribute to future scholarly work at their institution. Consequently, students' learning and living experience at world-class research institutions are generally affected as many Chinese students' based their educational experience through the classroom (Rao, 2002).

Because students derive their university based on teaching and learning, the emphasis to improve student-faculty relationship; recruit and retain international scholars; offer and provide more English-medium courses; as well as incorporate an international curriculum are vastly needed to create an educationally powerful experience at aspiring world-class research institutions.

Salmi (2009) recent research suggest that world-class university in Western societies can easily create a world-class student experience because these institution has: 1) a high concentration of talent (faculty and students), (b) abundant of resources to offer a rich learning environment and to conduct advanced research, and (c) favorable governance features that encourage strategic vision, innovation, and flexibility (p. 7). Moreover, they generally are in

more favorable position to receive exceptional human capital that allows them to establish high quality student development programs on-campus as well as to meet students' academic expectations and experiences. Additionally, these institutions typically receive a large number of funding through public and private donors that allows them to further advance exogenous and endogenous resources, such as, highly qualified faculty, excellence in research, quality teaching, high levels of government funding, well-defined autonomous governance structures, as well as well-equipped facilities for teaching, research, administration, and student life (Salmi, 2009: 32).

Unlike American or European universities, China's modern higher education system still has yet to place such strong initiatives to create a first-class student experience for college students. According to Gough & Scott (2007), this issue may be the result to limited staff awareness or expertise to handle students' demands; limited institutional drive or commitment from the higher management level; and/or perceived irrelevance by academic staff. Despite the fact that a few elite universities do receive partial funding from the Chinese governments to help facilitate with the process of building world-class universities, more is needed from public and private sectors that encourages them to improve the quality of campus facilities, campus resources and academic services at those aspiring world-class institutions in China. A first-class university environment creates a first-class student experience, and vice versa, a first-class student experience creates a first-class university environment. Simply by attending a world-class research university in China, students will be in far greater position to acquire better jobs; produce cutting-edge journals; and contribute to technical innovations towards their knowledge based-economy (Altbach, 2004: 18). Without the necessary funding to improve student experience, creating and making a world-class university will continue to be a challenge for many Chinese institutions that aspires to achieve "world-class" status by the year 2020.

CHAPTER 3: METHODOLOGY

This chapter focuses on the description of the method in this study adopted and divided into five sections. The first section describes the research aims of the study and how the survey was administered. The second part examines the conceptual framework of the study and the research questions. The third section provides an overview on how the instrument of the surveys were designed and how the two were modified to measure students' learning and living experience at those aspiring world-class institutions. The fourth part includes the descriptions and measures of variables (dependent and independent) in the study while the fifth illustrate the demographic information conducted in the study. And the last section describes the data sources, the data analysis methods, and the timeframe performed throughout the study.

Research Aims

The primary aim of this study is to assess the effects of student involvement and college environment on students' learning and living experience delivered by world-class universities in Hong Kong and Shanghai. Studies examining the effects of student involvement and college environment are becoming an important area for academics because China's modern higher education is rapidly developing and Chinese universities are undergoing mass reform as many aspire to become world-class. Numerous studies in the United States and United Kingdom have devoted a large amount of time studying how student involvement and college environment affect students' learning and living experience at their research institutions. However, limited amount of researchers in China has examined how these two variables affect students' overall learning and living experience.

This quantitative research sets out to explore the relationships between the dependent variable and the independent variables. The dependent variable was students' learning and living experience of the participants (i.e. teaching & learning, curriculum/degree program, student-

faculty relationships, student development programs, and extra-curricular activities). On the other hand, the independent variables were student involvement (i.e., academic involvement and social involvement) and the college environment (academic, campus, and interpersonal). Although there were many other factors that impact college students' learning and living experiences, the researcher had chosen these two specific variables because a large number of researchers (Astin, 1985; Pascarella, 1985; Tinto, 1987; Kuh, 1991; Pascarella & Terenzini, 1991) suggest that these variables carries the largest impact on students' learning and living experience. The participants in the study were randomly selected at two prestigious research universities who aspires to become world-class: The University of Hong Kong(HKU) and Shanghai Jiao Tong University(SJTU). Both institutions are current members of the elite international network *Universitas 21* and are currently ranked between 201-300 on the 2011 Academic Ranking of World Universities(ARWU) by the Shanghai Jiao Tong University as published on August 15, 2011.

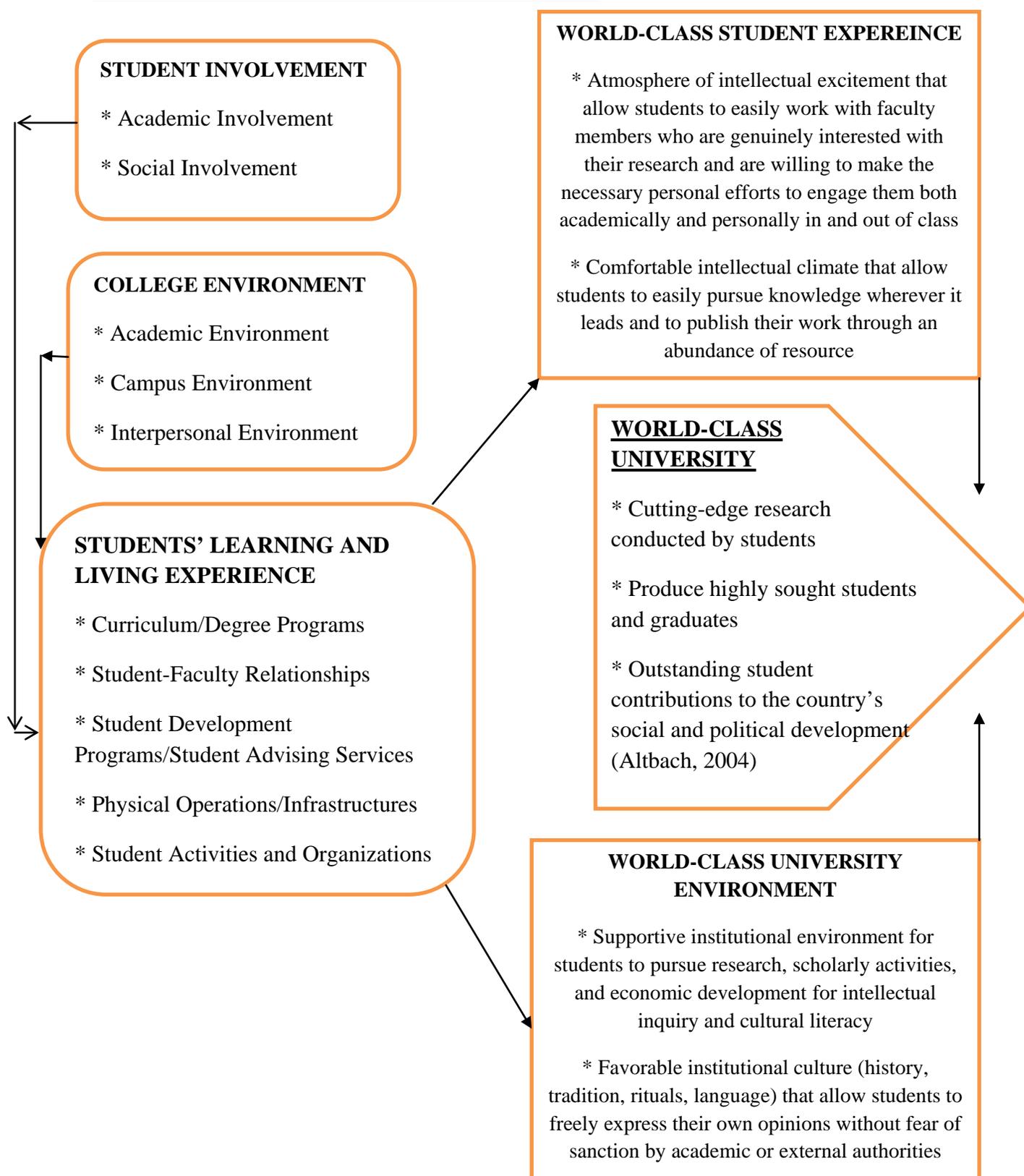
The research draws upon two surveys to conduct this study: 1) "Student Involvement Survey" from Ohio State University and 2) "Student Satisfaction Study" from the Centre for Research into Quality at Birmingham City University. These two universities were largely selected because they were matched closely to the variables being studied in this research. One survey specifically measures student involvement and integration while the other survey measures students learning and living experience and the perceptions of the college environment. Both questionnaires measure students' learning and living experience in different ways. A total of 60 students (30 students from HKU and 30 students from SJTU) were randomly selected from various departments. Undergraduate and postgraduate students from the university were randomly chosen from varying departments and divisions representing the university

community. The data was collected from April 2011 to July 2011. Because of limited funding and time to conduct the study, only a small number of random samples were collected. All questionnaires were conducted face-to-face that lasted approximately 30 to 60 minutes. Moreover, all questionnaires were administered primarily in English. To ensure that the survey measures student involvement and college environment, all questions have been modified to ensure they measure a specific range of education policy issues relating to students' learning and living experience. By administering a questionnaire at two different higher education systems, a comparison was made through statistical data analysis to distinguish between Hong Kong students and Shanghai students.

Conceptual Framework and Research Questions

The purpose of this study is to examine the effects of student involvement and college environment on students living and learning experience at The University of Hong Kong and Shanghai Jiao Tong University. The study also examines the effects of students' learning and living experience on the development plan for world-class research universities in China. The conceptual framework was solely developed by the principle investigator (Roy Chan) by incorporating a few parts from Astin's input-environment-outcome(IEO) model of college effects as well as Pascarella's causal model of environment influence on students' learning and living experience. Moreover, the conceptual framework illustrates the relationship between two models examined in the study, and the features of how college students learning and living experience are affected by both student involvement and college campus environment. The conceptual framework, based on the purpose of the study and the review of the literature, is presented in Figure 1 shown on the next page:

Figure 1: The Conceptual Framework of the Study:



Research Questions

The research questions reflect upon how the relationships in the conceptual framework are examined. Based on the conceptual framework presented in Figure 1, the design of the study aims to answer the following research questions:

- 1) What effect does student involvement (academic and social) have on students' learning and living experience in China?
 - a. To what degree does student involvement play role in enriching students' learning and living experience?
 - b. Why is student involvement important to research universities?
 - c. In what ways are the socialization experiences of student involvement similar to or different from each other at HKU and SJTU?
- 2) What effect does college environment (academic, campus, and interpersonal) have on students' learning and living experience in China?
 - a. How do students' perceptions of their college environment affect their learning outcomes?
 - b. In what ways do students' perceptions of their college environment differ between HKU and SJTU? Undergraduates or postgraduates?
 - c. To what extent are the socialization experiences of the college environment important to top research universities?
- 3) What effects does students' learning and living experience have on the making of world-class university in China?
 - a. To what factors are students' learning and living experiences playing a valuable role in the development plan for world-class university?

- b. To which characteristics of the socialization experience within student involvement and college environment important to aspiring world-class universities?
- c. How can aspiring world-class institutions like HKU and SJTU create a “world-class” university environment and “world-class” student experience?

Instrument

To answer the following questions, the study utilized and modified a cross-sectional (one time) survey from two higher education institutions that specifically measures student involvement and college environment: 1) the “Student Involvement Survey” from Ohio State University and 2) the “Student Satisfaction Survey” from the Centre for Research into Quality at Birmingham City University. The OSU “Student Involvement Survey” was first designed and conducted by the Office of Student Life Research and Assessment in 2002. Its primary aim is to investigate the involvement of students between academic and social activities as well as the student support services at the OSU main campus. Moreover, students are asked to provide an estimated numerical value both in their academic and social involvement regarding their educational experience. The information provided in the survey also helps university to understand the need of diverse student groups, based on which effective policies and practices may be identified to improve student college integration and satisfaction (OSU Student Life Research & Assessment, 2011).

On the contrary, the “Student Satisfaction Survey” at Birmingham City University(BCU) was first designed and conducted by the Centre for Research into Quality in 1982. Its primary aim is to explore the views of a variety of students (e.g. freshman, transfers, seniors, and postgraduates) as well as to capture the students’ perceptions of their total learning experience.

The survey also measure students' views of their total university experience in order for universities to effect change and improvement. Students are asked to rate on two parallel seven-point scales: 1) the satisfaction with different aspects of their experience and 2) the importance that they attach to these items. Compared with the widely used "College Student Experience Survey Questionnaire" (CSEQ), the "BCU Student Satisfaction Survey" differs in that the survey measures three specific questions: 1) *Student-determined questions* - focuses on the total learning experience as defined by students, 2) *Satisfaction and importance ratings* - student satisfaction with aspects of provision and then identifies which of those areas are important for students, and 3) *Management information for action* - areas which are important to students but where students are dissatisfied as priority areas for management awareness and appropriate responses (CRQ, 2011). These elements are important predictors for the institution to understand how to create an educationally powerful experience for students. The data is expected to reflect students educational' achievement level, activity level, development level, interaction level, involvement level, as well as satisfaction level.

Despite the fact that these surveys instrument measure two different objectives, all questions have been modified to ensure that they answer a specific range of education policy issues relating on students' learning and living experience. Both the OSU survey and BCU survey were combined to form the "2011 Student Experience Survey" at HKU and SJTU. The purpose of this survey is to strengthen student involvement and college environment at aspiring world-class institutions in China as well as to encourage more researchers to devote more effort in this particular field. The ultimate goal of the survey is to help Chinese researchers to understand how these two factors of student involvement and college environment impact students' learning and living experience as well as how students' university experience affect

China's progress to create world-class universities by 2020. These data are valuable sources to improve the higher education system in China, especially when the country is currently undergoing a series of mass reform practices. The research results conducted are supposed to provide accurate, holistic, and reliable information as the bases for student learning and development, institutions self-evaluation and improvement, and the promotion of higher education research in China.

The University of Hong Kong

The University of Hong Kong(HKU), also known as 香港大學, was founded by Governor Sir Frederick Lugard and established in 1911 as the first tertiary institution in Hong Kong with the goal of contributing to China's modernization (Postiglione & Shiru, 2010). Tracing its origins to the former Hong Kong College of Medicine for Chinese, the College is noted for being the home of China's Sun Yat-sen's, the Founding Father of Republican China. Today, it is an internationally respected centre of intellectual learning and pioneering research discoveries. It is consistently ranked one of the top universities in Asia. HKU academics and students engage in innovative research with local, regional and global significance across the University's faculties and research centers and institutes, with particular emphasis on multidisciplinary strategic research areas and international collaboration. With over 10 Faculties, 35 independent units and numerous research centers, its reputation as a centre of intellectual excellence is recognized around the world. The university continues to build on its strengths with innovative research and teaching, producing well-rounded graduates with outstanding leadership qualities. HKU has a wide range of expertise for collaborative and contract research, which can be searched through the HKU Scholars Hub (HKU Website, 2011). Its current President and Vice-Chancellor is Professor Lap-chee Tsui, a renowned Chinese geneticist from Shanghai (HKU Website, 2011).

Currently, there are about 23,000 undergraduate students and 10,000 postgraduate students at The University of Hong Kong. HKU is in the process to expand the university through the development of the Centenary Campus by 2012. According to HKU CEDARS, students enjoy a variety of “world-class” facilities on-campus, including various recreation facilities (i.g., gymnasium, badminton courts, tennis court, swimming, basketball courts, volleyball courts, running track), banking services, bookstores, health services, two postal services, one museum, and one post office. Aside from the facilities, the university also has six libraries: 1) Main Library, 2) Dental Library, 3) Education Library, 4) Law Library, 5) Medical Library, and 6) Music Library. The HKU Main Library was first established in 1912 and is now the oldest academic library in Hong Kong with over two million volumes of collections. The HKU Library primary mission is “to sustain and enhance the University’s excellence as an institution of higher learning, as a pre-eminent international university in Asia, and to provide outstanding teaching and world-class research support collections and services so as to produce well-rounded graduates with lifelong abilities to provide leadership within the societies they serve (HKU, 2011).”

Shanghai Jiao Tong University

Shanghai Jiao Tong University (SJTU), also known as 上海交通大学, was founded in 1896 as one of the oldest universities in China. Formerly known as the Nanyang College, Shanghai Jiao Tong University has nurtured over 200,000 outstanding figures from all across the world, including former China President Jiang Zemin and “The Father of Chinese Aerospace” Qian Xuesen. The university currently has 63 undergraduate programs, 250 masters-degree programs, 203 Ph.D. programs, 28 post-doctorate programs, 16 State key doctorate programs, 11 State key laboratories and one national engineering center from the University of Michigan-Ann

Arbor (SJTU Website, 2011). According to President Dr. Zhang Jie, Shanghai Jiao Tong University current mission is “to become a core builder of the national innovation system of technology, a significant participant in the international system of knowledge innovations, and a powerful promoter of social advancement and human civilization” (Jie, 2011). SJTU long term strategic goal is to eventually become a world-class university and to become a top 100 university on the Academic Ranking of World Universities(ARUW). In order to meet its goal, the university established the Graduate School of Education in 2007 as a part of the university inspiration to become a “world-class” comprehensive research university. The graduate program’s field in world-class universities is the first in the nation, and has organized three international conferences by the Center for World-Class Universities(since 2004.

Currently, there are about 20,000 undergraduate students and 13,000 postgraduate students at Shanghai Jiao Tong University. The students enjoy several world-class facilities on-campus, including various recreation facilities (gymnasium, badminton courts, tennis court, football field, basketball courts, volleyball courts, track & field, etc.), several banks (Bank of China, ICBC, Bank of Shanghai), laundry rooms, restaurants, and a post office. As of today, the university has four libraries: 1) Main Library on the Minhang campus, 2) Pao Yue-Kong Library on the Minhang campus, 3) School of Agriculture Library on the Qibao campus, and 4) School of Medicine Library on the Luwan campus. With a collection of over 2.8 million volumes including 5,800 kinds of Chinese and foreign language periodicals, the library provides high-quality services to Chinese students and staff members in the university. The library also covers more than 13,000 full-text e-journal titles in Chinese and foreign languages, as well as approximately 100,000 e-books. The library’s primary mission is foster innovation, ensure

practical relevance and pursue academic excellence for the entire SJTU community (SJTU Library, 2011).

Demographic Information

The demographic information of the 60 students sampled is presented below. Table 1.1a and Table 1.1b compare and represent the age and gender of the survey respondents at both The University of Hong Kong and Shanghai Jiao Tong University - Minhang Campus. For the number of the age respondents, students around age 24 or older were the majority sampled at HKU. On the other hand, students around the age 18-19 years old dominated the sample at SJTU. Regarding the number of gender, more females were surveyed at HKU while more males, however, were surveyed at SJTU. The following table below represents the total sample size of the population between HKU and SJTU:

Table 1.1a

Age and Gender of Survey Respondents – *The University of Hong Kong*

Gender		Age				Total #	%
		18-19	20-21	22-23	24 or older		
Male	#	2	1	3	4	10	33
	%	7	3	10	13		
Female	#	1	1	4	14	20	67
	%	3	3	13	47		
Total	#	3	2	7	18	30	-
	%	10	7	23	60		

Note. Age and gender data is self-reported by each student subject who chose to respond to the demographic questions

Table 1.1b

Age and Gender of Survey Respondents – *Shanghai Jiao Tong University*

Gender		Age				Total #	%
		18-19	20-21	22-23	24 or older		
Male	#	7	6	2	3	18	60
	%	23	20	7	10		

Female	#	5	4	1	2	12	40
	%	17	13	3	7		
Total	#	12	10	3	5	30	-
	%	40	33	10	17		

Note. Age and gender data is self-reported by each student subject who chose to respond to the demographic questions

Table 1.2a and Table 1.2b demonstrate the English proficiency level of the respondents. This section allows the researcher to gauge how well students can read and understand the survey questionnaires. Moreover, the researcher sought to eliminate any bias or inaccuracy of the data that may occur from language barriers. All questions were conducted in English. The following table below makes a comparison between the two institutions:

Table 1.2a

English Proficiency of Respondents – *The University of Hong Kong*

Proficiency Level	#	%
Very Good	2	7
Above Average	21	70
Fair	7	23
Poor	0	0
Total	30	100

Table 1.2b

English Proficiency of Respondents – *Shanghai Jiao Tong University*

Proficiency Level	#	%
Very Good	2	7
Above Average	8	27
Fair	19	63
Poor	1	3
Total	30	100

Table 1.3a and Table 1.3b outline the number of students in different departments, academic status, native language, and number of years residing in either Hong Kong or Shanghai. For HKU, majority surveyed are postgraduate students studying either engineering or medicine. On the other hand, for SJTU, majority surveyed are undergraduate students studying either

engineering or economics. For both institutions, all but a few Chinese students sampled were native mandarin speakers from mainland China. The following table below makes a comparison on the demographic information between HKU and SJTU:

Table 1.3aStudent Respondents Demographic Information – *The University of Hong Kong*

Variable	Frequency	Percent
Academic Status		
Undergraduate	8	27.0
Postgraduate	22	73.0
Visiting Student	0	0.0
Department		
Biology	2	7.0
Computer Science	0	0.0
Education	1	3.0
Economics	3	10.0
Engineering	11	37.0
English	1	3.0
Linguistics	0	0.0
Medicine	8	26.0
Political Science	1	3.0
Psychology	1	3.0
Social Sciences	2	7.0
Native Language		
Cantonese	9	30.0
Mandarin	18	60.0
English	3	10.0
Other	0	0.0
Years living in Hong Kong		
1 Year	16	53.0
1-3 Years	5	17.0
More than 3 Years	11	36.0

Table 1.3bStudent Respondents Demographic Information – *Shanghai Jiao Tong University*

Variable	Frequency	Percent
Academic Status		
Undergraduate	19	63.0
Postgraduate	11	37.0
Visiting Student	0	0.0
Department		
Biology	0	0.0
Computer Science	1	3.0
Education	3	10.0

Economics	5	16.0
Engineering	14	47.0
English	2	7.0
Linguistics	1	3.0
Medicine	2	7.0
Political Science	0	0.0
Psychology	2	7.0
Social Sciences	0	0.0
Native Language		
Cantonese	0	0.0
Mandarin	30	100
English	0	0.0
Other	0	0.0
Years living in Shanghai		
1 Year	6	20.0
1-3 Years	9	30.0
More than 3 Years	15	50.0

Variables

The variables of the study were chosen based on the review of the literature and the research questions in this study. As outlined in the conceptual framework in Figure 1, there were three major constructs in the study: student involvement, college environment, and students' learning and living experience. Students' achievement, student activity, student development, student interaction, student involvement, student satisfaction, student studying, and student usage levels were also collected to examine students' learning and living experience from a 1 to 5 numeric scale (1 = never and 5 = very often). A brief description of each construct, the variables chosen to represent the construct, and the description and measure of the variables were provided as followed.

