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The Effect of Career and University Preparation Resources on Cambodian Students' Post-Secondary Academic and Career Goals and Expectations

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Abstract

This study explores the effect that university and career preparation materials and resources in Cambodian upper secondary schools have on students' post-secondary plans, aspirations, and expectations. Globalization, and in the case of Cambodia the integration with transnational organizations like the Association of South East Asian Nations (ASEAN), has rapidly increased the speed at which people need to remain technologically connected, and has effectively opened physical and metaphorical boundaries between nations and cultures. The Cambodian government therefore aims to develop the human resources of its population to achieve economic advancement and successful integration into the global community. Operating within this human capital framework, this research examines the link between resource usage, other socioeconomic variables, university plans, and future career goals. Data from a survey of 210 Cambodian upper secondary students from three different schools in Siem Reap, Cambodia was used to measure and analyze demographic information, family wealth/resources, computer and English proficiency, access to and usage of career and university preparation resources, and students' attitudes and expectations for their future academic and career endeavors. Overall, usage of career and university preparation resources was less significantly related than students' socioeconomic status to students' post-secondary plans and expectations. This study concludes with a discussion of how we can better understand the school-to-work transition of Cambodian youth in the context of access to career and university preparation resources.

Keywords: Cambodian youth, career and university preparation, post-secondary goals

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Lack of education and high-quality educational resources is something which developing countries and their supporters have long struggled with. Countries across the globe face high drop-out rates, low enrollment rates, and other issues as a result of this lack of resources. Cambodia is currently struggling with many of these issues. 20% percent of Cambodian students drop out at the lower secondary level, while 12% drop out at the upper secondary level (USAID, 2011). The school survival rate of students from first to sixth grades is only 61.2% (MoEYS, 2010). The cycle of poverty, dropouts, poor education quality, and lack of resources often leads to limited educational opportunities and lack of awareness regarding post-secondary career and university opportunities. Based on 2011 data, the gross tertiary enrollment ratio for the world is 30.1%, while the gross tertiary enrollment ratio in Cambodia is only 15.8% (World Bank, 2013). This indicates that Cambodia also lags behind other countries in terms of graduating high school students who are prepared to enter a career or university – whether this stems from students being academically unprepared or simply unaware of opportunities is something this study aims to answer. International aid organizations as well as smaller NGOs have devoted resources to improving basic education around the globe in an effort to work towards sustainable development and to ensure that all countries can play a role in globalization and international cooperation. Cambodia is a country which is still recovering from political turmoil and genocide in the 1970s, yet is eager to develop economically and have a voice in world politics. There have been many efforts on the part of the Cambodian government as well as development organizations to begin the process of moving beyond basic education to provide additional resources to Cambodian students. Given the current situation in Cambodia in regards to poverty levels, dropout rates, and tertiary enrollment, this study seeks to explore specifically how career

and university preparation resources affect Cambodian high school students' post-secondary career and academic aspirations and achievements.

Background

Education System

The education system in Cambodia is governed by the Ministry of Education, Youth, and Sport (MoEYS), which controls the overall operation and curriculum delivered in all public schools. The school system is divided into three main segments: primary school, lower secondary school, and upper secondary school, with increasing attention now being placed on both higher education and early childhood education. Due to limited resources, only a small minority of children has access to schooling before the age of five, but there has been an increase in the amount of community preschools, preschools within primary schools, and private preschools (MoEYS, 2013). According to MoEYS, primary school enrollment has drastically improved, with enrollment rates reaching up to 97%. The country is working toward implementing the child-friendly school model, yet they still lack many of the necessary resources, including an adequate number of qualified teachers. Lower secondary school in Cambodia consists of grades seven through nine, and upper secondary schools include grades ten through twelve. Although the quality of secondary education has improved slightly, there has been no decrease in the dropout rate (MoEYS, 2013). This could be due to a variety of factors external from the education system that have not changed for students, like poverty or high rates of illness. The government has also recognized that students graduating from secondary schools need “improved and relevant knowledge and skills for technical, vocational, and higher education” (MoEYS, 2013).

Post-secondary Opportunities

This study is concerned with students exiting upper secondary school and transitioning to post-secondary opportunities. Many youth in Cambodia will undergo the school-to-work transition after leaving secondary school (regardless of whether or not the student graduates), and many of them will remain single into their twenties, as the average marriage age among youth is currently 21 years old (Kanol, Khemarin & Elder, 2013). A School to Work Transition Survey conducted by the International Labour Organization found that 74% of youth aged 15-29 are employed in Cambodia, while close to 17% of youth are in school and therefore inactive in the labor market (Kanol, Khemarin & Elder, 2013). An understanding of the opportunities available to students upon graduation from upper secondary school is important in attempting to understand what influences students to pursue which options.