Dependent Variable

Students' learning and living experience

Students' learning and living experience of the participants was the dependent variable in this study. The quality of teaching & learning, curriculum/degree program, student-faculty relationships, student development and enrichment programs/advising services, and student

activities and organizations were all combined to measure students' learning and living experience at HKU and SJTU. These categories were generated from the two variable sets: student involvement and college environment. As outlined from the literature, student involvement and college environment have a significant impact on students' learning and living experience. Pascarella and Terenzini (2005) emphasized that students' learning and living experience affect students' involvement level, their interactions with major agent on-campus, and the quality of campus life (p. 184). Research assessing students' learning and living experience have been a growing topic in higher education because they not only impact the development of students' intellectual and social growth but also the development of the university as a whole (Astin, 1993; Carini, Kuh, and Kein, 2006; Porter, 2006).

Independent Variable

Student Involvement

Student involvement was divided into two sub-categories: a) academic involvement and b) social involvement. Academic involvement consisted of classroom participation, hours spent on academic preparation, time spent in the library, and number of times met with faculty members outside of class were a select few chosen to represent student academic involvement. On the other hand, students' on-campus residential living experience, student clubs or organizations participation, time on work-study, and hours spend on recreation activities were a few adapted to represent student social involvement in college. The "Student Involvement Survey" from the Ohio State University was the primary source to measure both academic involvement and social involvement at HKU and SJTU.

College Environment

The variables in this construct specifically measured student perceptions of their college academic environment, campus environment, and interpersonal environment was the major focus

in this study. However, the institutional environment and structural environment were not included in this study due to time constraints and limited funding. The “Student Satisfaction Study” from the Centre for Research into Quality at Birmingham City University was the primary source to measure the college environment at HKU and SJTU.

The college academic environment measured the quality of courses, program, teaching, and curriculum at a university. The survey question measured both the achievement level and development level of these sources. On the other hand, the college campus environment gauges the quality of campus facilities (accommodation, classrooms, canteens, recreation centers), campus resources (computer labs, libraries, study rooms), and campus services (career services, parking services, transportation services) on a university. The survey question gauges both the activity level and satisfaction level of these two variables. And the interpersonal environment considers the amount of interaction students have with faculty members. The survey considered both the interaction level and involvement level between the faculty and students as well as the number of research discussion students have with their Professors outside of class.

Summary of the Variables

The summary of the variables, descriptions of the variables and the measures of the variables in the study are presented in Table 2. It was important to note that the measure scales in this study were not modified and came directly from the two surveys. A few questions had been adjusted to ensure that the questionnaire meets the research aims of the study. The two surveys were later combined to form the “2011 HKU/SJTU Student Experience Survey.”

Table 2: Variables and Descriptions of the Variables in the Study - *HKU and SJTU*

Variables	Descriptions	Measure Scales
Student Involvement		

Academic	Time spent studying on-campus per week	Numerical
	Hours studying each week	Numerical
	Number of times talked with career advisor per year	Numerical
	Hours spent on computer for academic and course study	Numerical
Social	Use of campus recreation facilities per week	0 = Aquatic Center 1 = Tennis 2 = Basketball 3 = Soccer 4 = Track & Field
	Time spent on social involvement (i.g., parties attended, restaurants)	Numerical
	Time spent on employment	Numerical
	Conversations with international students per year	Numerical
College Environment		
Academic	Level of studying and interaction (e.g., participate in class) (This variable is composed of 7 questions)	0 =Never 1= Seldom 2=Occasionally 3=Often 4=Very Often
	Level of classroom experience (e.g., trouble listening in class) (This variable is composed of 5 questions)	0 =Never 1= Seldom 2=Occasionally 3=Often 4=Very Often
Campus	Satisfaction of campus facilities and campus Services (e.g., computers, library) (This variable is composed of 5 questions)	0 =Very Dissatisfied 1=Dissatisfied 2=Neutral 3=Satisfied 4=Very Satisfied

	Use of campus resources (e.g., computers, library) (This variable is composed of 5 questions)	0 =Never 1=Once a month 2=Once a week 3=2-6 times a week 4=Everyday
	Activity level of residence hall	1=Never/Rarely 2= Occasionally/Often 3=Everyday/Very Often
Interpersonal	Number of research conversations on-campus, off-campus, and e-mail	Numerical
	Number of faculty-student interaction on-campus	Numerical
	Number of faculty-student interaction off-campus	Numerical
Students' Learning and Living Experience	Level of self-skills developed (e.g., leadership, interpersonal) (This variable is composed of 7 questions)	0=Never 1=Very Little 2=Some 3=Much 4=Very Much
	Level of future development (e.g., training for job) (This variable is composed of 4 questions)	0=Never 1=Very Little 2=Some 3=Much 4=Very Much
	Overall level of student involvement (academic and social)	1=Agree 2=Disagree 3=Not Applicable
	Overall satisfaction of college environment (academic, campus, interpersonal)	1=Agree 2=Disagree 3=Not Applicable

Data Source

This quantitative research utilized a cross-sectional (one-time) data to analyze the effects of student involvement and college environment on students' learning and living experience at China's aspiring world-class institutions. Specifically, this quantitative analysis examines the

relationships among student involvement, college environment, and students' learning and living experience. The data source for this study originated from the "2010 Student Involvement Survey" at the Ohio State University and the "2010 Student Satisfaction Study" at the Centre for Research into Quality in Birmingham City University. One survey measures student involvement and integration within the higher education field while the other measures students learning and living experience, and the perceptions of the college environment. Both questionnaires measure students' learning and living experience in different ways.

A total of 60 students were collected in this study between the two institutions. Prior to the recruitment of the study, a short pilot test was administered at HKU that included postgraduate students and tutors to ensure the statistical question measure the primary aims of the study. Afterwards, a total population of 30 students from HKU and 30 students from SJTU were selected from various departments and faculties. Because of limited funding and time constraints to conduct the study, only a small number of random samples were administered. All students were randomly chosen from varying departments and colleges representing their university community. Both undergraduate students and postgraduate students were later distinguished to outline the different academic standing group. The HKU survey was administered from April 2011 to May 2011 while the SJTU survey was conducted from June 2011 to July 2011. By administering a survey instrument at two different higher education institutions, a comparison was made between the Hong Kong education system and the Shanghai education system. Both HKU and SJTU are current members of the elite international network *Universitas 21* and are currently ranked between 201-300 on the 2011 Academic Ranking of World Universities (ARWU) by the Shanghai Jiao Tong University (Nian Cai & Cheng, 2010).

Data Analysis Method

The research design of this study utilized various descriptive statistics. The descriptive statistics are calculated for data comparison between undergraduate students and postgraduate students of the variables performed. Box plots are mostly used to distinguish the difference between undergraduates and postgraduates. Moreover, bar graphs and histograms are utilized as other ways to present the overall findings of the study. Factor analyses are adopted when the creation of new scales is needed in the process of the data analyses. In addition, reliability tests are used to examine the alpha values for every new scale. Since the survey only consist a small number of random samples, the analysis of variance, regression analysis and correlation analysis are not included in the study because this project did not take into consideration of student background characteristics. However, for further discussion purpose, bar graphs comparing the entire population between HKU and SJTU are later presented. This portion can be found within the Appendix section of pg. The primary aim of this study is to investigate the effects of student involvement and college environment on students' learning and living experience and its overall impact at aspiring world-class universities in China.

Reliability

To ensure that the students response were reliable, all questionnaires were collected face-to-face that lasted approximately 30 to 60 minutes. All surveys were conducted either in the libraries or at coffee shops on-campus of where a safe and comfortable environment was encouraged. Because the length of the questionnaire was quite comprehensive, participants were encouraged by the researcher to take breaks when necessary to avoid possible fatigue or response bias. Participants were also reminded by the researcher to complete the questionnaire as long as they want. To insure a degree of neutrality in the survey response, the researcher asked numerous questions to the participants prior to administering the survey. An informal discussion was later

conducted to answer any specific questions or concerns the participant may have prior to submitting the questionnaire.

At the completion of the study, all students received a small compensation of 20 HKD or 10 CYN respectively. Majority of the funds are supported through the “Roy Chan Foundation,” a foundation organized by the principle investigator to make grants in support for various research projects in East Asia (Chan, 2011). Of the 60 students selected at both HKU and SJTU, a few participants have declined to receive the small compensation in support of my academic research project. Because the survey involved money to thank participants, the researcher reduced the possibility of sampling bias by asking each student prior to administering the questionnaire their particular interest to undergo the survey. All students were recruited on-campus through several posters as well as various fliers handed out in student canteens and libraries. A sample of the posters and fliers is shown below.

Timetable of the Survey

The research design and implementation of the survey followed the standard procedure from the American Association for Public Opinion Research(AAPOR). With slight modifications, the survey followed a specific timetable format adapted by Professor Ron F. Czaja from North Carolina State University and Dr. Johnny Blair from the ABT company.

February 2011 – August 2011 Timetable

Month	Weeks	Activity
February 2011	1-4	Research Design
March 2011	2	Approval of HKU Research Ethics Committee
April 2011	1	Pilot Testing
April 2011	1	Printing Questionnaires
April 2011 – May 2011	8	Data Collection at HKU
June 2011 - July 2011	8	Data Collection at SJTU
July 2011	2	Data Entry to SPSS
July 2011 – August 2011	4	Data Analysis
August 2011	2	Write Up Results
August 31, 2011	2	Finish

CHAPTER 4: RESULTS

This quantitative research utilized a cross-sectional data to analyze and compare the effects of student involvement and college environment on students' learning and living experience both at The University of Hong Kong and Shanghai Jiao Tong University. These two institutions were primary selected because both HKU and SJTU aspire to become world-class universities. Both institutions are current members of the elite international network *Universitas 21* and are currently ranked between 201-300 on the 2011 Academic Ranking of World Universities (ARWU) by the Shanghai Jiao Tong University.

Descriptive Findings

This section presents the descriptive finding between the dependent variable and independent variable: students' learning and living experience, student involvement and college environment. Moreover, the descriptive findings for the survey items represent the variables of the new scales used in the analysis. The final weight was calculated to avoid sampling biases from the procedure in the descriptive statistical analyses and reflect the number of total population. There were a total of 60 students sampled, 30 from HKU and 30 from SJTU. Only data of college students enrolled at either HKU or SJTU are included in the analytical process.

Student Involvement Variables

Table 3, Table 4, Table 5, and Table 6 presents the survey items related to the involvement variables and the frequency results of each item by the institution students attended. The mean, median, mode, and standard deviation are also presented within the tables. In addition to the table, a box plot is shown to compare both undergraduates and postgraduates between HKU and SJTU on student involvement. A summary of the results gathered is later presented. A bar graph displaying the results of these two institutions is presented below:

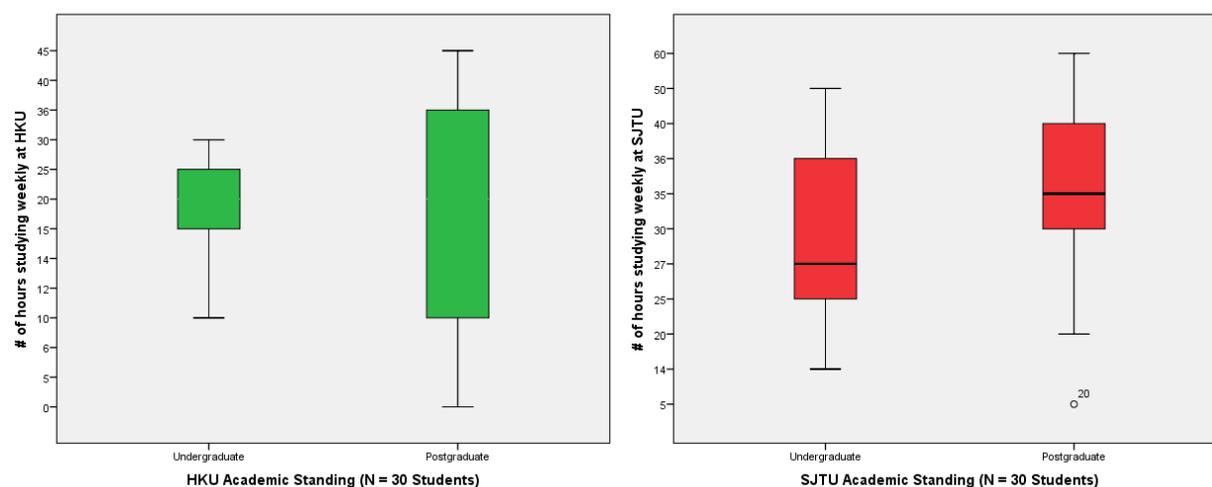
Table 3: Student Involvement Survey Results: WEEKLY– *HKU and SJTU* (N = 30 students)**WEEKLY**

1a) # of hours studying weekly at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	19.88	8	9.342
Postgraduate	21.23	22	14.586
Total	20.87	30	13.248

1b) # of hours studying weekly at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	29.26	19	9.368
Postgraduate	34.18	11	14.469
Total	31.07	30	11.510



According to the table above, both undergraduates and postgraduates at SJTU are shown to study twice as longer per week compared to HKU students.

2a) Student activities participated per week at HKU:

*** The University of Hong Kong:**

		Campus Recreation \bar{x} : 3.8 hours		College Production \bar{x} : 2.8 hours		Departmental Clubs \bar{x} : 2.3 hours		Hobbies or Social Clubs \bar{x} : 2.6 hours	
<i>Hours per week</i>		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Valid	0	18	60.0	25	83.0	27	90.0	25	83.0
	1	1	3.0	1	3.0	1	3.0	1	3.0
	2	1	3.0	-	-	-	-	-	-
	3	5	17.0	3	10.0	2	6.0	4	13.0
	4	3	10.0	1	3.0	-	-	-	-
	5	1	3.0	-	-	-	-	-	-
	10	1	3.0	-	-	-	-	-	-
	Total	12	40.0	5	17.0	3	10.0	5	17.0
Final Total		30	100.0	30	100.0	30	100.0	30	100.0

		Religious Activities \bar{x} : 3.0 hours		Residence Activities \bar{x} : 1.8 hours		Student Government \bar{x} : 3.0 hours		Volunteer Service \bar{x} : 2.8 hours	
<i>Hours per week</i>		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Valid	0	20	67.0	25	83.0	28	93.0	21	70.0
	1	-	-	3	10.0	1	3.0	3	10.0
	2	6	20.0	1	3.0	-	-	4	13.0
	3	1	3.0	-	-	-	-	-	-
	4	-	-	1	3.0	-	-	-	-
	5	3	10.0	-	-	1	3.0	1	3.0
	10	-	-	-	-	-	-	1	3.0
	Total	10	33.0	5	17.0	2	7.0	9	30.0
Final Total		30	100.0	30	100.0	30	100.0	30	100.0

2b) Student activities participated per week at SJTU:

*** Shanghai Jiao Tong University:**

		Campus Recreation \bar{x} : 4.2 hours		College Production \bar{x} : 1.0 hours		Departmental Clubs \bar{x} : 1.0 hours		Hobbies or Social Clubs \bar{x} : 3.3 hours	
<i>Hours per week</i>		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Valid	0	15	50.0	28	93.0	29	97.0	19	63.0
	1	1	3.0	2	7.0	1	3.0	1	3.0
	2	3	10.0	-	-	-	-	4	13.0
	3	4	13.0	-	-	-	-	1	3.0
	4	1	3.0	-	-	-	-	1	3.0
	5	4	13.0	-	-	-	-	4	13.0
	10	2	7.0	-	-	-	-	-	-
	To tal	15	50.0	2	7.0	1	3.0	11	37.0
Final Total		30	100.0	30	100.0	30	100.0	30	100.0

		Religious Activities \bar{x} : 0.0 hours		Residence Activities \bar{x} : 2.0 hours		Student Government \bar{x} : 0.0 hours		Volunteer Service \bar{x} : 1.4 hours	
<i>Hours per week</i>		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Valid	0	-	-	28	93.0	-	-	20	66.0
	1	-	-	-	-	-	-	6	20.0
	2	-	-	2	7.0	-	-	4	13.0
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-
	To tal	-	-	2	7.0	-	-	10	33.0
Final Total		-	-	30.0	100.0	-	-	30	100.0

By comparing the two tables above, students at HKU are generally more likely to remain involved from social activities on a weekly basis compared to students at SJTU.

3) Campus recreation facilities used weekly:

		Aquatic		Tennis		Basketball		Soccer		
Track & Field		Count	Percent	Count	Percent	Count	Percent	Count	Percent	
<i>HKU</i>										
No	27	90.0	27	90.0	28	93.0	30	100.0	29	97.0
Yes	3	10.0	3	10.0	2	7.0	0	0.0	1	3.0

		Aquatic		Tennis		Basketball		Soccer		
Track & Field		Count	Percent	Count	Percent	Count	Percent	Count	Percent	
<i>SJTU</i>										
No	28	93.0	26	86.0	21	70.0	29	97.0	9	30.0
Yes	2	7.0	4	14.0	9	30.0	1	3.0	21	70.0

From the two boxes above, both HKU and SJTU students rarely used the campus recreation facilities. The only significant difference is the percent of soccer at SJTU, of which more than 21 percent had indicated they had used the soccer field.

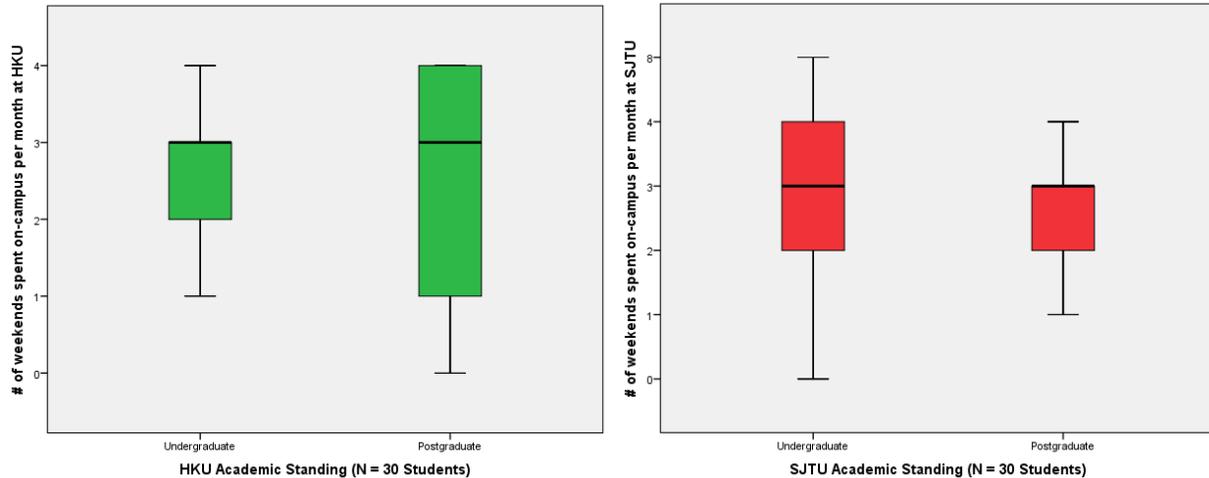
Table 4: Student Involvement Survey Results: MONTHLY – HKU and SJTU (N= 30 students)
MONTHLY

4a) # of weekends spent on-campus per month at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	2.38	8	1.061
Postgraduate	2.50	22	1.371
Total	2.47	30	1.279

4b) # of weekends spent on-campus per month at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	3.05	19	2.041
Postgraduate	2.64	11	.924
Total	2.90	30	1.709



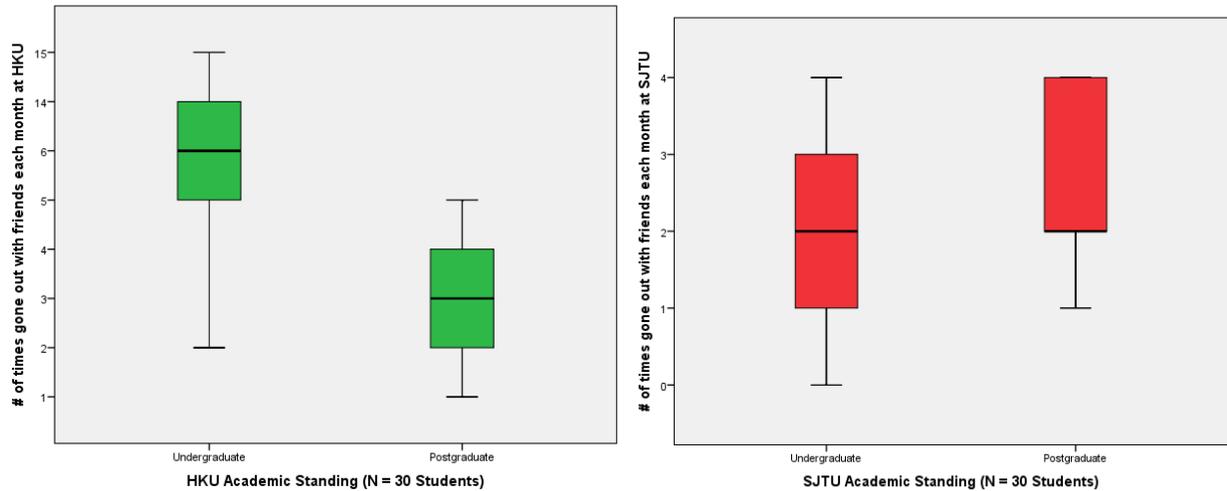
From the two box plots, both undergraduate and postgraduate students at SJTU were more likely to spend time on-campus per month compared to students at HKU.