University. Although university enrollment rates in Cambodia lag behind the global average, a considerable number of students at least plan on enrolling in university after high school graduation. This could in part be due to the increasing prevalence of non-governmental organizations within Cambodian that stress the importance of higher education and also the increasing emphasis that MoEYS is placing on university-level knowledge as a means for economic development. Currently there are 32 public and 45 private universities within Cambodia, located in 19 of Cambodia's 24 provinces (UNESCO, 2010), with a majority of them being concentrated in Phnom Penh. Several of the universities have secondary campuses located in Siem Reap. The current university system offers close to 100 different degrees, ranging from foreign languages to health science to tourism (UNESCO, 2010). A university education, however, is difficult for students to achieve, as passing the National Exam, taken at the end of a student's twelfth grade year, is required in order to graduate and also plays a large role in which

higher education institutions will accept a student. There are minimal scholarships available to students who do not score in the highest tier on the exam, and even fewer that will actually cover students' housing and living expenses while attending university.

Teacher training centers. Another option for students is to enter one of the teacher training colleges which, in Cambodia, are separate institutions from four year universities. Additionally, there are separate systems and institutions for different levels of instruction. Despite this system, there is still a considerable lack in instructional quality and there is currently no national teacher education policy in place which regulates all teacher education training at all levels (UNESCO, 2010). Despite becoming a teacher being a popular career goal for students, MoEYS has yet to meet its goal of training 5,000 new teachers per year (UNESCO, 2010).

Technical and vocational education. Students also have the opportunity to enroll in a technical or vocational school upon graduating from upper secondary school. The Cambodian government is currently redeveloping its national Technical and Vocational Education Training (TVET) system in order to better serve students and provide them with the skills necessary to compete in the job market (UNESCO, 2010). The TVET system "includes all forms of learning and development with a major technical or vocational component" (UNESCO, 2013). The current national system provides training at four different levels: certificate level, given over the course of several weeks to one year in provincial training centers; diploma level, given to post-grade 9 student in provincial or vocational training centers; higher diploma level, given to post-grade 12 students who complete two years of education at technical institutes; and bachelor level, given to post-grade 12 students who complete a bachelors degree in a technical or vocational field. Currently only 14 technical institutes and polytechnics exist that deliver these formal TVET courses (UNESCO, 2013). Cambodia also has a number of non-formal vocational

training programs, often developed and implemented by NGOs, private providers, Provincial Training Centers, and small businesses for example (UNESCO, 2013). In Siem Reap, where this research was conducted, vocational schools and technical training are often centered around the tourist industry, as Cambodia, and in particular Siem Reap, is seeing an increase in international tourists each year. These types of programs often do not require students to graduate from high school in order to participate, and in fact often cater instead to dropouts and the urban poor.

Job market and other paths. Aside from actually enrolling in some form of tertiary education, many students pursue work right after high school graduation. Many of the available cash income jobs in Siem Reap are in the service and hospitality industry, and students often express a desire to work within the city proper of Siem Reap in one of these types of jobs. These jobs however may be difficult for low-income rural students to obtain, as employers typically desire employees who have a working knowledge of technology and are able to communicate effectively using the English language. Other students have even fewer options due to family situations. It is common for students, especially in rural areas, to help their families on a small farm or with a family business.

Aside from families simply not being able to financially support children in academic endeavors, there are strong cultural ties to family in Cambodia, with many students desiring a good family life above all other future goals (Kanol, Khemarin & Elder, 2013). Additionally, the ILO's School to Work Transition survey showed that among youth migrants, the primary reason for their migration was in order to accompany family (Kanol, Khemarin & Elder, 2013). There are very clear ties to the Cambodian nuclear family and a desire to remain close to help the family. These familial ties as well as family financial constraints play an important role in students' post-secondary plans and pursuit of their goals.

Historical Context of Education

Cambodia as a nation is at a prime moment to be discussing its economic future and prospects. As a 'developing' country, Cambodia reflects the status of many other nations who are undergoing globalization and economic development. Their society and education system has had to be transformed and re-contextualized throughout the country's history.

The first large transformation in the education system came during the era of French colonization. Before the colonial period, the Buddhist pagoda within the community was the center of education and professional training (Rany, Zain, & Jamil, 2012). The beginning of the French colonial period signified a drastic shift in the way education was implemented and conceptualized. During the colonial period, which lasted from 1863 to 1953, the French instituted their own administrative and educational system (Rany, Zain, & Jamil, 2012). This formal system soon caught on among the leaders of Cambodia, with King Norodom establishing the first formal schools for Cambodian royalty, and the French following shortly after with public schools in several key provinces (Rany, Zain, & Jamil, 2012). This served as the beginnings of standardized, formal education in Cambodia. However, in these developmental years, the system suffered from "poor teaching methodology, lack of resources and financial support," and the difficulty of reconciling the traditional education of the Buddhist monks with this new Europe-based education (Rany, Zain, & Jamil, 2012). Despite these challenges, the formal education system continued after Cambodian independence. The period of 1953 to 1970, under the leadership of Prince Sihanouk, experienced a promotion of education policies to promote the modernization of Cambodia (Rany, Zain, & Jamil, 2012). Prince Sihanouk's educational expansion, which included an increase in the number of basic education institutions

as well as universities, operated under the ideology of Buddhism combined with "loyalty to the monarchy and Marxist egalitarianism" (Ayres, 2000).