5a) # of times gone out with friends each month at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	7.13	8	4.734
Postgraduate	2.86	22	1.167
Total	4.00	30	3.173

5b) # of times gone out with friends each month at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	2.11	19	1.197
Postgraduate	2.45	11	1.214
Total	2.23	30	1.194

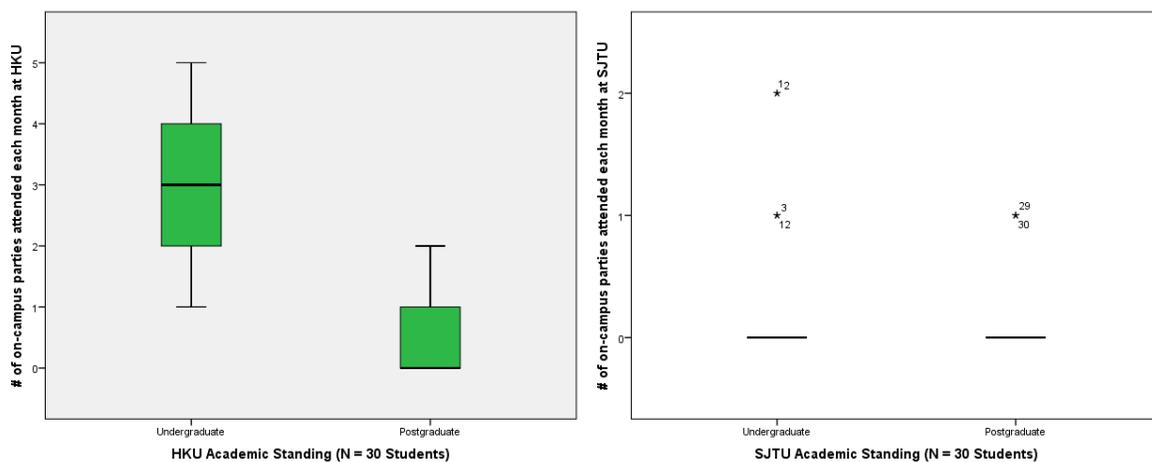


6a) # of on-campus parties attended each month at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	2.75	8	1.282
Postgraduate	.36	22	.581
Total	1.00	30	1.339

6b) # of on-campus parties attended each month at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	.32	19	.671
Postgraduate	.18	11	.405
Total	.27	30	.583



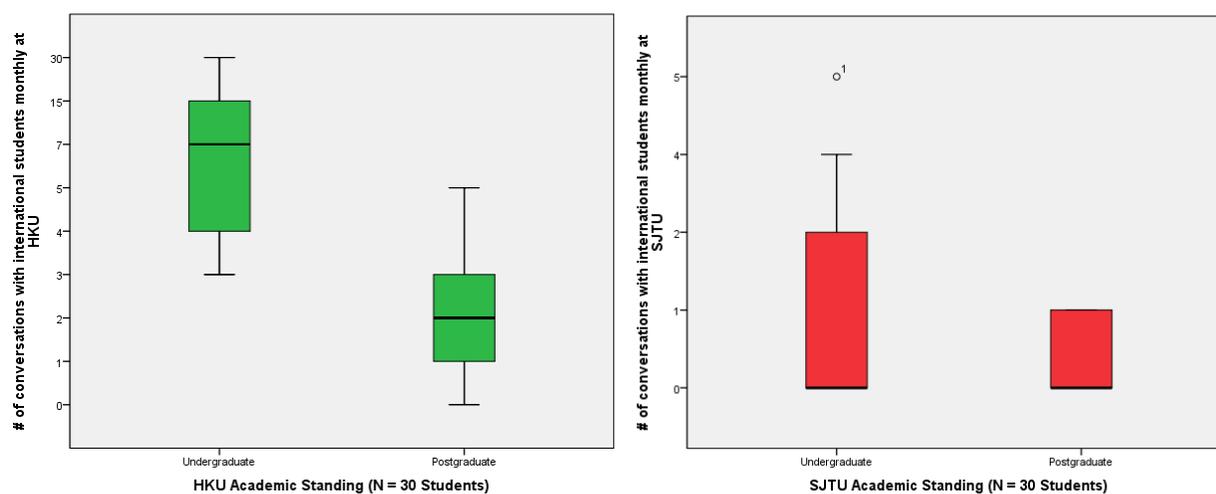
From the data above, both undergraduate and postgraduate students at HKU were more likely to attend on-campus parties per month compared to SJTU students.

7a) # of conversations with international students monthly at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	10.25	8	9.392
Postgraduate	2.18	22	1.332
Total	4.33	30	5.979

7b) # of conversations with international students monthly at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	1.00	19	1.453
Postgraduate	.27	11	.467
Total	.73	30	1.230



Undergraduate and postgraduate students at HKU were two times more likely to have conversations with international students per month compared to students at SJTU.

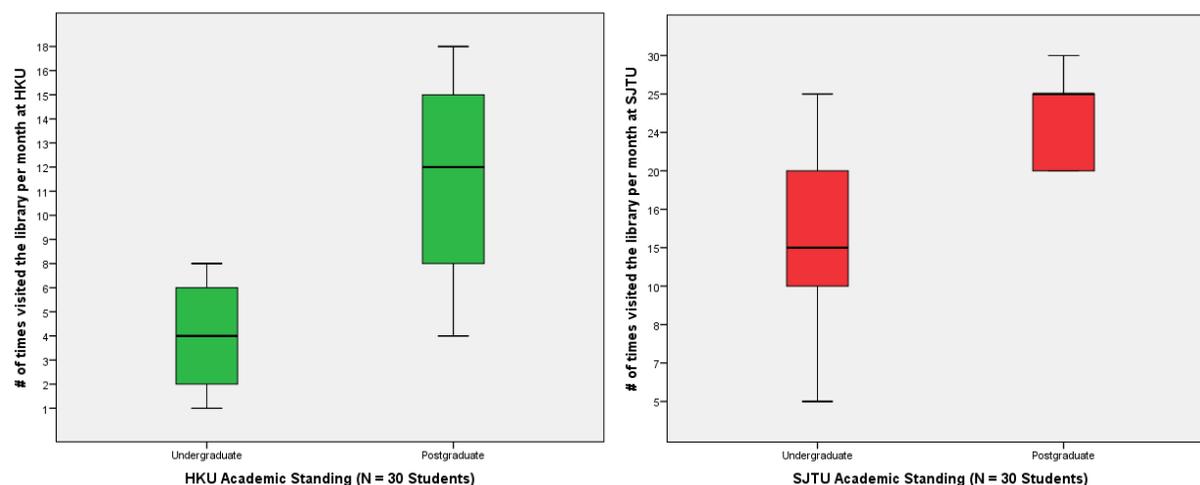
8a) # of times visited the library per month at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	4.00	8	2.390
Postgraduate	11.18	22	3.762
Total	9.27	30	4.697

8b) # of times visited the library per month at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	14.42	19	6.266

Postgraduate	24.00	11	3.742
Total	17.93	30	7.158



The number of times undergraduate and postgraduate students at SJTU to visit the library per month were twice as higher compared to students at HKU.

Table 5: Student Involvement Survey Results: YEARLY– HKU and SJTU (N = 30 students)

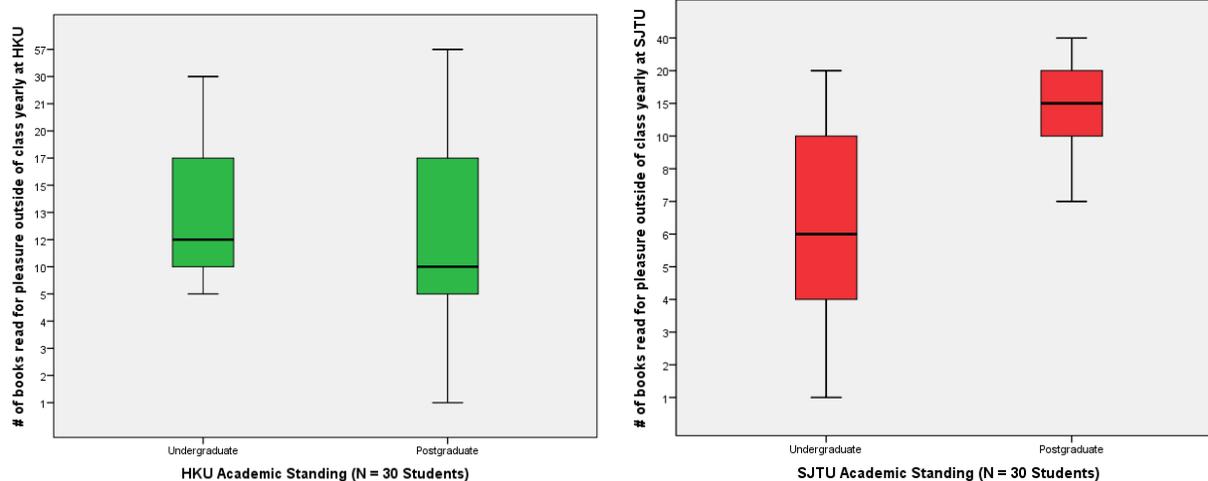
YEARLY

9a) # of books read for pleasure outside of class yearly at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	14.13	8	7.772
Postgraduate	12.27	22	11.849
Total	12.77	30	10.814

of books read for pleasure outside of class yearly at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	7.47	19	5.316
Postgraduate	17.20	10	9.223
Total	10.83	29	8.225



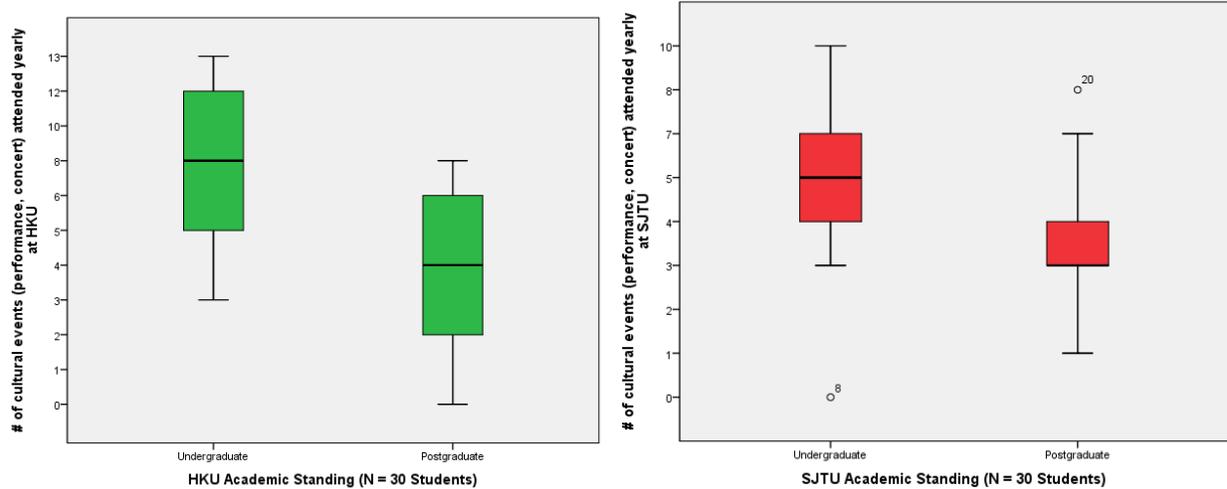
From the two box plots, undergraduate students at HKU were twice as more likely to read books for pleasure outside of class compared to SJTU students. However, postgraduate students at SJTU were slightly more likely to read more books for pleasures compared to HKU students.

10a) # of cultural events (performance, concert) attended yearly at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	7.75	8	3.655
Postgraduate	4.27	22	2.604
Total	5.20	30	3.253

10b) # of cultural events (performance, concert) attended yearly at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	5.00	19	2.494
Postgraduate	3.64	11	2.157
Total	4.50	30	2.432



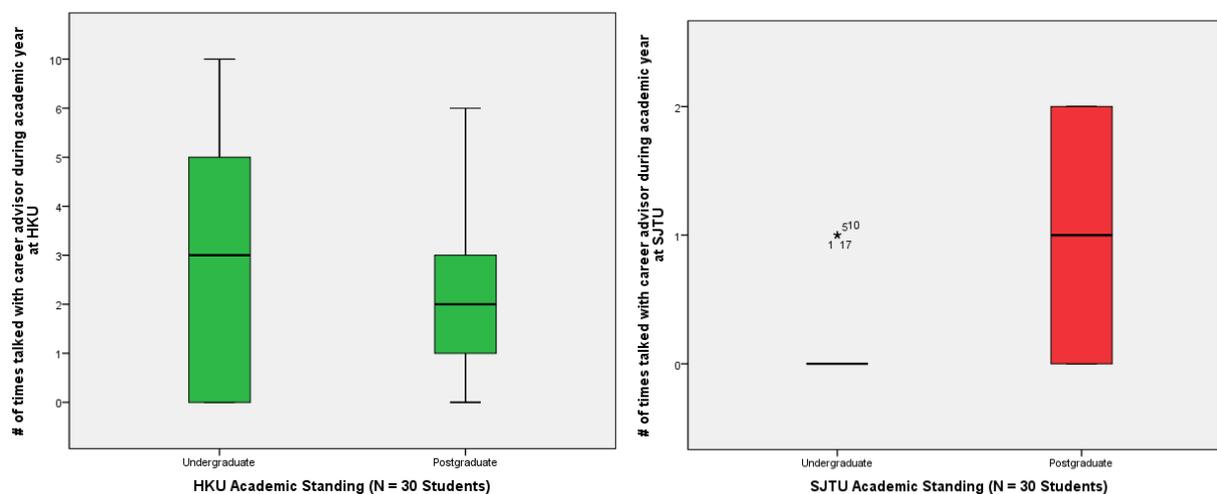
According to the box plots, undergraduate and postgraduate students at HKU were slightly more likely to attend cultural events (performance, concert) compared to students at SJTU.

11a) # of times talked with career advisor during academic year at HKU

HKU Academic Standing	Mean	N	Std. Deviation
Undergraduate	3.50	8	4.209
Postgraduate	2.23	22	1.926
Total	2.57	30	2.700

11b) # of times talked with career advisor during academic year at SJTU

SJTU Academic Standing	Mean	N	Std. Deviation
Undergraduate	.21	19	.419
Postgraduate	1.00	11	.894
Total	.50	30	.731



From the box plots, both undergraduate and postgraduate students at HKU were twice as more likely to visit the career service compared to SJTU students.

<i>Question</i>	<i>Response Frequency</i>		<i>%</i>	
12. Did you either have an off-campus or an on-campus employment this year? (N = 30 students)	HKU	SJTU	HKU	SJTU
A. Off-campus	8	3	26.0	10.0
B. On-campus	5	10	17.0	34.0
C. Off-campus and On-Campus	2	5	7.0	18.0
D. Neither Off-campus nor On-Campus	15	11	50.0	38.0
<i>Total</i>	30	30	100.0	100.0

Taking the entire university population, students at SJTU were twice as more likely to have an on-campus employment compared to HKU students, in which majority didn't hold an official employment either on-campus or off-campus.

Table 6: Student Involvement Survey Results: DAILY – HKU and SJTU (N = 30 students)

13) On average, about how many hours *daily* do you spend on a computer?

	HKU	SJTU
	# of hours each day spent using a computer for academic and course work	# of hours each day spent using a computer for academic and course work
N	Valid 30	30

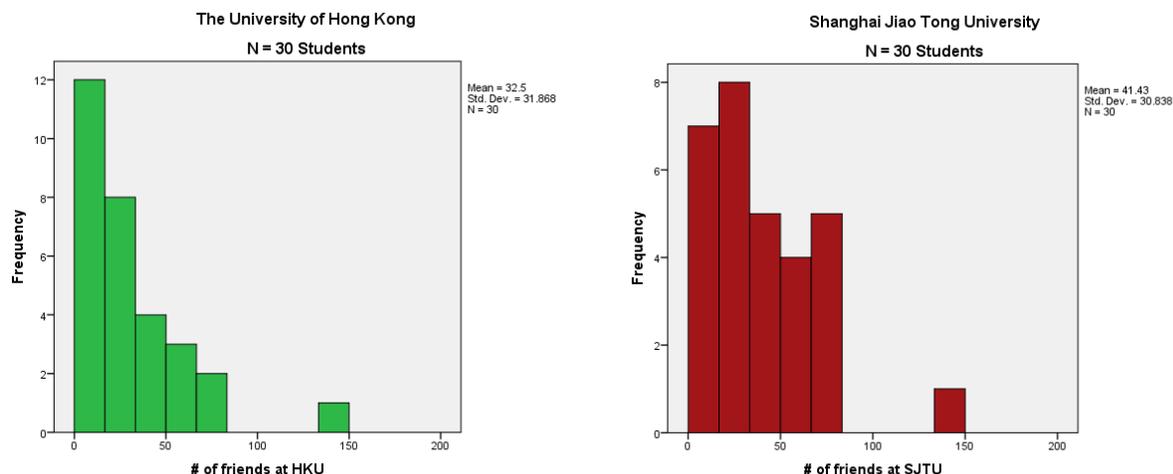
Missing	0	0
Mean	6.50	4.35
Median	5.00	2.00
Mode	6	2
Std. Deviation	8.108	4.793
Minimum	1	0
Maximum	40	20

		HKU	SJTU
		# of hours each day spent using a computer for personal work	# of hours each day spent using a computer for personal work
N	Valid	30	30
	Missing	0	0
Mean		4.35	2.30
Median		3.00	2.00
Mode		2	2
Std. Deviation		6.243	1.081
Minimum		0	1
Maximum		30	5

From the entire sample population, students at HKU were twice as more likely to spend their time on the computer for both academic and personal work compared to students at SJTU.

14)

		HKU	SJTU
		# of friends at HKU	# of friends at SJTU
N	Valid	30	30
	Missing	0	0
Mean		32.50	41.43
Median		27.50	36.00
Mode		30	70
Std. Deviation		31.868	30.838
Minimum		1	0
Maximum		150	150



Taking the entire university population, the estimated number of friends students had at SJTU was slightly higher compared to the number of friends at HKU, with a mean of 41 friends over 32 friends respectively.

From the entire tables above, Table 3, Table 4, Table 5, and Table 6 clearly demonstrates that there are differences in involvement patterns for students attending either Hong Kong or Shanghai. Specifically, for the weekly section in Table 3, the data suggests that Shanghai Jiao Tong University students were slightly more involved both academically and socially compared to students at The University of Hong Kong. A few areas that SJTU earned higher marks are the number of time students study per week, the number of campus recreation facilities students used per week, as well as the number of social clubs students were involved on-campus. The result may from the fact that students at SJTU – Minhang Campus are located far out of the main central city of which encourages students to be more involved on-campus both academically and socially. Contrary from the finding, HKU did score higher on specific social involvement categories, such as, time spent on religious activities per week as well as time spent on residence hall activities.

For the monthly section within Table 4, the data illustrate a mixed result between HKU and SJTU students' on academic and social involvement. The statistical analysis suggest that

students at the University of Hong Kong clearly were more involved socially compared to students at Shanghai Jiao Tong University who was more involved academically. A few areas that HKU received higher percentages on social involvement were the number of times they gone out with friends per month, number of on-campus parties students attended per month, and number of conversations students had with international students per month. Unlike HKU, SJTU received higher levels on academic involvement, specifically with the amount of times students visited the library per month as well as the number of time students spent on-campus during the weekends per month.

In regards to the yearly portion within Table 5, the data claim that the University of Hong Kong students were significantly more involved in all categories both academically and socially compared to students at Shanghai Jiao Tong University. A few areas that HKU earned higher marks were the number of cultural events attended per year, the number of books students read for pleasure outside of class yearly, as well as the number of times students talked with a career advisor per year. On the other hand, SJTU did not score any higher yearly between academic and social involvement.