The legacy of the Khmer Rouge period coupled with the Khmer culture of traditionalism and continuity has also played a large role in Cambodia's current status – as a country which had largely been forgotten by the rest of the world which is now experiencing promises of economic growth and prosperity (Derks, 2008; Chandler, 2008). The period of the Khmer Rouge has had a profound effect not only on Cambodia society, but also on the education system. The regime, which ruled the country from 1975 to 1979 desired to return Cambodia to a time of agrarian egalitarianism, and did this by instituting extremely harsh policies and abolishing much of the country's infrastructure. By the end of the four year period, Pol Pot, the leader of the regime, had as many as 1.7 million Cambodian people executed on his quest to establish his ideal society. The education system during this period suffered immensely, with schools either being abandoned or used for other purposes, like storage sheds or prisons (Ayres, 2000). It is estimated that up to 90% of the schools in Cambodia, including higher education institutions, and their documents were destroyed during the leadership of the Khmer Rouge (Rany, Zain, & Jamil, 2012). Any education that was implemented during this period was wrought with corruption and poor quality, and focused primarily on learning technology for the cause of work and revolution (Ayres, 2000; Rany, Zain, & Jamil, 2012).

After the fall of the Khmer Rouge, Cambodia was faced with the prospect of development and open engagement with its neighbors in Southeast Asia and the rest of the world. During this period, education was used as tool for nation building (Ayres, 2000). There was a push to reestablish the higher education institutions that had been decimated during the Khmer Rouge period, and the government called on survivors of the regime to return to these

institutions as teachers (Rany, Zain, & Jamil, 2012). Cambodia is still dealing with issues of teacher and education quality today because of Pol Pot's targeted removal of the country's intellectuals and their work. After over a decade of political disputes and civil war, the May 1993 election brought Cambodia "its first universally recognized government since 1970" (Ayres, 2000). With it came the government's central goal of integrating Cambodia into the global economic system (Ayres, 2000; Rany, Zain, & Jamil, 2012). Current Prime Minister Hun Sen proclaims that Cambodia is currently facing a "new era of growth and prosperity." This new wealth and development is something that the Cambodian population wants to be a part of, and recently the Cambodia government has placed an increasing emphasis on the development of the education system and Cambodia's human resources to meet this goal (Ayers, 2000). As a result, young Cambodians today are increasingly focused on the idea of upward mobility, as youth, and women especially, from rural areas travel to larger cities like Phnom Penh in search of jobs to feed the ever-increasing need for a cash income (Derks, 2008). A survey conducted by the International Labour Organization found that 32.7% of students living in Cambodian urban centers have migrated there from other areas (Kanol, Khemarin & Elder, 2013). Both the Cambodian government and its citizens see the opportunity for advancement and economic development, and are eager to use the education system to fit their needs.

ASEAN Integration

One of the key hallmarks of the promise of economic prosperity and engagement with the rest of the world is Cambodia's participation in the Association of Southeast Asian Nations, or ASEAN. The member nations of ASEAN believe in common goals in order to benefit Southeast Asia with respect to its role in global politics and economics. More specifically, ASEAN seeks "to accelerate the economic growth, social progress, and cultural development in the region

through joint endeavors in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asia nations" (ASEAN, 2009). Economic growth and prosperity are seen as two of the key ways in which Southeast Asia and hence Cambodia hopes to benefit from the current trends of globalization. Not only is ASEAN interested in producing capital and resources through production of raw materials or labor, but the nations seek "to provide assistance to each other in the form of training and research facilities in the educational, professional, technical, and administrative spheres" (ASEAN, 2009). If equating economic success and development with this type of professional work is the reality of ASEAN and the rest of the world, Cambodia is forced to measure the success of its own population and youth in the same manner. Theoretically, under the ASEAN charter and ideals, Cambodian high school and university graduates should be competitive in terms of skills and employment potential with Singaporean students or students from large cities in Malaysia for example who have access to greater educational resources. If we operate on the premise that a university education or professional job is the marker of success in order to compete for jobs and financial gain within the world economy, then Cambodian students' post-secondary career and academic status becomes important for the future of Cambodia's economy.

Current Labor Market

In order to understand Cambodia's current economic situation, it is important to examine current trends in labor and employment. The issue of labor market participation for youth aged 15-25 is especially important, for they make up approximately 32% of the total population of Cambodia (USAID, 2006). With this in mind, approximately 300,000 people enter the labor force every year competing for only 20,000 to 30,000 new jobs in the formal sector created by economic growth (USAID, 2006). The discrepancy between available jobs and those seeking

employment creates issues of unemployment, especially among young people exiting school and entering the labor force. Unemployment is particularly pronounced in countries within Southeast Asia. In Southeast Asia, youth are five times more likely than adults to be unemployed, while youth are only three times more likely to be unemployed than adults globally (ILO, 2007). There is also a trend within Cambodia of people searching for quick, possibly temporary, ways to find work and earn money rather than investing in the skills required to establish a career (USAID, 2006). Contributing to this is the fact that only about 20% of the Cambodian labor force consists of formal paid employees (ILO, 2007). Much of the labor force exists in the agricultural sector, and most of the labor force are self-employed or work for/with their families.