Within the daily section in Table 6, the statistical data portray that the University of Hong Kong students were slightly more involved on the number of hours spent using a computer per year for both on academic and social work compared to students at Shanghai Jiao Tong University. However, the finding also suggested that more students at SJTU had taken up either on-campus or off-campus employment during their academic studies compared to students over at HKU of which the majority of them were not employed. In addition, students at SJTU had slightly a larger amount of friends on-campus compared to students at HKU. This result may

suggest that meeting new friends at SJTU was slightly easier compared to meeting new friends at HKU.

College Environment Variables

The results for the college environment variables are shown below in Table 7, Table 8, and Table 9. All three tables present the descriptive results related to the college environment variables and the numerical results of each item by the institution students attend. The college environmental variables consisted of three factors: academic, campus, and interpersonal. All numeric data has been weighted to the next decimal points, and are presented in percentage as shown in the tables below. A comparative summary of these two institutions are presented for each question. The numerical data displaying the results are presented below:

Table 7: Weighted distribution of responses on the college campus environment at HKU and SJTU

PART A: Campus Facilities, Resources, and Services at University

Question 1a: Satisfaction Level: Campus Facilities & Services – The University of Hong Kong

	1	2	3	4	5
	Very dissatisfied				Very satisfied
	(%)				(%)
<u>Satisfaction level</u> (N= 30 students)					
Campus	0.0	7.0	12.0	70.0	11.0
Computer Facilities	6.0	3.0	26.0	36.0	29.0
Library	0.0	10.0	7.0	67.0	17.0
Student Services	3.0	7.0	26.0	57.0	7.0
Student Canteen	0.0	17.0	46.0	30.0	7.0
Sports Complex	0.0	3.0	20.0	57.0	20.0

Question 1b: Satisfaction Level: Campus Facilities & Services – Shanghai Jiao Tong University

	1	2	3	4	5
	Very dissatisfied				Very satisfied
	(%)				(%)
<u>Satisfaction level</u> (N= 30 students)					
Campus	10.0	7.0	7.0	43.0	33.0
Computer Facilities	7.0	0.0	10.0	53.0	30.0
Library	0.0	0.0	10.0	33.0	57.0

Student Services	-	-	-	-	-
Student Canteen	0.0	51.0	23.0	13.0	13.0
Sports Complex	0.0	0.0	23.0	53.0	23.0

According to the numerical data, students at HKU were most satisfied with their overall university campus while least satisfied with the student canteen. On the other hand, students at SJTU were most satisfied with the library while they were least satisfied with the student canteen.

Question 2a: Usage Level: Campus Facilities & Services – *The University of Hong Kong*

	Never (%)	Once a Month	Once a Week	2-6 times per Week	Everyday (%)
<u>Usage level</u> (N= 30 students)					
Career Service	47.0	30.0	10.0	10.0	3.0
Computer Facilities	0.0	27.0	20.0	27.0	27.0
Library	0.0	10.0	37.0	37.0	16.0
Sports Complex	16.0	30.0	30.0	21.0	3.0
Student Canteen	3.0	7.0	17.0	46.0	28.0
Parking	93.0	7.0	0.0	0.0	0.0

Question 2b: Usage Level: Campus Facilities & Services – *Shanghai Jiao Tong University*

	Never (%)	Once a Month	Once a Week	2-6 times per Week	Everyday (%)
<u>Usage level</u> (N= 30 students)					
Career Service	77.0	23.0	0.0	0.0	0.0
Computer Facilities	20.0	13.0	20.0	20.0	27.0
Library	0.0	0.0	27.0	43.0	30.0
Sports Complex	0.0	13.0	43.0	33.0	11.0
Student Canteen	0.0	7.0	0.0	0.0	93.0
Parking	63.0	10.0	0.0	7.0	20.0

From the numerical number, students at HKU used the Library, Computer facilities, and Student Canteen the most while rarely used the Career Service and Parking. On the other hand, students at SJTU used Sports Complex, Library, and Student Canteen the most while rarely used the Career Service and Parking.

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
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3. Overall, during the current academic year, how satisfied are you with the campus facilities? (N = 30 students)

	HKU	HKU	SJTU	SJTU
A. Very dissatisfied	0	0.0	0	0.0
B. Dissatisfied	2	6.0	0	0.0
C. Neutral	0	0.0	3	10.0
D. Satisfied	20	67.0	18	60.0
E. Very satisfied	8	27.0	9	30.0
F. Extremely satisfied	0	0.0	0	0.0
<i>Total</i>	30	100.0	30	100.0

From the two universities, students at HKU and SJTU were both equally satisfied with their overall campus facilities during the academic year.

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
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4. Overall, during the current academic year, how satisfy are you with the learning environment? (N = 30 students)

	HKU	HKU	SJTU	SJTU
A. Very uncomfortable	0	0.0	0	0.0
B. Uncomfortable	3	10.0	0	0.0
C. Average	3	10.0	5	17.0
D. Comfortable	14	47.0	14	47.0
E. Very comfortable	8	27.0	11	36.0
F. Extremely comfortable	2	6.0	0	0.0
<i>Total</i>	30	100.0	30	100.0

As shown above, students at HKU and SJTU were both equally comfortable with their overall learning environment with little difference between the two institutions.

5a) What can HKU do to improve the students' learning and living environment?

- * *Build more halls for postgraduate students*
- * *More on-campus shuttle bus for students who live off-campus*
- * *Better orientation for students on how to use facilities*
- * *More open space for study*
- * *More chance to communicate with international students*
- * *Extend opening hours for library*
- * *More computers for students*
- * *Faculty should communicate more with students*
- * *Improve campus canteen conditions*

5b) What can SJTU do to improve the students' learning and living environment?

- * *Install air-conditioner in the dormitories and some of the old classrooms*
- * *Improve the canteen atmosphere where students can easily study*
- * *More freedom to choose our own class*
- * *There needs to be more shuttle bus around campus*
- * *The library can be open one or two hour longer for weekdays*
- * *Teachers should be more focused on teaching and less on research*
- * *The quality of food needs to be improved*
- * *The desks and chairs needs to be replaced*
- * *There needs to be more books in the library, specifically English/Western books*
- * *The quality of courses needs to be improved*
- * *Connect students from different departments through activities*
- * *Delete some of the courses that are too general and meaningless*
- * *There needs to be more communication between Dean/Faculty Members and Students*
- * *Move some of the birds outside the north dormitories*
- * *The canteen should turn into a recreation center with provides music and dance performances*

Question	Response Frequency	%	Response Frequency	%
6. Have you at any time lived in a student residence, or other university hall (N = 30 students)?				
	HKU	HKU	SJTU	SJTU
A. Yes	14	47.0	26	87.0
B. No	16	53.0	4	13.0
<i>Total</i>	30	100.0	30	100.0

According from the numerical data above, students at SJTU were two times more likely to have lived in a student residence during their academic studies compared to students at HKU.

Question number 7 and number 8 correspond to students who answered 'Yes' to question 6.

Question	Response Frequency	%	Response Frequency	%
7. Overall, during the academic year, how active are you in your student residence life?				
	HKU	HKU	SJTU	SJTU
A. Not Active	0	0.0	4	15.0
B. Not So Active	1	4.0	4	15.0
C. Average	7	50.0	9	37.0
D. Active	4	30.0	7	27.0
E. Very Active	2	16.0	0	0.0
F. Super Active	0	0.0	2	7.0
<i>Total</i>	14	100.0	26	100.0

From the data above, students at HKU were slightly more involved with their student residence life compared to SJTU students.

8a: Activity Level: Residence Halls – *The University of Hong Kong*

	Never/Rarely (%)	Occasionally	Very Often (%)
<u>Activity level</u> (N= 14 students)			
Going out with other students for dinner, snacks, etc.	11.0	67.0	22.0
Offered to help another student	0.0	100.0	0.0
Asked others for assistance in something that you were doing	22.0	78.0	0.0
Attended social events organized by the student residence	22.0	56.0	22.0
Studies with other students in the student residence	44.0	44.0	11.0
Helped plan or organize an event in the student residence	44.0	34.0	22.0
Talked with my Residence Master/ tutor	56.0	44.0	0.0

8b: Activity Level: Residence Halls – *Shanghai Jiao Tong University*

	Never/Rarely (%)	Occasionally	Very Often (%)
<u>Activity level</u> (N= 26 students)			
Going out with other students for dinner, snacks, etc.	7.0	66.0	27.0
Offered to help another student	0.0	73.0	27.0
Asked others for assistance in something that you were doing	0.0	73.0	27.0
Attended social events organized by the student residence	76.0	17.0	7.0
Studies with other students in the student residence	17.0	50.0	33.0

Helped plan or organize an event in the student residence	65.0	35.0	0.0
Talked with my Residence Master/tutor	62.0	27.0	11.0

Table 8: Weighted distribution of responses on the college academic environment at HKU and SJTU

PART B: Studying and Interaction at University

Question 1a: Involvement Level: Studying and Interaction – *The University of Hong Kong*

	Never (%)	Seldom	Occasionally	Often	Very Often (%)
<u>Studying and Interaction Level (N= 30 students)</u>					
Took detailed notes	3.0	0.0	43.0	37.0	17.0
Participated in class discussions	3.0	22.0	37.0	26.0	12.0
Worked on a paper or project	0.0	16.0	16.0	37.0	31.0
Tried to explain the material to another student or friend	0.0	3.0	47.0	37.0	11.0
Made outlines/summaries from class notes or readings	3.0	3.0	58.0	22.0	12.0
Did additional readings on topics that were introduced and discussed in class	0.0	17.0	37.0	43.0	3.0
Worked on a group study project	11.0	31.0	21.0	33.0	3.0
Made a presentation in class	0.0	17.0	47.0	33.0	3.0

Question 1b: Involvement Level: Studying and Interaction – *Shanghai Jiao Tong University*

	Never (%)	Seldom	Occasionally	Often	Very Often (%)
<u>Studying and Interaction Level (N= 30 students)</u>					
Took detailed notes	0.0	0.0	60.0	30.0	10.0

Participated in class discussions	0.0	17.0	20.0	46.0	17.0
Worked on a paper or project	0.0	13.0	13.0	57.0	17.0
Tried to explain the material to another student or friend	0.0	7.0	56.0	30.0	7.0
Made outlines/summaries from class notes or readings	0.0	10.0	46.0	37.0	7.0
Did additional readings on topics that were introduced and discussed in class	0.0	10.0	30.0	53.0	7.0
Worked on a group study Project	0.0	7.0	26.0	60.0	7.0
Made a presentation in class	0.0	10.0	40.0	33.0	17.0

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
2. How much difficulty have you had in financing your study?				
	HKU		HKU	SJTU
A. No difficulty	8		27.0	18
B. A little difficulty	17		57.0	6
C. Some difficulty	5		17.0	4
D. A great deal of difficulty	0		0.0	2
E. Extremely difficulty	0		0.0	0
<i>Total</i>	30		100.0	30
				100.0

According to the data, a large number of students did not experience difficulty financing their study at HKU or SJTU. This question assumed that students may be supported by their family household.

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
3. During the academic year, on average, about how many hours do you spend in a typical 7-day week on-campus?				
	HKU		HKU	SJTU
				SJTU

A. 1-5 hours	0	0.0	0	0.0
B. 6-10 hours	0	0.0	0	0.0
C. 11-15 hours	2	7.0	0	0.0
D. 16-20 hours	4	13.0	0	0.0
E. More than 20 hours	24	80.0	30	100.0
<i>Total</i>	30	100.0	30	100.0

From the two universities, a large number of students at HKU and SJTU spend more than 20 hours a week on-campus.

Question 4a: Studying Level: Classroom Experience – *The University of Hong Kong*

	Never (%)	Seldom	Occasionally	Often	Very Often (%)
<u>Studying level</u> (N= 30 students)					
How often do you have trouble expressing your ideas in an assignment?	6.0	52.0	42.0	0.0	0.0
How often do you have trouble understanding things you hear in class?	11.0	52.0	26.0	11.0	0.0
How often do you imagine that you have less scholastic ability than your classmates?	3.0	37.0	60.0	0.0	0.0
In turning in a term paper, how often do you feel you did an excellent job on it?	3.0	17.0	43.0	37.0	0.0
Compared with classmates, how often do you feel you must study more than they do to get the same grades?	0.0	63.0	17.0	17.0	3.0

Question 4b: Studying Level: Classroom Experience – *Shanghai Jiao Tong University*

	Never (%)	Seldom	Occasionally	Often	Very Often (%)
<u>Studying level</u> (N= 30 students)					
How often do you have trouble expressing your ideas in an assignment?	10.0	50.0	40.0	0.0	0.0

How often do you have trouble understanding things you hear in class?	0.0	30.0	40.0	30.0	0.0
How often do you imagine that you have less scholastic ability than your classmates?	23.0	37.0	23.0	17.0	0.0
In turning in a term paper, how often do you feel you did an excellent job on it?	0.0	21.0	33.0	46.0	0.0
Compared with classmates, how often do you feel you must study more than they do to get the same grades?	7.0	28.0	20.0	38.0	7.0

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
5. Based on your experience so far, would you recommend the campus to your friends or relatives?				
	HKU	HKU	SJTU	SJTU
A. Definitely not	1	3.0	0	0.0
B. Probably not	0	0.0	2	6.0
C. Maybe	2	6.0	9	30.0
D. Probably would	21	70.0	8	27.0
E. Definitely would	7	23.0	11	37.0
<i>Total</i>	30	100.0	30	100.0

From the data, students at HKU were twice as more likely to probably recommend their campus to friends or relatives compared to students at SJTU.

6a. Based on your answer for question number 5, why did you choose such response at HKU?

- * *Environment is very friendly and comfortable*
- * *Professors are very friendly and international*
- * *To understand Hong Kong life and to understand the difference compared to China*
- * *Good studying facilities and resources*
- * *Courses are more practical and useful.*
- * *Student benefits (money) for Mainland*
- * *Teaching is poor at times*
- * *Better hall life*
- * *Opportunity for leadership development*

6b. Based on your answer for question number 5, why did you choose such response at SJTU?

- * *The library has many books and is the most beautiful in China*
- * *The atmosphere is the best here in China*
- * *There is a lot of student talent*
- * *At times, there is a lot of stress at SJTU*
- * *Campus facilities are very high quality and has a very good life here*
- * *The environment is very comfortable and nice to study, especially the library*
- * *There are many famous graduates at SJTU*
- * *I think Fudan University is better than SJTU in terms of location and extracurricular life*
- * *There are many Engineering majors*
- * *It's one of the best universities in Shanghai*
- * *It's a member of the C9 League*
- * *The food here is very cheap and the campus is quite big*

Table 9: Weighted distribution of responses on college interpersonal environment at HKU and SJTU

PART C: Interaction with Academic Advisors and Faculty Members at University

1) Conversations about educational plans, problems, or progress with the following people per academic year:

Academic Advisor	N	Mean	Std. Deviation	Std. Error Mean
# of conversations with Academic Advisor this academic year at HKU	30	11.63	15.641	2.856
# of conversations with Academic Advisor this academic year at SJTU	30	2.83	3.364	.614

Students at HKU were five times more likely to have conversations with their Academic Advisor during the academic year compared to students at SJTU.

Faculty Member	N	Mean	Std. Deviation	Std. Error Mean
# of conversations with Faculty Member this academic year at HKU	30	8.50	5.907	1.321
# of conversations with Faculty Member this academic year at SJTU	30	3.80	3.563	.797

Students at HKU were two times more likely to have conversations with Faculty Member during the academic year compared to students at SJTU.

Residence Life Staff Member	N	Mean	Std. Deviation	Std. Error Mean
# of conversations with Residence Life Staff Member this year at HKU	30	1.50	2.724	.609
# of conversations with Residence Life Staff Member this year at SJTU	30	2.15	2.540	.568

2) Conversations about research per academic year:

Research Conversations	N	Mean	Std. Deviation	Std. Error Mean
# of conversations about Research this academic year at HKU	30	9.70	10.892	2.436
# of conversations about Research this academic year at SJTU	30	4.05	5.256	1.175

Students at HKU were twice as more likely to have conversations about Research during the academic year compared to students at SJTU.

3) During the academic year, about how many times have you done the following:

Lunch/Dinner at Faculty Member's Home	N	Mean	Std. Deviation	Std. Error Mean
# of times had lunch at a faculty member's home this academic year at HKU	30	.25	.639	.143
# of times had lunch at a faculty member's home this academic year at SJTU	30	.20	.410	.092

According to the data above, students at both HKU and SJTU rarely had lunch at a faculty member's home during the academic year.

Refreshments with Faculty Member	N	Mean	Std. Deviation	Std. Error Mean
# of times gone out for refreshments with a faculty member this year at HKU	30	4.05	5.083	1.137
# of times gone out for refreshments with a faculty member this year at SJTU	30	1.60	3.152	.705

Students at HKU were three times more likely to go out for refreshments with a faculty member compared to students at SJTU.

On-Campus Meal with Faculty Member	N	Mean	Std. Deviation	Std. Error Mean
# of times eating a meal on-campus with faculty member this year at HKU	30	4.75	7.765	1.736
# of times eating a meal on-campus with faculty member this year at SJTU	30	10.60	17.715	3.961

Students at SJTU were three times more likely to eat a meal on-campus with a faculty member during the academic year compared to students at HKU.

Communicate with Faculty Member via E-mail	N	Mean	Std. Deviation	Std. Error Mean
# of times communicate with faculty member via e-mail this academic year at HKU	30	23.15	30.441	6.807
# of times communicate with faculty member via e-mail this academic year at SJTU	30	6.25	9.525	2.130

Students at HKU were three times more likely to communicate with their faculty member through via e-mail during the academic year compared to students at SJTU.

From Table 7, Table 8, and Table 9, the data clearly suggests that there are significant differences in environmental patterns for students attending either Hong Kong or Shanghai. For the level of satisfaction on campus facilities, services and resources section within Table 7, the table suggests that students at Shanghai Jiao Tong University were slightly more satisfied overall with their college campus environment compared to students at The University of Hong Kong. This result may be due to the fact that the SJTU – Minhang campus had twice the amount of modern infrastructures compared to the HKU campus. Of the three tables, one major difference noted was the student canteen, in which more than 50 percent of SJTU students were dissatisfied compared to only 17 percent at HKU. Meanwhile, the usage level of the campus facilities and campus services between the two institutions were vastly similar in many ways. One big difference to note was the career services on-campus, of which about 80 percent of SJTU students had never used the career services compared to only 40 percent at HKU. This table may suggest that many SJTU students were either unaware that such service existed for students on-campus or were completely inaccessible for students during their academic studies on-campus. In regards to on-campus residence hall, almost 90 percent of SJTU students had lived once on-campus during their academic studies compared to only 47 percent at HKU. On the contrary, students at HKU were slightly more active within their residence life compared to students at SJTU.

Unlike Table 7, Table 8 (studying and interaction level) claims that students at Shanghai Jiao Tong University were slightly more involved in their academic studies compared to students at The University of Hong Kong. A few areas that SJTU earned higher marks were the number of times student participated during class discussions, the number of times student worked on a paper or project the number of times student made a presentation in class, as well as the number

of times students worked on a group study project. Contrary from SJTU, HKU did earned higher marks on students taking detailed notes in class, explained the material to another student or friend in class, as well as the number of times student made outlines/notes from class notes or readings. Aside from the classroom experience, both HKU and SJTU students had little to no difficulties financing their academic studies. Moreover, the finding outlines that both HKU and SJTU students typically spend more than 20 hours per week on campus (whether going to class or studying in the library). In the end, the data suggest that students at HKU were 93 percent more likely to recommend their campus to friends or relatives compared to students at SJTU, of which received about 64 percent.

In regards to Table 9 (the interaction level with academic advisors and faculty members), the data suggests that students at The University of Hong Kong were twice as more likely to remain to interact and engage with academic advisors and faculty members compared to students at Shanghai Jiao Tong University. A few areas that HKU earned higher marks were the number of conversations and meals students had with academic advisors and faculty member on-campus and off-campus as well as the number of research conversations students had either in person or through via e-mail. On the contrary, SJTU had scored higher on only one specific category surrounding the amount of on-campus meals students had with faculty members per year. This finding may suggest that HKU students were slightly more motivated to interact with academic advisors and faculty members compared to SJTU students.

From Table 7, Table 8, and Table 9, all data presented outline the descriptive results related to the college environment variables and the numerical results of each item by the institution students attend. The college environmental variables consisted of three factors: academic, campus, and interpersonal. The institutional and structural environments were not

examined in this study due to time. All results have been verified twice to ensure accuracy of the percentages.