Although there is an issue within Cambodia regarding unemployment, there is data to suggest that those who are formally employed contribute significantly to the country's economic gain. According to the World Bank, the agricultural sector is made up of approximately 71% of the work force but only contributes 31% to the country's GDP; industry hires 8% of the labor force but makes up 29% of GDP; services employ the remaining 31% of the labor force and make up 35% of the GDP (USAID, 2006). Although most people go to work in the agricultural sector, data and statistics show that there is more earning potential in the service sector of the economy and job market. Not only is there currently more potential in the service sector, but there stands to be much more earning potential in fields like management and sciences. In 2006, it was announced that large offshore oil deposits exist off the coast in Cambodia's territorial waters. Initial estimates predicted that these deposits could provide an additional one billion dollars in revenue to Cambodia annually (Chandler, 2008). Being able to successfully obtain this oil using skilled workers and native Cambodian management teams could provide more economic gain and fewer opportunities for exploitation than outsourcing the oil drilling to

western organizations. Therefore, when determining how best to improve the country's economic position with respect to the rest of the world, the emphasis should be placed on preparing students for careers in the fields of industry, service, and other professional careers as laid out by ASEAN. Not only is this important for the success of ASEAN's ideals, but preparing Cambodians for professional careers has the potential to be a necessity in the coming years.

Previous Career Preparation Studies in Cambodia

Currently, very little research has been conducted concerning career preparation and preparing students for higher education within upper secondary schools in Cambodia. A study conducted by USAID explored career counseling and post-secondary guidance that is available to Cambodian students (2006). The report, entitled *Jobs for the 21st century: Cambodia assessment*, assessed the current job market in Cambodia, how youth can adapt to face the demands of the growing economy, and provided policy recommendations for the future. The assessment team conducted focus groups across Cambodia consisting of 15-45 students each, totaling 200 students across all the focus groups. The participants' ages ranged from 11-25. The assessment team found that students generally did not give much thought about employment opportunities that were available after graduating secondary school. Additionally, most of the students did not fully comprehend which job skills or what levels of education were necessary for jobs that were available or even how to go about searching for information about job openings. None of the students had any help from school employees in terms of job searching. The idea of receiving job counseling was a foreign concept to the participants, though they expressed interest in receiving that type of assistance. The team also concluded that basic education alone is not sufficient in preparing students to become job market ready (USAID, 2006). It is evident from USAID's assessment that there is a lack of career preparation

knowledge and resources for students who are about to graduate from secondary school. Students express interest in career counseling, but lack the resources and awareness to prepare themselves and obtain the necessary skills to meet the needs of the job market.

Research Question

Aside from this assessment done by USAID, research regarding university and career preparation resources for secondary students in Cambodia is difficult to find. There are many NGOs in Cambodia that focus on providing job skills to impoverished farmers or women who were previously victims of sex trafficking for example. However, as far as programs being implemented in secondary level government schools, few resources are being used to provide students with career and university preparation resources, as evident by the focus groups performed by USAID.

This study seeks to explore what can be done about the issue of lack of awareness among students about post-secondary opportunities. Understanding if and how access to and usage of career and university preparation programs and resources impacts students' plans and expectations is extremely important. If these types of programs increase students' aspirations and expectations for themselves simply by raising awareness about the types of opportunities available, then this type of programming should be capitalized on. This research seeks to answer how access to and usage of career and university preparation resources affects students' post-secondary goals and expectations.

Conceptual Framework

International Development

The link between professional careers and economic growth and development is not unique to Cambodia and its policies. The goal of many of today's international aid organizations

and transnational development agencies is largely to improve peoples' quality of life through poverty reduction and access to basic resources. Because agencies like the United Nations and initiatives like Education for All have placed an emphasis on education as a sustainable means of economic development, it is especially important to evaluate and determine the impact new educational practices and policies are having on countries and citizens worldwide. If the goal of large international organizations, small NGOs, and the Cambodian government itself is to improve quality education as a means for sustainable development, then there must be a way to measure this impact and outcome. Additionally, future economic development is often predicated on students receiving an education, accumulating more financial and economic resources than perhaps their parents were capable of, and subsequently demanding improvements for their own children. Cambodian leadership has bought into the modernization and development agenda, which promises the country and its people greater social mobility and affluence (Ayres, 2000). The development of existing human resources is crucial for the modernization agenda, and the Cambodian government has recognized that link. The Ministry of Education, Youth, and Sport's Strategic Plan for Education states that "the MoEYS vision is to establish and develop human resources of the very highest quality and ethics in order to develop a knowledge-based society with Cambodia" (MoEYS, 2010). There is clear desire on the part of the Ministry of Education to develop the human resources and skills of the population in order to meet these goals. This study operates within this framework of human resource development in determining if and how university and career preparation resources affect potential human resource development in terms of university and career goals.