Students' Learning and Living Experience Variables

Table 10 presents the descriptive results related to students' learning and living experience variables and the numerical results of each item by the institution students attended. The students' learning and living experience examined both the achievement and development level at their institutions. An overall summary of students' overall university experience is then presented. All numeric data has been weighted to the next decimal points to ensure accuracy of the number and are presented in percentage on the tables below. A comparative summary between HKU and SJTU is later presented. The numerical data displaying the results of these two institutions are presented below:

Table 10: Weighted distribution of responses on the students' learning and living experience at HKU and SJTU

Overall University Experience

Question 1a: Achievement Level: Student Experience – *The University of Hong Kong*

	None (%)	Very Little	Some	Much	Very Much (%)
<u>Overall University Experience (N= 30 students)</u>					
Improving your job prospects	3.0	0.0	45.0	47.0	3.0
Learning things that really interest you	0.0	11.0	31.0	47.0	11.0
Training for a specific job or profession	3.0	17.0	17.0	47.0	17.0
Prepare for future qualifications after completing the program	0.0	3.0	32.0	60.0	3.0

Question 1b: Achievement Level: Student Experience – Shanghai Jiao Tong University

	None (%)	Very Little	Some	Much	Very Much (%)
<u>Overall University Experience</u> (N= 30 students)					
Improving your job prospects	0.0	0.0	40.0	50.0	10.0
Learning things that really interest you	0.0	27.0	33.0	10.0	30.0
Training for a specific job or profession	7.0	17.0	23.0	46.0	7.0
Prepare for future qualifications after completing the program	0.0	7.0	40.0	46.0	7.0

Question 2a: Development Level: Student Experience – The University of Hong Kong

	None (%)	Very Little	Some	Much	Very Much (%)
<u>Overall University Experience</u> (N= 30 students)					
Self-confidence	0.0	3.0	43.0	37.0	17.0
Being able to work independently	0.0	3.0	22.0	64.0	11.0
Thinking analytically and critically	0.0	16.0	21.0	42.0	21.0
Ability to work with others	0.0	3.0	33.0	47.0	17.0
Interpersonal/social skills	0.0	0.0	47.0	37.0	17.0
Leadership skills	0.0	21.0	32.0	31.0	17.0
Ability to solve problems	0.0	0.0	47.0	32.0	21.0

Question 2b: Development Level: Student Experience – Shanghai Jiao Tong University

	None (%)	Very Little	Some	Much	Very Much (%)
<u>Overall University Experience</u> (N= 30 students)					

Self-confidence	0.0	6.0	37.0	47.0	10.0
Being able to work independently	0.0	0.0	47.0	47.0	6.0
Thinking analytically and critically	0.0	0.0	47.0	37.0	16.0
Ability to work with others	0.0	7.0	33.0	53.0	7.0
Interpersonal/social skills	0.0	17.0	33.0	40.0	10.0
Leadership skills	0.0	17.0	47.0	26.0	10.0
Ability to solve problems	0.0	0.0	10.0	67.0	23.0

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
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3. Overall, during the academic year, how active are you in your social life?

	HKU	HKU	SJTU	SJTU
A. Not active at all	0	0.0	0	0.0
B. Not so active	6	20.0	4	13.0
C. Average	12	40.0	19	64.0
D. Active	10	33.0	7	23.0
E. Very active	2	7.0	0	0.0
<i>Total</i>	30	100.0	30	100.0

According to the table above, students at SJTU were slightly more active in their social life compared to students at HKU. However, the difference between the two institutions was not significantly large.

<i>Question</i>	<i>Response Frequency</i>	<i>%</i>	<i>Response Frequency</i>	<i>%</i>
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4. Overall, how much do you think you are achieving or developing during your current academic year?

	HKU	HKU	SJTU	SJTU
A. None	0	0.0	0	0.0
B. Very little	4	13.0	0	0.0
C. Some	8	27.0	5	17.0
D. Very much	18	60.0	22	73.0
E. A great deal	0	0.0	3	10.0

Total 30 100.0 30 100.0

From the data above, more students at SJTU believe that they are achieving or developing much greater compared to students at HKU.

5) Looking back at your experience as a whole, to what extent do you agree/disagree with the following statements?

<i>Questions</i>	<i>Response Frequency</i>		<i>%</i>	
	HKU	SJTU	HKU	SJTU
My degree program was well-organized				
A. Agree	21	12	70.0	40.0
B. Disagree	5	14	17.0	47.0
C. Not Applicable	4	4	13.0	13.0
<i>Total</i>	30	30	100.0	100.0
The arrangement of my program timetable over the day/week was convenient				
A. Agree	24	20	80.0	67.0
B. Disagree	6	10	20.0	33.0
C. Not Applicable	0	0	0.0	0.0
<i>Total</i>	30	30	100.0	100.0
I had enough opportunities to express my views on my experience				
A. Agree	19	10	63.0	33.0
B. Disagree	8	14	26.0	47.0
C. Not Applicable	3	6	11.0	20.0
<i>Total</i>	30	30	100.0	100.0
Computer facilities were readily available				
A. Agree	23	27	77.0	90.0
B. Disagree	4	0	13.0	0.0
C. Not Applicable	3	3	11.0	10.0
<i>Total</i>	30	30	100.0	100.0
The library had enough up-to-date materials (e.g. books, journals, periodicals)				
A. Agree	23	20	77.0	67.0
B. Disagree	5	6	17.0	20.0
C. Not Applicable	2	4	6.0	13.0
<i>Total</i>	30	30	100.0	100.0
The provision of student services was adequate (e.g. careers advice, financial assistance)				
A. Agree	22	13	74.0	43.0
B. Disagree	6	14	20.0	47.0
C. Not Applicable	2	4	6.0	13.0
<i>Total</i>	30	30	100.0	100.0

The student canteen offered good quality food and drinks at a reasonable price

A. Agree	16	15	53.0	50.0
B. Disagree	11	15	37.0	50.0
C. Not Applicable	3	0	11.0	0.0
<i>Total</i>	30	30	100.0	100.0

The University had enough individuals/groups study space

A. Agree	14	20	47.0	67.0
B. Disagree	13	4	43.0	13.0
C. Not Applicable	3	6	10.0	20.0
<i>Total</i>	30	30	100.0	100.0

6a) Please name a few things you think HKU as a whole can do to improve the student experience:

- * *More choice of canteen (different type of food)*
- * *Provide more postgraduate student housing*
- * *More seats in canteen*
- * *More study/gathering space for students*
- * *More computers in the library*
- * *Invite more international students*
- * *More practical teaching*
- * *Availability of Mentor Program*
- * *More opportunity to practice English*
- * *Raise more postgraduate studentship*
- * *Increase the vacation leave time for Research Postgraduates*
- * *More systematic orientation regarding Campus Resources and Facilities*
- * *More interaction between Students and Faculty*
- * *Renewal of old building (classroom faculty, washroom, etc.)*
- * *Provide more student leadership opportunities*
- * *Launching more talks with scholars*
- * *Stipends to students with financial difficulties*
- * *More part-time jobs on-campus*

6b) Please name a few things you think SJTU as a whole can do to improve the student experience:

- * *Freedom to speak our mind*
- * *More space to relax*
- * *More experienced and international Professors*
- * *More student activities*
- * *Teachers need to be more open*
- * *More free time outside of class*
- * *Quality of food*
- * *Canteen atmosphere*
- * *Air conditioner in dorms*
- * *Opportunities to go abroad*
- * *Shuttle bus from New Campus to Old Campus*

- * *The books need to be updated in library*
- * *Opportunity to meet with more distinguished people from Western societies*
- * *Social service need to be more profession*
- * *Communication with international students*
- * *Single rooms in dorms*
- * *More international students at SJTU*

From Table 10 above, the data clearly demonstrates that there were significant differences among students' learning and living experience patterns for Chinese students attending either Hong Kong or Shanghai. For the achievement level in Table 10, the tables suggested that students at The University of Hong Kong achieved slightly more during their university experience compared to students at Shanghai Jiao Tong University. A few areas that HKU received higher percentages were the amount of things they've learned as well as the amount of preparation for future qualifications after completion of program. On the other hand, SJTU students earned slightly higher percentages on improving job prospects after their university studies as well as their ability to train for a specific job or profession within the academic field of study. In regards to the development level, both HKU and SJTU received very similar percentages on students overall development at their institution. One drastic difference between the two institutions was the ability for students to solve problems, of which 93 percent of SJTU students were able to develop problem solving skills compared to HKU students, of which only received 50 percent. Another difference to note was the amount of leadership skills gained, of where the data suggested there was a mixed response between the two institutions from very little to very much. In regards to student social life, the data claims that both HKU and SJTU students were active in similar ways and that students were developing in many ways throughout their academic year.

Summary of the Results

Overall, after comparing the results from all tables, the study presents a number of findings. First, students attending either HKU or SJTU have shown different involvement patterns both academically and socially as suggested in Table 3, Table 4, Table 5, and Table 6. Secondly, college students attending either HKU or SJTU display different satisfaction and usage levels as well as different studying and interaction levels between faculty members and students in regards to the college environment as per outlined in Table 7, Table 8, and Table 9. The college environment consisted of academic, campus, and interpersonal factors. Thirdly, the dependent variable (students' learning and living experience) is correlated to each independent variable (student involvement and college environment) as per outlined in the conceptual framework of the study (see Figure 1). And lastly, from the entire tables above, the statistical data provides enough information to conclude that students at The University of Hong Kong were slightly more satisfied with their overall learning and living experience compared to students at Shanghai Jiao Tong University. The difference is neither significantly higher nor lower between the two institutions.

In sum, the results indicate that both HKU and SJTU are doing quite well to promote student involvement, college environment, and students' learning and living experience on-campus for Chinese college students. A few points to note was that 70 percent of HKU students agreed that their degree program was organized compared to only 40 percent at SJTU. Another area to note was that 74 percent of HKU students agreed that their student services were adequate compared to only 43 percent at SJTU. Additionally, 63 percent of HKU students agreed that students had enough opportunities to express their own views on-campus compared to only 33 percent at SJTU. On the other hand, it was important to note that almost 70 percent of SJTU

students agreed that the university provided enough space for group study compared to only 47 percent at HKU. Moreover, 90 percent of the SJTU students agreed that the computer facilities were readily available on-campus compared to only 77 percent at HKU. A few similar percentages between HKU and SJTU were the quality of student canteen as well as the libraries capacity to provide enough updated learning materials for students' on-campus.

CHAPTER 5: DISCUSSION

This chapter presents a summary of the findings and the discussion for the results of the study. The first section presents the discussion of the study and the findings of the study. The second section presents the implications, while the third section provides possible limitation of the study derived from the study. The recommendation for further research follows in the summary and conclusion part of the next chapter.

Discussions

Acquiring a further understanding on the effects of student involvement and college environment on students' learning and living experience is growing topic within China's higher education institution. Moreover, understanding how students' learning and living experience affects the making of world-class institutions is also another important area of study. While studies examining the effects of student involvement, college environment, and students' learning and living experience do exist from past research (Astin, 1984; Kuh, 1996; Pascarella & Terenzini, 2005; Pike, 2000), no research has measured how three variables impact the developmental plan for world-class universities in China (Min & Chau, 2011). It is important to learn thoroughly what specific factors and sub-factors affect Chinese students' learning and living experiences between student involvement and college environment as well as to discover how aspiring world-class institutions can further improve those specific factors to create an educationally powerful environment and experience for all students in China.

From the data gathered in this study, three common themes has emerged in this section based on the findings: a) student involvement (academic and social) affect students' learning and living experience, b) college environment (academic, campus, and interpersonal) affect students' learning and living experience, and c) students' learning and living experience impact the

developmental plan for world-class research universities in China. Firstly, under the control group of student involvement, this study illustrates that both academic and social involvement has a significant college effect on the levels of studying and interaction among Chinese students as well as the achievement and development levels both inside and outside the classroom at HKU and SJTU. Additionally, the findings confirm the fact that student involvement is considered to be a major variable surrounding the impact of Chinese students' learning and living experience (Astin, 1993; Kuh & Klien, 2006; Porter, 2006). In addition, the research suggests that socialization experience of Chinese students is impacted in many ways by their academic and social involvements at both HKU and SJTU.

Among the involvement variables, academic involvement displayed the highest significant affect levels towards students' learning and living experience compared to students' social involvement at HKU and SJTU. Because majority of Chinese students derive their college experiences through the classroom, the results suggesting that the levels of academic involvement is much higher than social involvement is not a surprise finding from this study (Zhang, 2008). However, this finding does re-asserts the claim made by Pascarella and Terenzini (2005) earlier that the impact of college students is largely determined by the individual effort and that academic involvement plays a more salient effect to Chinese student development, such as, novel skills and ill-defined structures. Both novel skills and ill-defined structures are influenced by the measures of student academic involvement, such as, the use of library, satisfaction of campus resources and services, and/or writing papers and course assignments for a specific class. Like academic involvement, students' social involvement also showed significant relationship on Chinese students' learning and living experience at both HKU and SJTU. This study indicates that Chinese students who are most involved socially through on-campus

organizations, residence life, and off-campus activities experienced higher on gains in their learning and living experience compared to students who are not socially involved. This research, again, matches the conclusion made by Pike (2000) earlier that being socially involved both on-campus and off-campus have a significant impact towards college students' learning development as a whole.

Secondly, from this study, the college environment variables exert a compelling effect on students' learning and living experience at both HKU and SJTU. This research confirms the fact that Chinese students' perception of their college environment plays a salient effect towards their educational outcomes and personal developments (Pike, 2000; Kuh & Hu, 2001; Pike & Killian, 2001). Among the environmental factors in this study, the college campus environments (campus facilities, campus resources and campus services) showed the largest impact towards students' learning and living experience while the college interpersonal environment (faculty-student relationship) came in second following the college academic environment (curriculum, degree program) as the third most significant impact on college students' learning and living experience. Consequently, students who have demonstrated the highest levels of satisfaction towards their college campus environments tended to be more satisfied with their overall learning and living experience at HKU and SJTU. As suggested earlier in the literature, Astin (1996) observed that the college campus environment is considered to be the most important factor when cultivating students' intellectual growth. Thus, this study proves Astin's claim that the college campus environment exhibits a powerful influence on college students' learning and living experience whether they be from the United States, United Kingdom, or China.

Thirdly, from this research, students' overall learning and living experience affect the developmental process of making world-class research universities in China. Faculty members,

administrators, and college students' all plays a salient role towards the process of delivering the highest quality of instruction, curriculum, and student life on-campus. As suggested earlier, Levine (2006) outlines that great universities, such as, Harvard, Princeton and Yale contribute to three major functions: (1) excellence in education of their students; (2) research, development and dissemination of knowledge; and (3) activities contributing to the cultural, scientific, and civic life of society (p. 16). Moreover, Altbach (2004) observed that great institutions are generally able to create an atmosphere of intellectual excitement that consists of many institutional factors, such as, outstanding college environment, adequate funding and institutional self-governance (p. 31). Thus, for universities to achieve world-class status, Chinese senior officials and student affairs practitioners must place heavy emphasis on creating a first-class environment and experience for all college students. Chinese research universities who seek to avoid creating an educationally powerful environment and experience tends to run into far greater risk of producing highly sought graduates, cutting-edge research, and significant contributions to the country's social and political development. In addition, Chinese students' academic and social involvement would be hindered of which subsequently may affect the institutional ability of becoming a great university. As a result, in order to meet China's vow to establish world-class universities by the year 2020, aspiring world-class institutions should place heavy emphasis on creating an educationally powerful environment and experience for all college students, particularly those institutions within the C9 league. In addition, aspiring world-class research institutions, whether they are from China, Vietnam or South Africa, should design and implement various educational programs and regulations that encourage senior administrators and student affairs professionals to deliver the highest quality of learning and living experience for all students in higher education.

Churchill and Iwai (1981) once emphasized that student interaction with their college environment is positively associated with persistence (p. 11). Moreover, Gaff and Wilson (1973) observe that those students who were most involved in the pursuit of intellectual activities reported the most progress in learning abstractions, comprehending ideas, and applying principles. Without involvement both intellectually and socially, Pascarella and Terenzini (2005) believe that students' learning and living experience will be affected of which can ultimately lead to more unsatisfied college students in the long run. Consequently, for China to create an intellectually powerful environment and experience that satisfy students' need, Altbach (2004) suggest that senior officials and student affairs practitioners must consider the following six criteria's: 1) facilities, 2) orientation and advising, 3) curriculum, 4) teaching, 5 co-curricular activities, and 6) relationships among students and between student and faculty. More recently, a few researchers have claimed that China's higher education institute rarely invests in student development programs (Li, 2011; Lim, 2010; Zhang, 2008). This may be due to many external and internal factors, such as, limited funding to support college sponsored activities, a lack of cohesive peer environment between faculty members and student affairs practitioners, or even a lack of organization from the bottom to top administration and management level (Lim, 2010: 53). Thus, more emphasis is needed to improve students' learning and living experience at those inspiring to become world-class institutions particularly in China. By improving college students' experience, Chinese universities can achieve far greater respect from top donors and scholars to support their institutional progress of creating a world-class experience for students in Hong Kong and Shanghai. This will allow students to further produce meaningful contribution towards knowledge for advanced research and publication; to make research an integral

component of students in China; as well as to make students stand out the most because of their achievement and development success at the institution (Yu, 2009: 15).

Implications

Based on the results and findings, this inter-individual collaboration between HKU and SJTU suggests a number of implications for aspiring world-class institutions in China, focusing on the three following themes: 1) create a campus climate that exhibits a world-class student experience 2) create an atmosphere of intellectual excitement that instills a world-class university environment, and 3) create a supportive institutional culture and environment that foster excellent talent in different fields to promote progress of the society and make great contribution to the world.

From my study, the data suggests that the student involvement(academic and social) variable plays a salient effect on students' learning and living experience at both HKU and SJTU. Chickering (1993) proposed earlier that climate is the most important principle for good institutional practice. Thus, in order for HKU and SJTU to create a world-class student experience, both institutions should place greater initiatives towards promoting academic and social involvement on-campus that foster students' learning and living experience. Aspiring world-class institutions in China should continue to strive harder to create an atmosphere of intellectual climate of which all students feels welcomed, supported, and be able to participate fully. Moreover, administrators and student affairs practitioners should find various practices that may encourage more Chinese students to become more academically and socially involved on-campus. Like students, faculty members also play a significant role in inducing academic and social involvement on students at both HKU and SJTU. How teachers interact with Chinese students outside the classroom is just as important as the pedagogies teaching practice within the

classroom experience that promote student involvement in class. In addition, college campuses that provide students more opportunity to live in residential halls creates a more positive impact on students' learning and living experience. Aspiring world-class universities, therefore, should continue to strive harder by providing more on-campus residential living opportunities for a supportive institutional climate and environment that allows them to create an authentic world-class student experience for students in China.

Secondly, from my study, the college environment (academic, campus and interpersonal) variables suggest that the college campus environment shows the highest effect on Chinese students' learning and living experience at both HKU and SJTU. Higher education in China should continue to enhance their campus facilities, campus resources, and campus services in order to improve student involvement and educational gains. Delivering a high-quality college campus environment would allow institutions to easily form supportive and beneficial institutional climate for all Chinese students. In addition to campus environment, student-faculty relationship (interpersonal environment) also displayed a significant impact towards students' learning and living experience at both HKU and SJTU. Pascarella and Terenzini (2005) suggested earlier that more interaction between college students and their teachers would impact college students' learning and living experience. In addition, the more conversation student has both inside and outside the classroom, the higher satisfaction students have towards their institution. Hence, teachers who practice effective pedagogies in the classroom allow Chinese students to become more active in their learning experience. Thus, aspiring world-class research institutions must continue to build upon a strong interpersonal environment that encourages faculty members and administrators to create a world-class university environment for all students in China.

Thirdly, from our research, students' learning and living experience affect the making of world-class universities in China. Both HKU and SJTU aspires to become a world-class institution on the Academic Ranking of World Universities (ARWU). In order for HKU and SJTU to achieve that goal, both institutions must continue to create a supportive institutional culture and environment that promotes an atmosphere of intellectual excitement for all students. As outlined earlier, Altbach (2004) suggests that world-class university has the capacity to produce highly sought graduates, allow students to generate cutting-edge research, as well as encourage students to contribute towards the country's social and political development of their country. Moreover, Ngok and Guo (2008) observes that world-class university strive for first-class academic disciplines, first-class teaching contingent, first-class student resource, first-class talent training, first-class scientific research results, and first-class administrative and operating mechanisms (p. 3). Thus, for Chinese universities to further their dreams to create a world-class university, senior administrators and policymakers must continue to find innovative ways that allows the institution themselves to create a first-class learning and living environment for students. World-class universities require a strong leadership, a bold vision of the institution's mission and goals, and an articulated strategic plan to translate that vision to reality (p. 42). By recruiting and training world-class talent, top Chinese research universities can play a larger role in developing China's international competitiveness within their higher education system.

Limitations

This study has five key limitations and the results should be interpreted with these limitations in mind. Firstly, from the study, there were obviously a small number of populations within our random sample. The questionnaire was limited to only 30 students from HKU and 30 students from SJTU due to limited time constraints to complete the master degree dissertation at

HKU. Because of the small amount of random sample, the survey results for each particular question should be taken lightly rather than seriously.

Secondly, most of the questions in the survey were based on secondary data analysis. Half of the questions were constrained and limited to the design existing in the “2010 Student Involvement Survey” from Ohio State University and “2010 Student Satisfaction Survey” from Birmingham City University. Since the survey instruments were pre-existing, only a select few items representing the features of world-class university were selected for examination. Certainly, there were many other possible variables outside student involvement and college environment that may better explain the conceptual framework of the study. However, due to a lack of time and funding, the two variables were strictly chosen based on the researcher interest.

Thirdly, the survey involved the use of money to award participant for completing the study. Because of the highly sensitive nature of giving out money to thank participants, some students may feel intimidated to give actual feedback when answering specific questions regarding achievement or development levels at their institution. Moreover, students’ primary intention of participation may be largely to earn money rather than to participate in this meaningful project. As a result, the survey results should be taken lightly that not all response truly reflects the institution performance of enhancing students’ learning and living experience.

And lastly, the amount of previous research who has examined the college impact of students’ learning and living experience at aspiring world-class institution was quite limited. Because few studies had ever measured how Chinese students’ socialization experience impacted the making of world-class universities, some questions measured may not have been justified. Despite those few limitations, this research can be highly useful to aid for any academics and student affairs practitioners who are employed at an aspiring world-class institution in China.

CHAPTER 6: SUMMARY AND CONCLUSION

SUMMARY

From the entire paper, the introductory chapter presented the background of the research problem, purpose of the study, research questions, hypotheses, and significance. A literature review of student involvement, college environment, student experience, and China's higher education were discussed in chapter 2. The third chapter described the quantitative research methodology and how it was developed as well as the quantitative research methods employed to answer the research questions. The instrument, variables of analyses, and the analytic approach were also discussed. In chapter 4, the researcher presented the analysis and the findings of the study pertaining to each research question. In chapter 5, the researcher provided a discussion, implications and limitations of the study. The final chapter contained a summary of possible recommendations for further studies, and concluding remarks of this dissertation.

CONCLUSION

This study makes a significant contribution to understand the impact of students' learning and living experience at two aspiring world-class institutions in Hong Kong and Shanghai. Moreover, this study contributes to an understanding of the socialization experience of Chinese students' learning and living experience as well as the solutions of creating an educationally powerful environment and experience that enables college students to go global through higher education. The results from this study indicate that students' learning and living experience plays a salient effect on the development for world-class university. At the end, the researcher encourages Chinese universities to further promote the following two concepts: 1) student involvement and 2) college environment.

For centuries, Chinese universities have been lacking the drive to improve students' learning and living experience. If China wants to truly attract more top international scholars into their universities, senior officials and policy makers must begin to re-assess the ways how management can be delivered to create an authentic first-class experience and environment for Chinese students. Universities around the world are actively diversifying their staff profiles and internationalizing the curriculum. As a result, China must continue to seek various ways to promote an internationalized university management that will likely offer them new insights on how Chinese administrators, policy makers and student affairs practitioners can further create an educationally powerful environment and experience at aspiring world-class institutions.

Recommendations for Further Studies

This study suggests a number of directions for further research. Because very few research has been done to examine how policymakers and senior officials can create a more powerful environment and experience at aspiring world-class institutions, more study must be done to examine whether a first-class student experience and first-class university environment can benefit the development of world-class institution. In addition, examining other Confucian societies, such as Macau, Singapore or Taiwan, may also reveal further insights to how student involvement and college environment can affect students' learning and living experience. It would be interesting to further examine how Confucian values indirectly influence student involvement and student experience. It would also be very meaningful to further study other variables outside student involvement and college environment to identify what other factors affect students' learning and living experience in China. A few variables that need further research are student engagement, student attrition, student moral development, as well as student learning outcomes at aspiring world-class universities. Additionally, adding these variables may

reveal further insight and direction to how student affairs practitioners and senior officials can better contribute towards the development of world-class university in China.

REFERENCES

- Altbach, Philip & Umakoshi, Toru (2004). *Asian Universities: Historical Perspectives and Contemporary Challenges*. Baltimore: The Johns Hopkins University Press.
- Altbach, Philip (2010). *Leadership for World-Class Universities: Challenges for Developing Countries*. New York: Routledge.
- Albach, Philip & Balan, Jorge (2010). *World Class Worldwide: Transforming Research Universities in Asia and Latin America*. New York: The John Hopkins University Press.
- Argyrous, George (2005). *Statistics for Research*. Thousand Oaks, CA: SAGE Publications.
- Arnold, Karen (1997). College student development and academic life: Psychological, intellectual, social, and moral issues. In series: *Contemporary Higher Education International Issues of the Twenty-First Century*. New York: Garland.
- Astin, Alexander (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297-308.
- Astin, Alexander (1993). *What matters in college? Four critical years revised*. San Francisco: Jossey-Bass Publishers.
- Astin, Alexander (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40, 518-529.
- Barnett, Elizabeth (2011). Validation Experiences and Persistence among Community College Students. *The Review of Higher Education*, 34, 2, 192-230.
- Bray, Mark & Li, Mei (2007). Cross-border flows of students for higher education: Push-pull factors and motivations of mainland Chinese students in Hong Kong and Macau. *Higher Education*, 53, 6, 791-818.
- Canto-Sperber, Monique (2009). The Evaluation of World-Class Universities: Differences between Nations in the Definition of Evaluation Criteria. *The World-Class University as Part of a New Higher Education Paradigm: From Institutional Qualities to Systemic Excellence*. Shanghai: City University Press.
- Cao, Cong (2010). "China's universities need a 'universal' soul". UPI Asia, 9 February 2010.
- Cheng, Kai Ming (2010). "Distinct and Differentiation: What is a World-Class University?" Presented at Shantou University, 29 June 2010.
- Chickering, Arthur (1987). Seven principles for good practice in undergraduate education. *AAHE bulletin*, 39(7), 3-7.

- Chickering, Arthur (2003). *Education and Identity*. San Francisco: Jossey-Bass Publishers.
- Cremonini, Leon (2011). "In the Shadow of Celebrity: World-Class University Policies and the Higher Education System." 23 May 2011. CHERPA: University of Twente.
- Cohen, Paula (2011). "The Making of World-Class Universities of Chinese Variety." *The Chronicle of Higher Education*. Retrieved February 18, 2011, from <http://chronicle.com/article/The-Making-of-World-Class/126433/>
- Czaja, Ron (2005). *Designing Surveys: A Guide to Decisions and Procedures*. Thousand Oaks, CA: Pine Forge Press.
- Donald, David & Lazarus, Sandy (2009). Developing inclusive learning environments. *Educational Psychology in Social Context*. Oxford University Press: Capetown, Southern Africa.
- Evans, Nancy & Forney, Deanna (1998). *Student Development in College: Theory, Research, and Practice*. Jossey-Bass Publishers: San Francisco, CA.
- Fowler, Floyd (1995). Improving Survey Questions: Design and Evaluation. *Applied Social Research Methods Series, Vol. 38*, Thousand Oaks, CA: SAGE Publications.
- Huan, Shi Jing (2009). Combining Vision, Mission and Actions: Tsinghua's Experience in Building a World-Class University. *The World-Class University as Part of a New Higher Education Paradigm: From Institutional Qualities to Systemic Excellence*. Shanghai: City University Press.
- Hayhoe, Ruth & Zha, Qiang (2004). Becoming World Class: Chinese Universities facing Globalization and Internationalization. *Harvard China Review*, 5(1): 87-92. Translated into Chinese under the title of Zuiqiu shijie yiliu: miandui quanqiuhua he guojihua de zhongguo daxue. *Fudan Education Forum*, 3(3): 59-65.
- Hayhoe, Ruth & Li, Jun (2011). "Portraits of 21st Century Chinese Universities: In the Move to Mass Higher Education." Hong Kong: Comparative Education Research Center - University of Hong Kong.
- Kildahl, Ann (2011). "Competing Priorities? The Pursuit of Excellence and Sustainability in Higher Education." Presented at the 2011 ISCN-GULF Conference, Retrieved from The University of Hong Kong Sustainability Office, 9 June 2011.
- Kuh, George (1996). Guiding principles for creating seamless learning environments for undergraduates. *Journal of college student development*, 37(2), 135-48.
- Kuh, George & Hu, Shouping (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24, 309-332.

Kuh, George & Kinzie, Jullian (2005). *Student Success in College: Creating Conditions That Matter*. Jossey-Bass Publishers: San Francisco, CA.

Levin, Henry (2006). "What is World-Class Universities?" Paper presented at the *Conference of the Comparative & International Education Society*, Honolulu, Hawaii, March 16, 2006.

Levin, Henry (2010). "The Rise of Asia's Universities". *The Royal Society*, London, England, 1 February 2010. (<http://opac.yale.edu/president/message.aspx?id=91>)

Li, Jun (2011). "Equity, Institutional Change and Civil Society - The Student Experience in China's Move to Mass Higher Education." In: Hayhoe, Ruth & Li, Jun. *Portraits of 21st Century Chinese Universities: In the Move to Mass Higher Education*. Comparative Education Research Centre, The University of Hong Kong, April 2011.

Lily, Cheryl & Schwartz, Brown (2009). Perceptions of Values at a Public Research University. *Journal of College and Character*, 10, 4, 2-28.

Lim, Kok Wing (2008). "Innovation Enabling Transformation." Malaysian Collection: Kuala Lumpur, 1 January 2008.

Marginson, Simon (2011a). Higher Education in East Asia and Singapore: Rise of the Confucian model. *Higher Education*, 61 (5), 587-611.

Marginson, Simon (2011b). "Nation-states, educational traditions and the World-class University project." Presented at the Institutionalization of a World-Class University in Global Competition Hoam Convention Centre, Seoul National University 28-29 June 2011.

Markwell, Don (2008). Working Together to Become 'World-Class' Universities." Paper presented at the ASEAN University Network Rectors' Conference. Australia: The University of Western Australia.

Menard, Scott (2002). *Applied Logistic Regression Analysis*. Thousand Oaks, CA: SAGE Publications.

Min, Weifang. (2004). "Chinese Higher Education: The Legacy of the Past and the Context of the Future". Found in *Chapter 3 - Asian Universities: Historical Perspectives and Contemporary Challenges*. New York: The John Hopkins University Press.

Mohrman, Kathryn (2005). World-Class Universities and Reform in China. *International Higher Education*, Spring 2005.

Mohrman, Kathryn (2009). "What World-Class Universities Should Not Adopt from U.S. Higher Education," in Jan Sedlak and Liu Nian Cai, eds., *World Class Universities: Proceedings from the 2007 World Class University Conference (UNESCO-CIPES, 2009)*.

Nian Cai, Liu & Cheng, Ying. (2010). Global University Rankings and Their Impact, invited chapter in P. Altbach, ed., *Leadership for World-Class Universities: Challenges for Developing Countries*. New York and London: Routledge.

Nian Cai, Liu. (2009). The Story of the Academic Ranking of World Universities. *International Higher Education*, (54), 2-3.

Ngok, Kinglun & Guo, Weiqing (2008). The Quest for World-Class Universities in China: Critical Reflections. *Policy Futures in Education*, no. 6, vol. 5, Sun-yet Sun University.

Oleksiyenko, Anatoly (2008). Global Portfolios and Strategic International Partnerships: A Case -Study of the University of Toronto. *The Proceedings of the 2nd International Conference of World Class Universities*. Centre for World Class Universities and Institute of Higher Education, Shanghai Jiao Tong University, PRC, October 31 - November 3, 2007.

Pascarella, Ernest (1985). College environmental influences on learning and cognitive development: A critical review and synthesis. *Higher Education Handbook of Theory and Research*, 1, New York: Agathon Press, Inc.

Pascarella, Ernest (2001). Using student self-reported gains to estimate college impact: A cautionary tale. *Journal of college student development*, 42(5), 488-92.

Pascarella, Ernest & Terenzini, Patrick (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.

Pike, Gary (1999). The effects of residential learning communities and traditional residential living arrangements on educational gains during the first year of college. *Journal of College Student Development*, 40, 269-284.

Postiglione, Gerald & Shiru, Wang (2010). Governance and the Double Edged Academy: The Case of Hong Kong. In: Locke, William & Cummings, William: *Changing Governance and Management in Higher Education*. The Changing Academic Profession, Springer, 1st Ed., 2011.

Rendon, Laura (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative higher education*, 19(1), 33-51.

Salmi, Jamil (2009). *The Challenge of Establishing World Class Universities*. New York: World Bank Publications.

Shijing, Yan (2010). "Internationalization: An Important Approach to Create First-class Universities for Chinese Universities." Presentation given at Sichuan University, October 2010.

Tai, Hsiou-Hasia (2006). The Features of a World-Class University: Lessons from International Ranking. *The World Class University and Ranking: Aiming Beyond Status*. Romania:UNESCO.

Tinto, Vincent (1994). Coordinated studies programs: Their effect on student involvement at a community college. *Community college review*, 22(2), 16-25.

- Tinto, Vincent (1998). Colleges as communities: Taking research on student persistence seriously. *Review of higher education*, 21(2), 167-77.
- Wang, Xin (2010). *Higher Education as a Field of Study in China: Defining Knowledge and Curriculum Structure*. Maryland: Lexington Books.
- Wang, Qiu. & Nan Cai, Liu (2010). National Initiatives for Building World-Class Universities: A Comparison. *Higher Education Forum*, no.7, Hiroshima University.
- Wang, Qi (2009). Internationalisation of Higher Education and Building World-class universities in Mainland China: A Case of Shanghai Jiao Tong University. *Alliance for International Education Shanghai Gathering 2010*, Shanghai, China.
- Wang, Qi (2011). A comparative analysis of different national initiatives for building world-class universities. *2011 Comparative and International Education Conference*, Montreal, Canada.
- Wende, Marijk van der (2011). Towards a European Approach to Ranking. In: Nian Cai Liu, Qi Wang and Ying Cheng (Eds.). *Paths to a World-Class University. Lessons from Practices and Experiences*. Global Perspectives on Higher Education Volume 23, Sense Publishers, 125-139.
- Yang, Min & Chau, Albert (2011). Social involvement and development as a response to the campus student culture. *Asia Pacific Education Review*, 12, 393–402.
- Yang, Rui (2010). Changing Governance in China's Higher Education: Some Analyses of the Recent University Enrollment Expansion Policy. *The Search for New Governance of Higher Education in Asia*. New York: Palgrave Macmillan.
- Yang, Rui (2011). "The Universities of the Future: An Illustration by the Chinese Experience". University for Foreigners, Piazza Foretebraccio, Perugia, 14 April 2011.
- Yu, Wei (2009). Policy Debate on Research in Universities in China. *Higher education, research, and knowledge in the Asia Pacific region*. New York: Palgrave Macmillan.
- Whitt, Elizabeth (1994). Encouraging adult learner involvement. *NASPA Journal*, 31(4), 309.
- Zha, Qiang (2008). Diversification or Homogenization: How Governments and Markets Have Combined to (Re)Shape Chinese Higher Education in Its Recent Massification Process. *Higher Education*, Online First, DOI 10.1007/s10734-008-9180-y.
- Zha, Qiang (2011). "Is there an Emerging Chinese Model of the University?" In: Hayhoe, Ruth & Li, Jun. *Portraits of 21st Century Chinese Universities: In the Move to Mass Higher Education*. Comparative Education Research Centre, University of Hong Kong, April 2011.
- Zhang, Li-fang (2008). Thinking styles and identity development among Chinese university students. *American Journal of Psychology*, 121(2):255-71.

APPENDICES

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Name:	Staff No/ Student No:		
Position:	Department/Unit:		
Degree Programme/Year (for students only):			
Research Proposal/Project:			
Title:	THE EFFECTS OF STUDENT INVOLVEMENT AND UNIVERSITY ENVIRONMENT BY WORLD-CLASS UNIVERSITIES: A COMPARATIVE CASE OF THE UNIVERSITY OF HONG KONG(HKU) AND SHANGHAI JIAO TONG UNIVERSITY(SJTU)		
Start date:	MARCH 29, 2011	Expected completion date:	AUGUST 31, 2011
Funding Source (please tick as appropriate):			
University internal research grants#	<input type="checkbox"/>	RGC General Research Fund	<input type="checkbox"/>
Innovation Technology Fund	<input type="checkbox"/>	Public Policy Research	<input type="checkbox"/>
Contract Research#	<input type="checkbox"/>	Other external grant#	<input checked="" type="checkbox"/>
No funding	<input type="checkbox"/>		
# Please specify funding source: <u>Roy Chan Foundation</u>			

Part B: Research Proposal

Please summarise on ONE page the objectives of the project and methodology used, and attach a copy of your proposal including any questionnaire and informed consent form to be used.

Objectives of the proposal:
The objective of the proposal is to explore the effects on student involvement and college environment on students' learning and living experience at HKU and SJTU. Specifically, the study will examine Chinese students' perceptions of their learning and living experience and the relationship among: 1) quality of the campus facilities and services, 2) quality of studying and interaction at the university and 3) quality of the overall university experience. The case study will further investigate – a) how student involvement affect students' development, b) how college environment affect students development, and c) how students' learning and living experience affect the making of world-class universities in China. The study also explores how institutional environments and organizational or structural characteristics affect student development as well as identify the difference between Chinese students' experience at HKU and Chinese students' experience at SJTU

Research plan and methodology:

Adapting a quantitative research approach, this comparative case-study will utilize the 2010 national "Student Satisfaction Study" from Birmingham City University and the "Student Involvement Survey" from Ohio State University at two aspiring world-class institutions: The University of Hong Kong(HKU) and Shanghai Jiao Tong University(SJTU).

The population of this study will consist of both current undergraduate students and current postgraduate students in any academic departments and disciplines at The University of Hong Kong and Shanghai Jiao Tong University (Minhang Campus). Participants will have the option to complete either a survey on-campus or off-campus. The survey will be held in different time slots at varied location, particularly in coffee shops or libraries. Student background characteristics, such as, gender, age, field of study and current academic status will asked to compile a demographic information of the participants. Personal information, such as name or e-mail address, will be optional. A comparative data analysis will later be conducted to identify how student involvement and college environment affect students' learning and living experience.

The estimated time to complete the survey will be about 30 minutes. A random sample of about 30 participants at both HKU and SJTU will be acquired for a total of 60 participants. To thank participants, students will have a choice to either receive a small compensation of HKD \$20.00 (HKU Students) or CYN 10 Yuan (SJTU Students) to those who complete the study. Majority of the funds will largely come from the Roy Chan Foundation, a research grant foundation founded by the Principal Investigator to assist various research projects in East Asia.

Part C: Risk Assessment for Newly Collected Data

	Yes	No
a) Will the study involve action/participatory/treatment research?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Is it possible that the study will involve greater than minimal privacy risks, which could induce stress to research participants, such as political behaviour, illegal conduct, drug or alcohol use and sexual conduct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Is it possible that the participants' burden to complete the procedures will induce greater than minimal stress, in particular, for children, given their age and capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Is it possible that the study will induce greater than minimal physical or psychological stress/pain/discomfort?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

e) Is it possible that the study will expose participants to greater than minimal physical or medical risk?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Will deception be used during the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Will video-recording be used during the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Will audio-recording be used during the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Is there potential conflict of interests? (e.g. financial gain to the investigators, power over participants such as teacher/student relationship)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Will the study involve vulnerable participants who are unable to give informed consent, e.g. under the age of 18, mentally handicapped individuals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>- If "Yes", please specify details of the age group and/or vulnerability:</p> <p>_____</p> <p>(Parent/Guardian Consent Form should be attached.)</p>		

If you have answered "Yes" to any of the above questions (a) – (j), please give more details on your study design and methodology in the questions (k) to (t).

k) The selection and recruitment of participants (Attach any initial letter of contact and Consent Form)
The initial Consent Form is attached to the Survey Questions. Please review the information for further details.

l) Rationale for sample size calculation
Taking HKU as a comparative objective to SJTU practices, the research questionnaire will seek a random sample of 30 Chinese students at both institutions.

m) How will participants be recruited/identified?
About 30 participants at HKU and about 30 participants at SJTU will be recruited. There will be several posters around campus to invite students to participate.

n) What are the inclusion and exclusion criteria?
There are neither inclusion nor exclusion criteria in this study. Everyone is welcomed to take the study as long as the individual remains a current active student of the institution.

o) Description of any specific data collection, such as interviews, questionnaire (including telephone) survey or experimental procedures like deception (please attach Deception Form) and any treatment or intervention.
Survey questionnaires will be conducted. The survey questionnaire will be taken from the 2010 national "Student Satisfaction Study" from Birmingham City University(BCU) and the

“Student Involvement Survey” from Ohio State University(OSU).

p) Please state who will perform the data collection, how long it will take and where the data collection will take place.
The Principle Investigator, Roy Yew Hung Chan, will be performing the data collection. The study will take about 30 minutes to complete. The data of collection will take place in small quiet study rooms in the libraries and/or classroom buildings.

q) Can the participants be allowed to withdraw at any time without prejudice?
Yes, participants will be allowed to withdraw at any time of the procedure. Participation is voluntary. This means that participants can choose to stop at any time without negative consequences.

r) Will there be any stress/discomfort to participants?
- If “Yes”, please state the precaution measures to minimize such stress.
No, there will be no stress/discomfort to the participants.

s) Please provide details of any audio and/or video recording including the justifications for the recording.

There will be no audio/video recording in the study.

t) Please identify any potential conflict of interests and how that potential conflict will be addressed.

There will be no conflict involved in this study.

Part D: Using Existing Documents or Records containing Personal Data

Please complete this section if you are using existing documents or records that contain any personal data. Please refer to the Section on “pre-existing data” of the *Guidelines*.

Will existing documents or records containing any personal data be used? Yes No

- If “Yes”, please give more details of the personal data being obtained by answering questions (a) – (h) in the following.

- If “No”, please skip this Part D.

a) What is the source of the data?

b) Were the data originally collected for research purposes? Yes No

- If “Yes” is checked, please attach a copy of the Consent Form for the original collection of data.

- If “No” is checked, please provide the Personal Information Collection Statement.

- For all situations, please explain how this research is consistent with the purpose and use specified when the data were originally collected.

c) Please list the types of personal data being used, if not already listed in the Consent Form for the original collection of data or Personal Information Collection Statement.

d) Are any of the data listed above sensitive? Yes No
 - If “Yes”, please provide full details.

e) Is the source of data publicly available¹? Yes No

f) How are data identified when they are made available to your research team? (Please indicate by marking the appropriate box below.)

i) Direct Identifier (i.e. name, address, ID card number, medical record number, etc.)

ii) Indirect Identifier (i.e. an assigned code which could be used by the investigator or the source providing data to identify a subject, such as tracking code used by the source.)

iii) No Identifier (i.e. neither the researcher nor the source providing the data can identify a subject based upon information provided with the data.)

g) If i) or ii) is checked above and you are requesting permission to study archived data, will you abstract and record any subject identifiers as a part of the data collection process?