Education for Development

The Cambodian education system and the government's perception of the system play a large role in the way education is perceived and used by the government and population today. Cambodia is caught within the process of modernization and development, much like other developing nations, which equates development with economic growth (Ayres, 2000). This link between education and development has been entrenched not only by the government, but the populace as a whole. The relationship is even better understood within the context of Cambodia's educational ideology and cultural history, which has not necessarily been reconciled with modern, global demands (Ayres, 2000). The French used education as a means to enmesh their own ideas about government with the traditional Cambodian hierarchical structure, promising not only general economic growth but also wealth and social mobility for the Cambodian people (Ayres, 2000). This promise is still highly desirable today, as young people migrate to urban areas in search of this upward mobility. The modern use of education for the advancement and development of the state dates back to Prince Norodom Sihanouk in the 1960s and his campaign for formal education (Ayres, 2000). Leaders have since continued to use the Cambodian education system as a symbol of benevolent authority, propelling the population towards economic advancement. Cambodian citizens have believed in the promise of education, believing that education and formal qualifications will lead to better and more employment opportunities (Ayres, 2000). The country's citizens, especially those with more stable financial resources, have followed the government's lead where education and the pursuit of higher education and higher-skilled occupations are concerned.

Career Preparation and Human Capital Theory

These ideas coincide with the key points of human capital theory, the primary theoretical framework for this study. Human capital theory suspects that "individuals and societies derive economic benefits from investments in people" (Sweetland, 1996). Investments in human capital have also frequently been linked to poverty alleviation, particularly in the developing world. We have come to a point in which "the primary determinant of a country's standard of living is how well it succeeds in developing and utilizing the skills, knowledge, health, and habits of its population" (Becker, 1995). The context of this research situates the usage of career and university preparation resources as a means for the development of human capital. Students, those from Cambodia included, presumably invest energy and time in "experiences that are expected to increase their prospects for favorable employment" (Sagen, Dallam & Laverty, 2000). Therefore, a school's decision to implement career and university preparation resources and a student's decision to utilize them indicates not only an investment in the human capital of the Cambodian population, but also a student's investment in his or her personal human capital. Because "supplementary career preparation experiences" serve to distinguish one student from another when employment opportunities are scarce (Sagen, Dallam & Laverty, 2000), and education and training promote growth and efficiency (Becker, 1995), a student utilizing these resources is investing in his or her own human capital with the end goal of increased skills and readiness for the job market. In this model, students who utilize career and university preparation resources are investing in the development of their own human capital to achieve higher-skilled jobs and a greater chance for economic advancement.

Socioeconomic Variables as an Alternative to Human Capital Theory

Although investments in human capital is the primary framework for this study (and the assumed reason that career and university preparation resources have been implemented), there are other theories that may provide an explanation for students' post-secondary plans and goals. There is abundant research that situates socioeconomic status as a primary determinant of students' academic achievement and post-secondary success. Much of the research is based in the United States, but differences in socioeconomic status are equally relevant in the Cambodian context. Studies have shown a positive relationship between educational experiences and academic achievement while in school and students' socioeconomic status and social class (Caro, McDonald, & Willms, 2009; Sewell & Shah, 1967; Lareau, 1987). These stratified differences may also follow students as they exit secondary school. Specific studies conducted among university students in the United States have shown that socioeconomic status is a constant factor in determining success in higher education (Sewell & Shah, 1967). As students begin to explore post-secondary academic opportunities, students of a low socioeconomic status may not perceive higher education as a worthwhile investment if they lack the resources to afford tuition (Caro, McDonald, & Willms, 2009). In the case of Cambodia, many students are not in fact able to afford a university education because of their families' limited financial resources. These socioeconomic considerations may play a large role in Cambodian students' post-secondary plans and goals.

There has also been research conducted to examine the knowledge gap that exists between people of high and low socioeconomic status. The knowledge gap theory is used specifically to examine how mass media information is absorbed and spread by different social classes (Tichenor, Donohue, & Olien, 1970), but may also apply to the way non-media

information is spread across groups in Cambodia. Studies have shown that information spreads more quickly across segments of the population that have a higher socioeconomic status as opposed to a lower socioeconomic status (Tichenor, Donohue, & Olien, 1970). In this model, higher socioeconomic status students in Cambodia theoretically have more access to and awareness of information about post-secondary career and academic opportunities. Parents' education, often a measure of overall family socioeconomic status, may also contribute to students' access to information, as "education generally indicates a broader sphere of every day activity, a greater number of reference groups, and more interpersonal contacts" (Tichenor, Donohue, & Olien, 1970). Rather than simply having access to university and career preparation resources while in school, socioeconomic status and family education may play a significant role in Cambodian students' plans and goals for their futures.