Yes No Does Not Apply

h) Will any data be collected from subjects after the submission of this application?

Yes No

- If “Yes”, please complete Part C

¹ Please note that the term “publicly available” means that the general public can obtain the data. Sources are not considered “publicly available” if access to the data is limited to researchers.

Part E: Assessment for a Waiver of Written Informed Consent

The waiver of written informed consent is only applicable to data without personal identifiers, e.g. where data are tabulated or where oral consent is audio-recorded, PIs are required to clearly specify that they are using data without personal identifiers in their research grant proposals.

<p>Please answer the following questions if you are collecting new data, and wish to apply for a waiver of informed consent. Please refer to the Section about “the Waiver of the Requirement of Written Informed Consent” of the Guidelines.</p>	
<p>When conducting research where seeking written consent is not practical or too sensitive, oral consent might be less of a privacy risk than written consent and can be considered as an alternative. <u>Please submit a full justification below and attach an information sheet to this application.</u></p>	
a) Will there be oral consent?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If “Yes”, will the oral consent be audio recorded?	Yes <input type="checkbox"/> No <input type="checkbox"/>
b) Is participation anonymous?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>If “No”, i.e. participation is not anonymous, your proposed research is not normally qualified for a waiver of informed consent. Measures should be taken to code the data collected and delete all personal identifiers on the spot.</p>	
c) If participation is not anonymous, please explain why the study is not practicable without a waiver.	
d) Please explain why the proposed study presents no more than minimal risk to the participants.	
e) Please explain why a waiver of informed consent will not adversely affect the rights and welfare of the participants.	

Part F: Benefits

Please state any possible benefit to participants.

<p><i>Participants will be invited to reflect on their personal experience. Such reflection may give students benefits about themselves as well as their overall university experience at HKU/SJTU. In addition, this research project can provide valuable information on what areas they learn best both socially and physically as well as how these areas affect their overall educational achievement and learning development at HKU/SJTU. Additionally, this research can help them identify strengths that they have achieved overtime and possible improvements needed to further enhance their current university experience.</i></p>

Part G: Attachments

Please tick as appropriate to indicate which of the following documents are enclosed to this application.

(1) Full research proposal including any questionnaire and/or interview script. (Note i)	<input checked="" type="checkbox"/>
(2) Parent/Guardian Consent Form (sample documents)	<input type="checkbox"/>
(3) Informed Consent Form (standard templates of Informed Consent Form and sample language) (Note ii)	<input checked="" type="checkbox"/>
(4) Deception: post debriefing consent form (sample documents)	<input type="checkbox"/>

Part H: Declaration

In making this application, I certify that I have read and understand the University's *Policy for Ethical Practice in Research* (document 133/303), the *Operational Guidelines and Procedures of the Human Research Ethics Committee for Non-Clinical Faculties*, and the summary of the Belmont Report, and I will comply with the ethical principles of these documents. I will submit, as appropriate, a *Report for Research Progress or Amendment of an Approved Project* if there are significant changes to my research, or an adverse incident, or when the report for annual progress due.

Date: 25/03/2011	Signature: 
_____	_____ (Signature of Applicant)
Date: _____	Signature: _____
	_____ (Signature of supervisor)
I hereby endorse this application with my approval and confirm that the investigator(s) are appropriately qualified in the research area involved to conduct the proposed research project, and am capable of undertaking this research study in a safe and ethical manner.	
Date: _____	Signature: _____
	_____ Delegate, Faculty Research Ethics Committee

June 2010

APPENDIX B
HKU HUMAN RESEARCH ETHICS APPROVAL -
FACULTY OF EDUCATION RESEARCH ETHICS COMMITTEE(FREC)

Mail :: Inbox: Research Ethics Application- Mr Chan Yew Hung Roy [MEd(HE)]

8/26/11 12:29 AM

Date: Thu, 25 Aug 2011 15:58:32 +0800 [15:58:32 CST]
From: Roy Chan <rychan@hku.hk>
To: "rychan@sjtu.edu.cn" <rychan@sjtu.edu.cn>
Subject: Research Ethics Application- Mr Chan Yew Hung Roy [MEd(HE)]

From: Sharon Lim [limsl@hku.hk]
Sent: Tuesday, March 29, 2011 4:49 PM
To: Roy Chan
Cc: 'Ada Cheung'; 'Tammy Y. L. Kwan'; 'paoleks'; cycwong@hkucc.hku.hk
Subject: Research Ethics Application- Mr Chan Yew Hung Roy [MEd(HE)]

To: Mr Chan Yew Hung Roy [MEd(HE)]
From: Miss Sharon Lim, for Secretary, Faculty Research Ethics Committee

I refer to your ethics application for your study entitled "The Effects of Student Involvement and University Environment by World-class Universities: A Comparative Case of the University of Hong Kong(HKU) and Shanghai Jiao Tong University(SJTU)".

I am pleased to inform you that the Delegate, on behalf of the Faculty Research Ethics Committee, has approved your application.

I am copying this to the Programme Secretary for information and record.

Thank you for your attention.

29 March 2011

APPENDIX C
INFORMED CONSENT FORM (HKU FORMAT)

297/1005

A Informed Consent Form for Adult (HKU Format)

Effects of the World-class University Environment on Students' Learning and Living
Experience: A Comparative Case Study of The University of Hong Kong(HKU) and Shanghai
Jiao Tong University(SJTU)

INTROUCTORY SENTENCE

You are invited to participate in a research study conducted by Mr. Roy Yew Hung Chan in the Faculty of Education at The University of Hong Kong.

PURPOSE OF THE STUDY

This comparative case-study examines the effects on students' involvement and university environment on student learning and living experience at The University of Hong Kong. The study also identifies how the quality of campus facilities and services, the quality of studying and interaction, and the quality of the university experience affect students' development and interaction at HKU. Additionally, the study compares levels of these qualities in Hong Kong to levels in mainland China.

PROCEDURES

You will be invited to complete either a survey questionnaire (30 minutes) to assess your current university experience at The University of Hong Kong. In addition, we will examine your daily life style and social behavior here at HKU to understand how institutional environments and organizational/social characteristics affect your overall student living and learning experience. The survey questionnaire will take on average 30 minutes to complete.

POTENTIAL RISKS / DISCOMFORTS AND THEIR MINIMIZATION

You may find answering some of the survey questions and/or talking about your personal experience during the procedure to be somewhat uncomfortable and upsetting. Such discomforts, however, should be no greater than what we experience in everyday life.

If you should ever feel discomfort at any moment of the research procedure, please feel free to notify the principle investigator.

COMPENSATION FOR PARTICIPATION

As a token of appreciation, you will receive HKD \$20 for your participation in this procedure.

POTENTIAL BENEFITS

In this study, you will be invited to reflect on your personal experience. Such reflection may give you insights about yourself as well as your overall university experience at HKU. In addition, this research project can provide valuable information on what areas you learn best both socially and physically as well as how these areas affect your overall educational achievement and moral development at HKU. Additionally, this research can help you identify strengths that you have achieved overtime and possible improvements needed to further enhance your current university experience.

CONFIDENTIALITY

Any information obtained in this study will remain very strictly confidential, will be known to no-one, and will be used for research purposes only. Codes, not names, are used on all test instruments to protect confidentiality.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. This means that you can choose to stop at any time without negative consequences.

STORAGE OF DATA

All data and documents will be kept confidential, and will not be released to others. They will be securely stored in a locked filing cabinet in my office and will be destroyed on completion of the project.

QUESTIONS AND CONCERNS

If you have any questions or concerns about the research, please feel free to contact Mr. Roy Yew Hung Chan at HKU, [Room 407, Graduate House, 3 University Drive, The University of Hong Kong ; (+852)-5362-0236; rychan@hku.hk]. If you have questions about your rights as a research participant, contact the Human Research Ethics Committee for Non-Clinical Faculties, HKU (+852)-2241-5267.

SIGNATURE

I _____ (Name of Participant) understand the procedures described above and agree to participate in this study.

Signature of Participant

Date of Preparation:

HREC/NCF Approval Expiration date:

APPENDIX D
INFORMED CONSENT FORM (SJTU FORMAT)

A Informed Consent Form for Adult (SJTU Format)

Effects of the World-class University Environment on Students' Learning and Living
Experience: A Comparative Case Study of The University of Hong Kong(HKU) and Shanghai
Jiao Tong University(SJTU)

INTROUCTORY SENTENCE

You are invited to participate in a research study conducted by Mr. Roy Yew Hung Chan in the Graduate School of Education at Shanghai Jiao Tong University (Minhang Campus).

PURPOSE OF THE STUDY

This comparative case-study examines the effects on students' involvement and university experience on student learning and living experience at Shanghai Jiao Tong University (Minhang Campus). The study also identifies how the quality of campus facilities and services, the quality of studying and interaction, and the quality of the university experience affect students' development and interaction at SJTU. Additionally, the study compares levels of these qualities in Shanghai to levels in Hong Kong.

PROCEDURES

You will be invited to complete either a survey questionnaire (30 minutes) to assess your current university experience at Shanghai Jiao Tong University. In addition, we will examine your daily life style and social behavior here at SJTU to understand how institutional environments and organizational/social characteristics affect your overall student living and learning experience. The survey questionnaire will take on average 30 minutes to complete.

POTENTIAL RISKS / DISCOMFORTS AND THEIR MINIMIZATION

You may find answering some of the survey questions and/or talking about your personal experience during the procedure to be somewhat uncomfortable and upsetting. Such discomforts, however, should be no greater than what we experience in everyday life.

If you should ever feel discomfort at any moment of the research procedure, please feel free to notify the principle investigator.

COMPENSATION FOR PARTICIPATION

As a token of appreciation, you will receive CYN 10 Yuan for your participation in this procedure.

POTENTIAL BENEFITS

In this study, you will be invited to reflect on your personal experience. Such reflection may give you insights about yourself as well as your overall university experience at SJTU. In addition, this research project can provide valuable information on what areas you learn best both socially and physically as well as how these areas affect your overall educational achievement and moral development at SJTU. Additionally, this research can help you identify strengths that you have

achieved overtime and possible improvements needed to further enhance your current university experience.

CONFIDENTIALITY

Any information obtained in this study will remain very strictly confidential, will be known to no-one, and will be used for research purposes only. Codes, not names, are used on all test instruments to protect confidentiality.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. This means that you can choose to stop at any time without negative consequences.

STORAGE OF DATA

All data and documents will be kept confidential, and will not be released to others. They will be securely stored in a locked filing cabinet in my office and will be destroyed on completion of the project.

QUESTIONS AND CONCERNS

If you have any questions or concerns about the research, please feel free to contact Mr. Roy Yew Hung Chan at SJTU, [Room 234, Chen Ruiqiu Building, Graduate School of Education, Shanghai Jiao Tong University; rychan@sjtu.edu.cn]. If you have questions about your rights as a research participant, please contact the HKU Human Research Ethics Committee for Non-Clinical Faculties (+852)-2241-5267

SIGNATURE

I _____ (Name of Participant) understand the procedures described above and agree to participate in this study.

Signature of Participant

Date of Preparation:

HREC/NCF Approval Expiration date:

APPENDIX E
HKU POSTER

Upon Request

APPENDIX F
SJTU POSTER

Upon Request

APPENDIX G

“2011 HKU/SJTU STUDENT EXPERIENCE SURVEY” QUESTIONNAIRE TEMPLATE

*** Demographic Information:**

1. What level of study are you currently in?

- a) **Undergraduate** b) **Postgraduate** c) **Visiting Student**

2. Are you an Exchange Student?

- a) **Yes** b) **No**

3) What is your gender?

- a) **Male** b) **Female**

4) What is your age?

- a) **18-19** b) **20-21** c) **22-23** d) **24+**

5. To which Faculty/Department do you belong to?

6. Where is your home country?

- a) **Hong Kong** b) **China** c) **United Kingdom** d) **United States** e) **Other**

7. What is your native language?

- a) **Cantonese** b) **Mandarin** c) **English** d) **Other**

8. How would you rate your level of English proficiency?

- a) **Poor** b) **Fair** c) **Good** d) **Very Good**

9. How many years have you been in Hong Kong?

- a) **1 Year** b) **1-3 Years** c) **More than 3 Years**

OPTIONAL:

Name:

E-mail (if you would like to hear the results of the survey):

This survey is taken and modified from the "Student Involvement Survey" at Ohio State University(OSU)

Direction: Please check/circle the following.

WEEKLY:

- _____ 1. How many hours did you spend each week studying for your classes?
2. Which of the following Campus Recreation facilities or programs have you used weekly? (check all that apply)
- _____ Aquatic Center _____ Tennis _____ Basketball _____ Soccer _____ Track & Field
3. How many of the following activities did you participate in?

<i>CHECK</i>	<i>NUMBER</i> <i>HOURS</i>
_____	_____ Campus Recreation (Aquatic, Fitness, Tennis, Basketball)
_____	_____ College Productions or Performances (e.g., Theater, Choir)
_____	_____ Professional or Departmental Clubs (e.g., Business Club, Arts Alliance)
_____	_____ Hobbies or Social Clubs (e.g., Music Society, Astronomy Society)
_____	_____ Religious Organizations (e.g., Christian Association, Buddhist Society)
_____	_____ Residence Hall Activities (e.g., Hall Council, Social Activities, Workshops)
_____	_____ Student Government (e.g., Student Senate, Student Union)
_____	_____ Leadership Programs (e.g., Emerging Leaders, Conferences)
_____	_____ Volunteer Service (e.g., Rotaract Club, World University Service)

MONTHLY:

Questions 4 through 8 ask you about how much time you spent per month doing certain activities.

- _____ 4. About how many weekends each month do you spend on campus?
- _____ 5. About how many times have you gone out with friends each month?
- _____ 6. About how many on-campus parties did you attend each month?
- _____ 7. At how many of these parties did you drink alcoholic beverages?
- _____ 8. About how many times have you been to the library each month?
- _____ 9. About how many conversations with International students have you had in a month?

YEARLY:

Questions 10 through 16 ask how much time you spent per year doing certain activities.

- _____ 10. How many books other than those assigned for class have you read for your own pleasure?
- _____ 11. How many cultural events have you attended (e.g., performance, concert, plays)?

12. How many conversations about educational plans, problems, or progress did you have with the following people?

- Academic Advisor
- Faculty Member
- Residence Life Staff Member
- Student Organization Advisor

13. How many conversations about research have you had this academic year?

14. During this academic year, about how many times have you done the following:

- Have dinner or refreshments at a faculty member's home?
- Go out for refreshments with a faculty member?
- Have a meal on campus with a faculty member?
- Communicate with a faculty member via e-mail?

14. About how many times have you talked with a career advisor this academic year?

15. Did you have either an off-campus or an on-campus job this year? (check one)

- (1) off-campus
- (2) on-campus
- (3) off-campus and on-campus
- (4) neither off-campus nor on-campus

16. On average, about how many hours each day do you spend on a computer?

- For academic and course work
- For personal use

17. About how many friends you know currently attend HKU? _____

This survey is taken and modified from the "Student Satisfaction Study" at Birmingham City University(BCU) by the Center for Research into Quality.

Part A: Campus Facilities and Services

1) In your experience at HKU/SJTU, how satisfied are you with the following as a student?
(Satisfaction: 1=Very dissatisfied 2=Dissatisfied 3=Neutral 4=Satisfied 5=Very satisfied)

Campus Facilities and services	1	2	3	4	5
Campus					
Computing Facilities					
Library					
Student Services					
Student Canteen					
Sport Complex					

2) At HKU/SJTU, how often (on average) have you been using or attending?

Campus Facilities and services	Never	Once a month	Once a week	2-6 times a week	Everyday
Career Services					
Computing Facilities					
Library					
Sport Complex					
Student Canteen					
Parking					

3) Overall, during the current academic year, how satisfied are you with the campus facilities at HKU/SJTU?

Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied Extremely Satisfied

4) Overall, during the current academic year, how satisfy are you with the learning environment at HKU/SJTU?

Very Uncomfortable Uncomfortable Average Comfortable Very Comfortable Extremely Comfortable

5) What can HKU/SJTU do to improve student learning and living environment?

6) Have you at any time lived in a student residence, or other university hall at HKU/SJTU?

Yes **No**

If yes, please answer question number 7 and number 8.

7) Overall, during the current academic year, how active are you in your student residence life?

Not Active **Not So Active** **Average** **Active** **Very Active** **Super Active**

8) If you are now living/have lived on-campus, about how often have you done each of the following in your residence?

College	Never/Rarely	Occasionally/ Often	Everyday/ Very Often
Gone out with other students for dinner, snacks, etc.			
Offered to help another student			
Asked others for assistance in something that you were doing			
Attended social events organized by the student residence			
Studied with other students in the student residence			
Helped plan or organize an event in the student residence			
Talked with my Residence Master/Tutor			

Part B: Studying and Interaction at University

1) Here at HKU/SJTU, about how often have you done each of the following?

Studying and Interaction at HKU	Never	Seldom	Occasionally	Often	Very Often
Took detailed notes in class					
Participated in class discussions					
Worked on a paper or project					
Tried to explain the material to another student or friend					
Made outlines/summaries from class notes or readings					
Did additional readings on topics that were introduced and discussed in class					
Worked on a group study project					
Made a presentation in class					

2) How much difficulty have you had in financing your study at HKU/SJTU?

No difficulty	A little difficulty	Some difficulty	A great deal of difficulty	Extremely difficulty
----------------------	----------------------------	------------------------	-----------------------------------	-----------------------------

3) During the academic year, on average, about how many hours do you spend in a typical 7-day week on-campus?

1-5 hours	6-10 hours	11-15 hours	16-20 hours	More than 20 hours
------------------	-------------------	--------------------	--------------------	---------------------------

5) Please indicate the following:

Studying and Interaction at HKU	Never	Seldom	Occasionally	Often	Very Often
How often do you have trouble expressing					

your ideas in an assignment?

How often do you have trouble understanding things you hear in class?

How often do you imagine that you have less scholastic ability than your classmates?

In turning in a term paper, how often do you feel you did an excellent job on it?

Compared with classmates, how often do you feel you must study more than they do to get the same grades?

6) Based on your experience so far, would you recommend HKU/SJTU to your friends or relatives?

Definitely not **Probably not** **Maybe** **Probably would** **Definitely would**

7) Based on your answer for question number 6, why did you choose such response?

Part C: Overall University Experience

1) How much do you think you are achieving in the following areas at HKU/SJTU?

Overall university experience at HKU	None	Very Little	Some	Much	Very Much
Improving your job prospects					
Learning things that really interest you					
Training for a specific job or profession					
Prepare for future qualifications after completing the program					

2) How much do you think you are developing in the following areas at HKU/SJTU?

Overall university experience at HKU	None	Very Little	Some	Much	Very Much
Self-confidence					
Being able to work independently					
Thinking analytically/critically					
Ability to work with others					
Interpersonal/social skills					
Leadership skills					
Ability to solve problems					

3. Overall, during the academic year, how active are you in your social life at HKU/SJTU?

Not active at all **Not so active** **Average** **Active** **Very Active**

4. Overall, how much do you think you are achieving or developing at HKU/SJTU during the current academic year?

None **Very Little** **Some** **Very Much** **A Great Deal**

5) Looking back at your HKU experience as a whole, to what extent do you agree/disagree with the following statements?

My degree program was well-organized

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

The arrangement of my program timetable over the day/week was convenient

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

I had enough opportunities to express my views on my experience

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

Computer facilities were readily available

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

The library had enough up-to-date materials (e.g. books, journals, periodicals)

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

The provision of student services was adequate (e.g. careers advice, financial assistance)

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

The student canteen offered good quality food and drinks at a reasonable price

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

The University had enough individual/group study space

A) Agree	B) Disagree	C) Not Applicable
-----------------	--------------------	--------------------------

6) Please name three things you think HKU/SJTU as a whole can do to improve the student experience. (no more than five words for each box)

a) _____

b) _____

c) _____

7) Finally, are there any improvements that could be made to this questionnaire?

This is the end of the questionnaire.
Thank you for participating in this survey. Your feedback is truly appreciated, and will help HKU/SJTU provide better educational opportunities for you and the future.

Please return your answer sheet to Mr. Roy Yew Hung Chan and collect your compensation. To ensure the integrity of the survey, please refrain from discussing the survey to friends or family.