Description of Career and University Preparation Resources

If Cambodian youth are expected to be prepared for professional, knowledge-based careers, or at least be well informed about the steps to achieve a professional career, then access to adequate university and career preparation related materials and resources may affect students' readiness to enter the job market at a professional level. I define a career or university preparation resource as anything which aids students in awareness of post-secondary opportunities or prepares students for post-secondary academic or career-related endeavors. Career and university preparation resources are ubiquitous in developed countries. Students in the United States for example are provided with information about university options, potential career fields, proper resume construction and the like from the time they begin high school. In countries like Cambodia, where a large percentage of the student population does not even complete school at the secondary level, money and energy that could be spent in improving post-

secondary resources is often spent on improving primary or lower secondary level education. There is however increasing amounts of these types of resources available, regardless of how limited they are, and they take several forms.

This study specifically explores several types of resources available to Cambodian high school students – printed materials, guest speakers, field trips to local universities or businesses, and attending career fairs or forums. Printed materials often take the form of brochures and pamphlets from local universities and technical colleges, and offer basic information like tuition costs and available areas of study. Aside from these physical resources, some schools and organizations have begun implementing a more program-based system to expose students to university and career opportunities. Some schools invite guest speakers to the schools to discuss different career paths and have begun to take students on field trips to local businesses and universities. The hope is that students will gain more information from this type of experiential activity. Career fairs and forums, as well as the other types of resources, are often coordinated by NGOs operating in Cambodia and include everything from university information to information about immediately available jobs in the hospitality industry. It is important to note that a majority of students in Cambodia never have access to these types of career and university preparation resources during the course of secondary school. Despite these resources becoming more available in recent years, there is still a huge lack of overarching career and university preparation support that is offered to students.

Link between University Education and Career Aspirations

This study is concerned with not only the simple school-to-work transition, but also the transition to university education. The increasing number of higher education institutions within Cambodia and the "expansion of public fee-paying programmes indicate a strong social demand

for higher education" (Ahrens & Kemmerer, 2002), most likely a result of the government's continued push for education and higher education for economic development. A university education has long been valued as a means for a higher status, more economically sound career, and research confirms the economic value of a university degree (Sagen, Dallam & Laverty, 2000). Studies have shown that even within Cambodia, youth that hold university degrees spend less time transitioning from school to work than students who have not completed any tertiary education (Kanol, Khemarin & Elder, 2013). In many ways, a university degree can be viewed itself as an investment in one's own human capital, leading students to more stable, higher-skilled career opportunities. This is not to say that a university degree guarantees a student gainful employment upon completion of the program. In fact, many Cambodian university graduates have expressed difficulty in obtaining the jobs they want, citing that the broad and sometimes non-rigid structure of their academic program has not properly prepared them for jobs within their field (Chamroeun & Brady, 2008). Despite this mismatch between skills and job attainment that a university education does not necessarily solve, tertiary education enrollment rates in Cambodia continue to steadily rise (World Bank, 2013). There appears therefore to be at least a perceived value in a university degree with Cambodian society. This study therefore seeks to explore not only the impact that resources have on students' career aspirations, but also on their goals and expectations for higher education.

Research Hypotheses

The goal of this study is to explore how access to and usage of career and university preparation resources affects students in their post-secondary endeavors. Based on awareness, access, and usage of resources signifying an investment in human capital and therefore having a

positive relationship with post-secondary goals and expectations, the following research hypotheses were made:

1. Students who actively used career and university preparation resources during high school are more likely to cite enrolling in and attending university as a post-secondary goal.
2. Students who actively used career and university preparation resources perceive their career goals to have a higher level of prestige than students who do not use career and university preparation resources.

If achievement as it relates to plans, goals, and expectations is more closely related to socioeconomic status than to investments in human capital, then the following relationships were proposed:

1. Students whose parents have achieved a higher level of education are more expected to attend university than students whose parents have little to no formal education.
2. Students of a higher socioeconomic status are more likely to be expected to attend university by friends and family.
3. Variables associated with socioeconomic status (i.e. having electricity at home, having family members who speak English, etc.) are significantly related to students' plans for attending university.

This study primarily examined the two research hypotheses, but also examined relationships between socioeconomic variables that may be in conflict with a human capital framework.

Methodology

Sample

The sample consisted of 210 Cambodian students, primarily in twelfth grade, living in and around the city of Siem Reap located in Siem Reap province. Siem Reap province is located in northeast Cambodia, is the largest province by land area, and is currently the province with the highest population growth rate ("Council for the Development of Cambodia," 2014). Siem Reap is a particularly interesting place to study youth and their transition from school to work because although the city of Siem Reap is growing rapidly in terms of tourism and international visitors, 36.6% of the province's population still lives below the international poverty line ("Poverty Alleviation Cambodia," 2014). In order to obtain a more representative sample, the sample was split between three different upper secondary schools in and around the area of Siem Reap. 37 students attended a school approximately one hour away from the city center and located in what is considered a rural area. 37 of the student participants attended a semi-rural school, which is approximately 30 minutes from the city center. 136 students attended an urban school, which is located in the city of Siem Reap. Students at the semi-rural school had known access to career and university preparation resources through a career and university preparation program supported by a local NGO. This program included access to printed materials, guest lectures, career and university related field trips, and an annual career fair. Whether the students from the rural and urban schools had access to career and university preparation resources was unknown at the time the sample was chosen. The upper secondary schools for the study were selected based on a convenience sample, the semi-rural school in particular because of the existence of the career and university preparation program and the continual partnership with Caring for Cambodia (and hence Lehigh University). The remaining two high schools were selected in

order to compare socioeconomic status as it relates to school location. Many students from urban areas have greater family and financial resources that could be compared to students from the rural and semi-rural schools. The distribution of the sample across three different school environments provided more variety in socioeconomic status among the participants. Once the schools were selected, every 12th grade student was asked to participate in the study to create the greatest sample possible. 210 of the 600 surveys that were distributed were returned. Basic descriptive statistics for the sample are shown below.

Table 1

Descriptive statistics of participants

Variable	N (%)	Mean (SD)	Range
School location			
Urban	136 (64.76)		
Rural	37 (17.62)		
Semi-rural	37 (17.62)		
Gender			
Female	118 (56.46)		
Male	91 (43.54)		
Age		18.57 (1.4)	16-23
Grade			
Eleventh	42 (20)		
Twelfth	160 (76.19)		
Unknown	8 (3.91)		
Number of siblings		4.14 (1.96)	1-10
Have electricity at home			
Yes	148 (71.84)		
No	58 (28.16)		
Transportation to school			
Bike	134 (64.11)		
Motorcycle	36 (17.22)		
Walk	30 (14.35)		
Ride with others	9 (4.31)		
Study English outside of school			
Yes	184 (88.04)		
No	25 (11.96)		
Self-rated English proficiency level (10 point scale)		5.33 (1.92)	
Have computer at home			
Yes	68 (33.50)		
No	135 (66.50)		
Have internet access at home			
Yes	34 (16.59)		
No	171 (83.41)		
Have cell phone			
Yes	163 (80.69)		
No	39 (19.31)		

Procedure

Before graduating, the entire 12th grade class in each of the three schools from which the sample was drawn was asked to complete the Graduating Student Survey (see Appendix A for a copy of the Graduating Student Survey). Due to it being close to the end of the school year and the students leaving school early in order to study for the National Exam, a total of 210 responses were collected. The survey was translated into Khmer (the Cambodian language) by a translator prior to distribution to the students. The students were asked to complete the survey during class time to prevent students from sharing answers or opinions with each other while completing the survey. Before distributing the survey, I met with the administrators of each of the three schools in order to explain the purpose of the survey and how it was to be completed. These administrators then disseminated the surveys to teachers to give to their students to complete.

The primary instrument for this study was the Graduating Student Survey, which was adapted from a previous survey created by Lehigh University to evaluate Caring for Cambodia's career preparation program. The goal of the Graduating Student Survey was to gather basic demographic data, assess students' access to and usage of career and university preparation resources, and to determine students' plans and expectations for their future. Part I of the survey requested basic demographic data – age of the student, number of siblings, education level of parents, and other measures to gauge socioeconomic status (e.g. presence of electricity at home, having a computer or TV at home, and mode of transportation to school). This section allowed a better understanding of the socioeconomic status of the students and the composition of their families. Sections II through IV measured other variables that could potentially impact the post-secondary plans, goals, and expectations of the students. Section II dealt with academic scores and English usage and proficiency. Students were asked to provide their semester scores and

their English scores so that I could observe any effect that existing academic achievement and proficiency in English had on goals and/or success. Asking students about receiving after-school English tutoring and having them rate their level of English proficiency provided an idea of their English proficiency level. Section III covered computer and technology usage. Students were asked if they owned a computer and how often they used it. English and computer proficiency are things that are associated with success and marketability in Cambodia, so being able to better understand these variables was crucial in determining the impact of career and university preparation resources. Section IV dealt with travel and resources, asking students whether they have traveled outside of their village or outside of Siem Reap province. This gave an indication as to the students' awareness of outside areas and family resources.

The remaining sections of the survey assessed students' usage of career and university preparation materials and resources and their post-secondary plans and expectations. Section V asked students if they used career and university preparation resources and attempted to determine how students engage it. They were asked which resources they have used, if any, and how many field trips, guest speaker events, or career fairs they have attended, if any. Section VI measured post-secondary career and university plans and expectations, with separate sections inquiring about university plans and expectations and plans for future careers. The final section requested contact information from the student participants so that students could be contacted for future data collection and follow-up.

After the students completed the surveys in class, the surveys were collected from the students. The survey responses, which were written in Khmer by the students, were translated into English and input into data analysis software with the help of a Cambodian university student in Phnom Penh who had been trained in translation and data coding. The data from the

student survey responses was then statistically analyzed to determine what relationships exist between usage of career and university preparation resources and students' post-secondary plans and expectations.