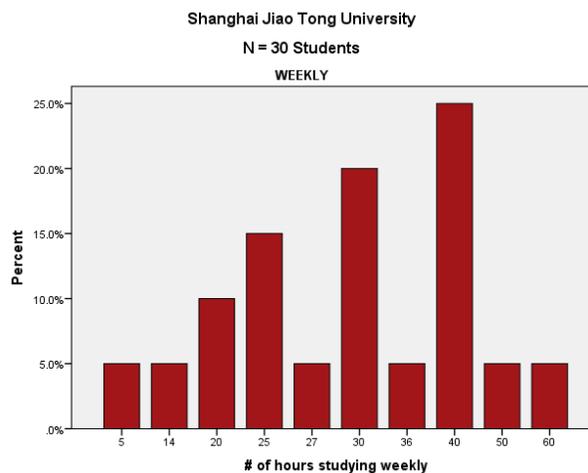
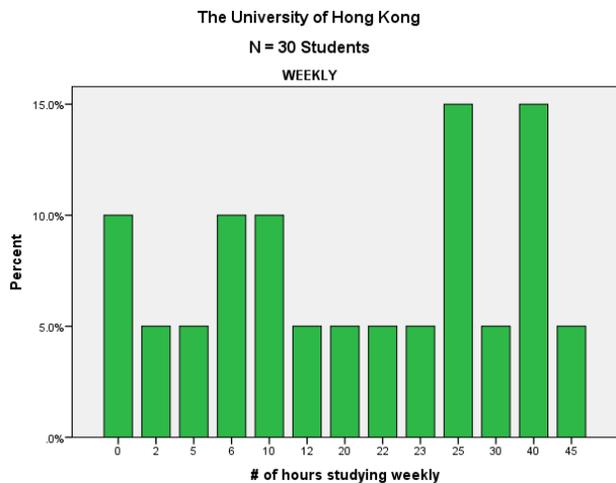
Should you have any questions or concerns regarding this survey, please contact the Principle Investigator at rychan@hku.hk or rychan@sjtu.edu.cn.

APPENDIX H

BAR GRAPHS REPRESENTATING ENTIRE UNIVERSITY POPULATION

The bar graphs displayed below compares the entire student population (both undergraduate and postgraduate) between HKU and SJTU from the “OSU Student Involvement Survey”

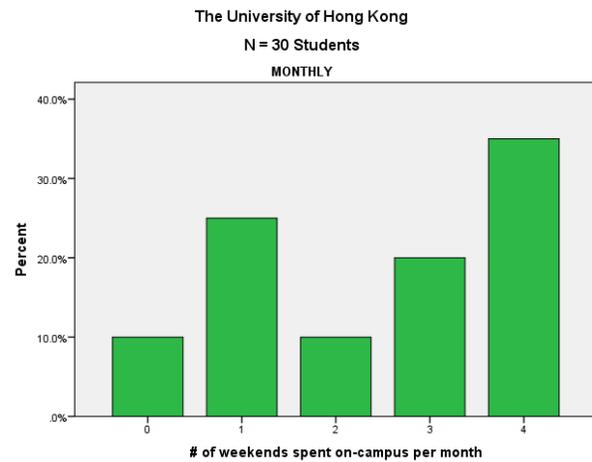
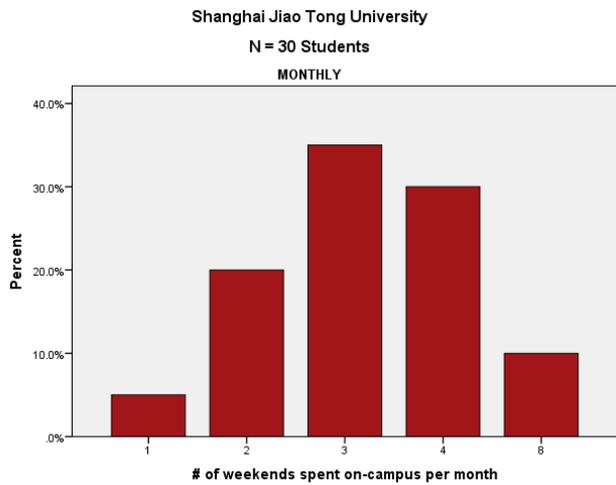
H1)		HKU	SJTU
		# of hours studying weekly	# of hours studying weekly
N	Valid	30	30
	Missing	0	0
Mean		20.87	31.07
Median		21.00	30.00
Mode		25	40
Std. Deviation		13.248	11.510
Minimum		0	5
Maximum		30	45



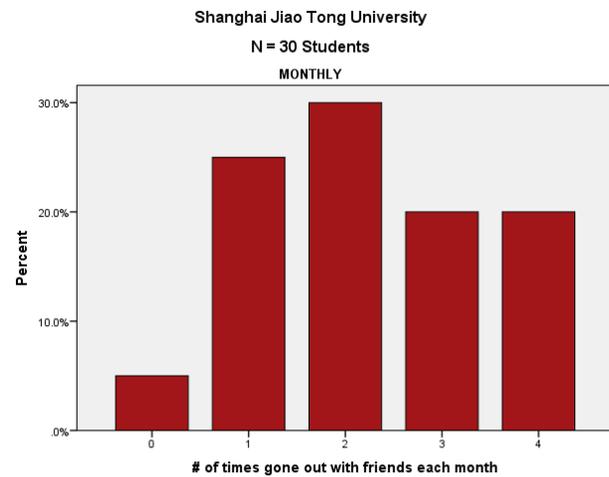
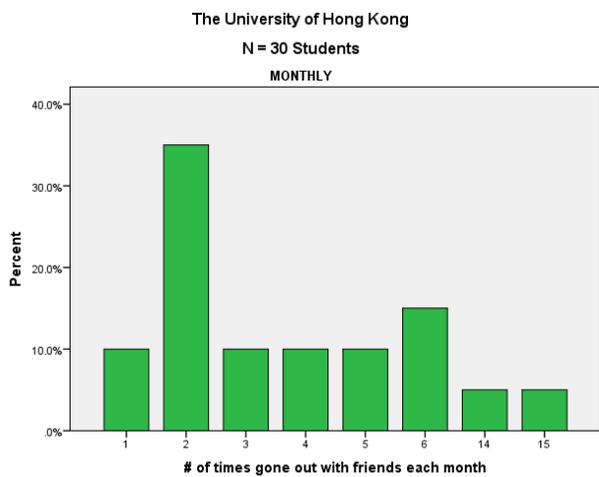
H2) HKU SJTU

		# of weekends spent on-campus per month	# of weekends spent on-campus per month
N	Valid	30	30
	Missing	0	0
Mean		2.47	2.90
Median		3.00	3.00
Mode		4	3

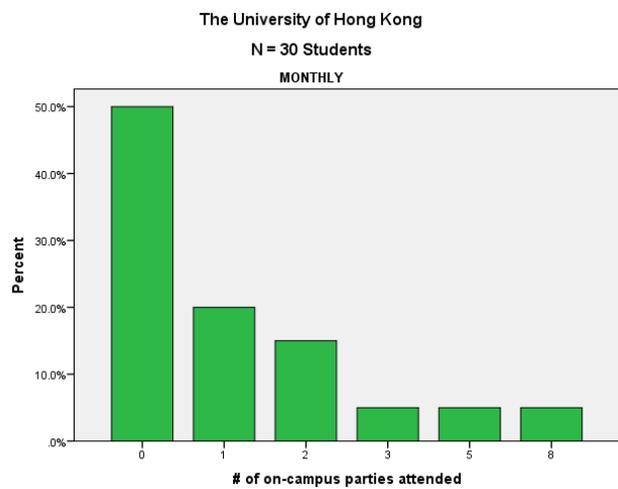
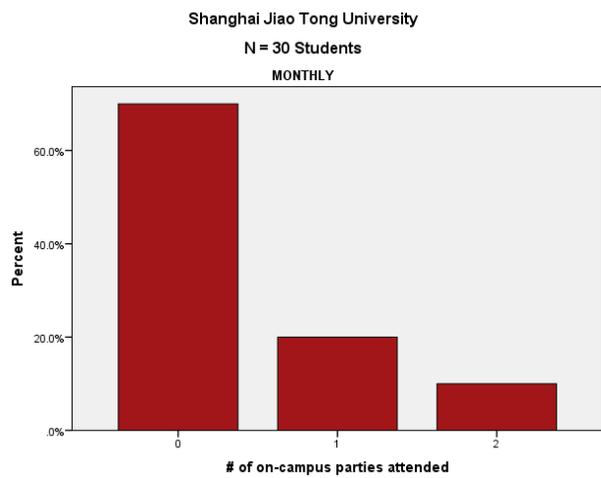
Std. Deviation	1.279	1.709
Minimum	0	1
Maximum	4	8



		HKU	SJTU
		# of times gone out with friends each month	# of times gone out with friends each month
N	Valid	30	30
	Missing	0	0
Mean		4.00	2.23
Median		3.00	2.00
Mode		2	2
Std. Deviation		3.173	1.194
Minimum		1	0
Maximum		14	4



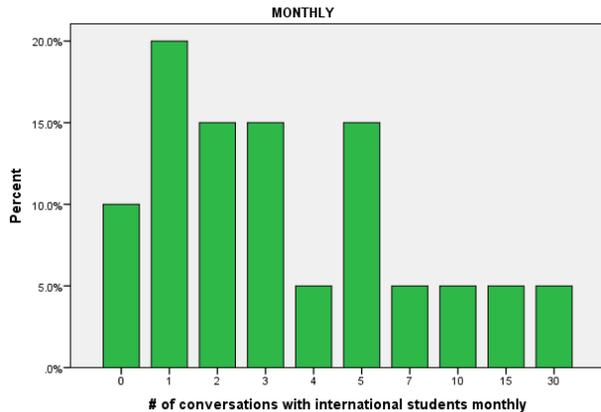
H4)		HKU	SJTU
		# of on-campus parties attended each month	# of on-campus parties attended each month
N	Valid	30	30
	Missing	0	0
Mean		1.00	0.27
Median		.50	0.00
Mode		0	0
Std. Deviation		1.399	0.583
Minimum		0	0
Maximum		8	2



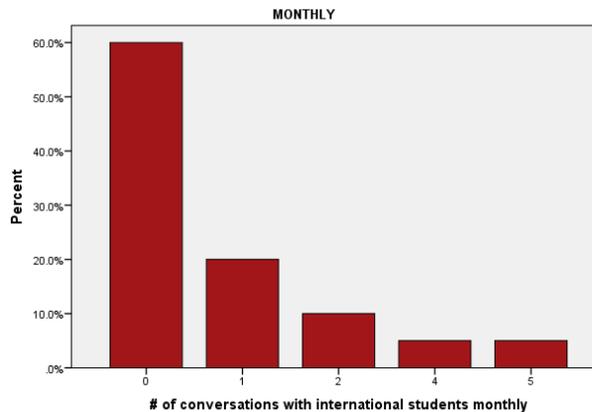
H5) HKU SJTU

		# of conversations with international students every month	# of conversations with international students every month
N	Valid	30	30
	Missing	0	0
Mean		4.43	0.73
Median		3.00	0.00
Mode		1	0
Std. Deviation		6.913	1.424
Minimum		0	0
Maximum		30	5

The University of Hong Kong
N = 30 Students



Shanghai Jiao Tong University
N = 30 Students

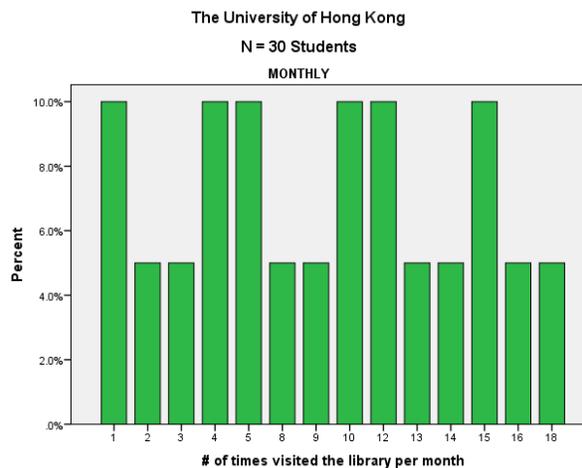
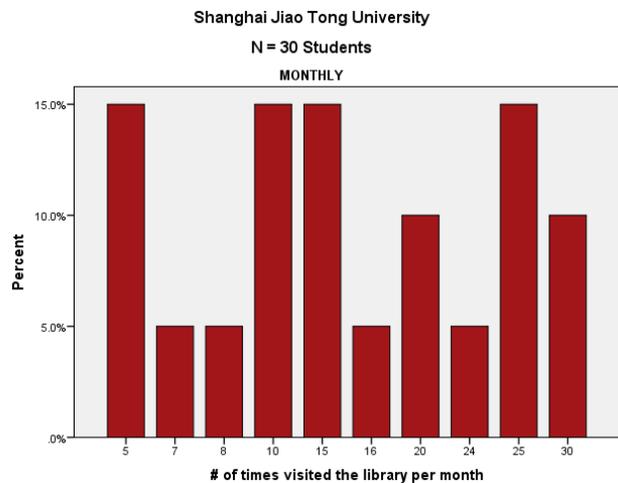


H6)

HKU

SJTU

		# of times visited the library per month	# of times visited the library per month
N	Valid	30	30
	Missing	0	0
Mean		9.27	17.93
Median		9.50	15.0
Mode		1	0
Std. Deviation		4.697	7.158
Minimum		1	5
Maximum		18	30

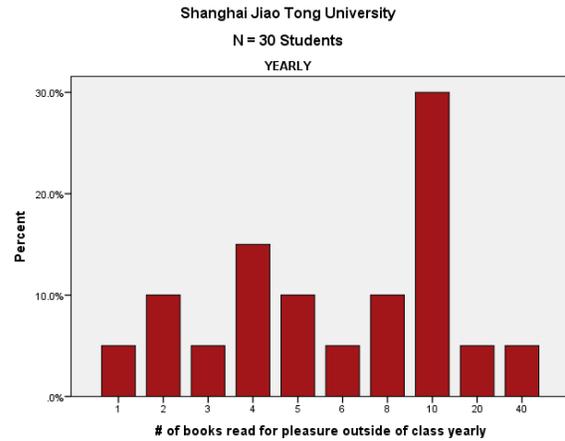
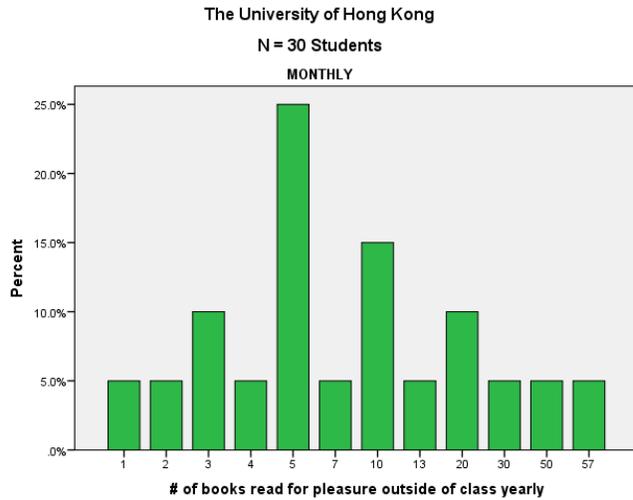


H7)

HKU

SJTU

		# of books read for pleasure outside of class yearly	# of books read for pleasure outside of class yearly
N	Valid	30	30
	Missing	0	0
Mean		12.77	10.83
Median		7.00	6.00
Mode		10	5
Std. Deviation		10.814	8.225
Minimum		1	1
Maximum		57	40

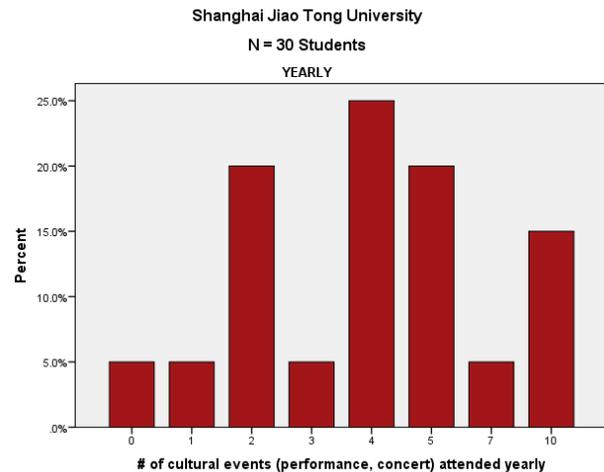
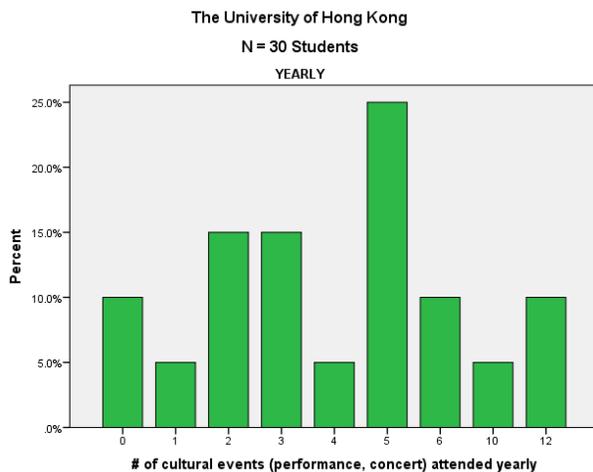


H8)

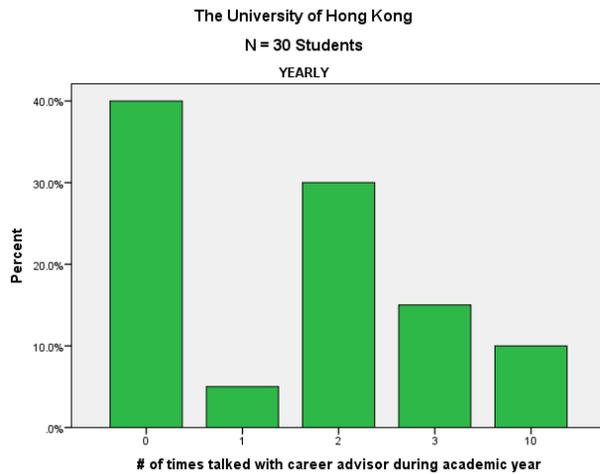
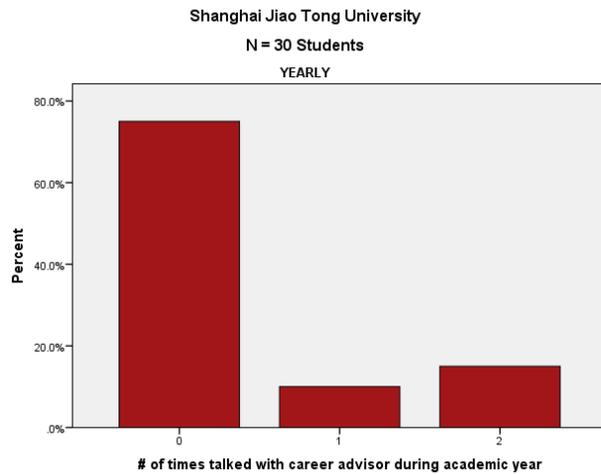
HKU

SJTU

		# of cultural events (performance, concert) attended yearly	# of cultural events (performance, concert) attended yearly
N	Valid	30	30
	Missing	0	0
Mean		5.20	4.50
Median		4.00	4.00
Mode		5	4
Std. Deviation		3.253	3.2134
Minimum		0	0
Maximum		12	10



H9)		HKU	SJTU
		# of times talked with career advisor during academic year	# of times talked with career advisor during academic year
N	Valid	30	30
	Missing	0	0
Mean		2.57	.50
Median		1.50	.00
Mode		0	0
Std. Deviation		2.700	.731
Minimum		0	0
Maximum		10	2



APPENDIX F
Miscellaneous: Academic Reference of Research Experiment and Further Studies

Upon Request

BIOGRAPHICAL SKETCH

Mr. Roy Y. CHAN (陈佑雄), born and raised from Los Angeles California USA, was a master's degree student in Higher Education from the Faculty of Education at The University of Hong Kong. During the 2010-2011 academic year, Mr. Chan served as President for the HKU Postgraduate Student Association(PGSA) representing over 10,000+ research postgraduate students at the HKU Graduate School. During his tenure, Roy played an instrumental role in reshaping the identity of the Association that led to remarkable results, including special recognition from Professor CHENG Kai Ming, Chair of the Faculty of Education. Outside, Roy also served as an Intern for the HKU Sustainability Office, Research Assistant under Professor Bruce Macfarlane, Residential Committee for the HKU Graduate House, as well as an Elected Board Member of the Faculty of Education under UNESCO Chair Professor Mark BRAY.

Mr. Chan's primary research focuses on the building and making of world-class research institutions in China, the crossculturalism in education policy and higher education internationalization, the comparative and international higher education, and the socialization experience of college students in East Asia and the Pacific. Roy's most recent book entitled *Students' Experience at World-Class Universities in China* was published on December 2011 by the LAP LAMBERT Academic Publishing (ISBN#: 978-3-8465-4905-6). Roy served on the Editorial Advisory Board for the book *Intellectual Leadership in Higher Education: Renewing the Role of the University Professor* authored by Professor Bruce MACFARLANE from The University of Hong Kong, to be published by Routledge on February 2, 2012 (ISBN 9780415560825).

Roy was the first cohort student to graduate from the Higher Education program in the Hong Kong Special Administrative Region(HKSAR). Mr. Chan holds a Bachelor of Arts degree from the University of California, Irvine and a Specialized Certificate in Gifted and Talented Education(GATE) from the University of California, San Diego. He was a recipient of the 2011 Gerald H. Reed International Scholarship from the Phi Delta Kappa Education Association.

Today, Roy is a current doctoral student in Higher Education Administration at Boston College – Lynch School of Education. For more info, please visit his personal homepage at <http://www.rychan.com>. He can be reached via e-mail at rychan@gradaute.hku.hk



Mr. Roy Yew-Hung CHAN, President of the Postgraduate Student Association(PGSA) kindly meets with **Professor Lap-Chee TSUI**, current Vice-Chancellor & President of The University of Hong Kong