Variables

The primary variables used in the process of data analysis to test the research hypotheses were as follows:

- *Usage of career and university preparation resources* is primarily measured by asking students if they utilized career and university preparation resources at their school ('No'=0, 'Yes'=1), attendance of academic or career-related guest-lecturer sessions ('No'=0, 'Yes'=1), participation in career preparation related field trips ('No'=0, 'Yes'=1), attendance at career fairs/forums ('No'=0, 'Yes'=1), and whether or not students used resources for vocational, job, and university information ('No'=0, 'Yes'=1).
- *University plans* were measured by whether or not students planned on attending university or pursuing a different post-secondary opportunity ('Planning on attending university'=0, 'Planning on pursuing a different opportunity'=1).
- *University expectations* were measured by students responding to whether or not people in their lives expected them to attend university. Students were asked individually if their mother, father, siblings, teachers, relatives, and they themselves expected them to continue to university. Responses were coded 0 for 'No' and 1 for 'Yes'.
- *Perceived future career prestige* was measured using a ten-point scale. Students were asked to list what their future career goal was and rank the prestige of that career on this

scale, with one being the least prestigious and ten being the most prestigious. This scale attempted to measure if a student's career aspirations were perceived to be high or low.

There are several variables that exist that may also have an effect on students' career and university plans and expectations – family wealth and resources, computer proficiency, and English proficiency. Therefore, these variables were also examined during the data analysis phase and were measured in the following ways:

- *Family wealth and resources* were measured by several individual variables, including having electricity, a television set, or a computer at home ('No'=0, 'Yes'=1), what mode of transportation students used to get to school ('Bike'=1, 'Motorcycle'=2, 'Walk'=3, 'Ride with others'=4), and whether or not students had traveled to the capital city, Phnom Penh ('No'=0, 'Yes'=1).
- *Parents' education level* was measured by two separate categorical variables, one measuring mother's education level and one measuring father's education level. Students were asked to indicate the highest level of education completed by each of their parents, choosing from 'No schooling', 'Primary school', 'Secondary School' (i.e. lower secondary school), 'High school' (i.e. upper secondary school), and 'Above high school.'
- *Computer proficiency* was measured by how often students used a computer at home (Every day, Several times per week, Several times per month, Once or twice per month, and Never) and how often students used the internet at school and at home (Every day, Several times per week, Several times per month, Once or twice per month, and Never).
- *English proficiency* was measured by several individual variables measuring whether or not students took extra English classes outside of school ('No'=0, 'Yes'=1), or had family members who spoke English ('No'=0, 'Yes'=1).

This study incorporates analysis for certain variables that also have the ability to impact career and university expectations and attainment. While the goal of career and university preparation is on providing career and university information, there is also the desire on the part of MoEYS to expose students the skills that are necessary and/or desirable for university enrollment or employment. These skills include computer and English proficiency. As the world becomes increasingly technologically connected, employers are beginning to demand basic computer proficiency of their potential employees. Lex Borghans and Bas ter Weel concluded that although computer skills may not have a bearing on actual wages, the ability to use a computer provides significant returns in the labor market (2004). This has become the reality for people seeking employment in the 'developed' world, where technology has become essential to daily communication. However, this trend does not limit itself to the developed world. Cambodia's Ministry of Education, Youth, and Sport has implemented initiatives to better use and teach students information and communication technologies in accordance with its Education Strategic Plan for 2009-2013 (MoEYS, 2013). MoEYS along with development organizations within Cambodia recognize the need for students to have basic computer and IT skills in order to be competitive in the job market and to succeed in university. University age students themselves from Cambodia also view technology as very important for school and work, yet many feel that they are proficient in only the most basic computer skills (Elwood and MacLean, 2009).

A basic knowledge of English and even English proficiency is also becoming increasingly important in terms of labor market participation and acceptance into universities across the world. Many argue that today there is a definitive linguistic hierarchy, with English being the most powerful for political, economic, and cultural reasons (Phillipson & Skutnabb-

Kangas, 1996). English is often viewed as a way for citizens to participate in the political, educational, social, and economic life of not only their own country, but also of the world (Desai, 2001). Because of the pervasiveness of English and the realities of the world system, English has become almost a necessity for students across the globe. Many governments, including MoEYS, implement English classes sometime during the course of basic K-12 education. Parents have also been known to push for entire curricula in English because they believe it will help their child achieve a higher level of English proficiency, which is often seen as a pathway to academic and financial success (Heugh, 2000). Knowledge of English is also important within the context of Cambodia's place in ASEAN, as the ASEAN charter states that English will be the working language of ASEAN (ASEAN Secretariat, 2008). In addition, the "Roadmap for an ASEAN Community: 2009-2015" outlines the English language as a key part of human development for the member states, supporting the "citizens of Member States to become proficient in the English language, so that the citizens of the ASEAN region are able to communicate directly with one another and participate in the broader international community" (ASEAN Secretariat, 2009). With the emphasis that ASEAN is placing on the English language as the lingua franca of the region, proficiency in English will becoming increasingly crucial for success within that system and region.

Results

University Plans and Expectations

Before determining any relationships between the usage of career and university preparation resources and career and university expectations, it is important first to understand what resources students used and what they used these resources for. Figure 1 and Figure 2 show

the percentage of students who reported using career and university preparation resources by gender and by school, respectively.

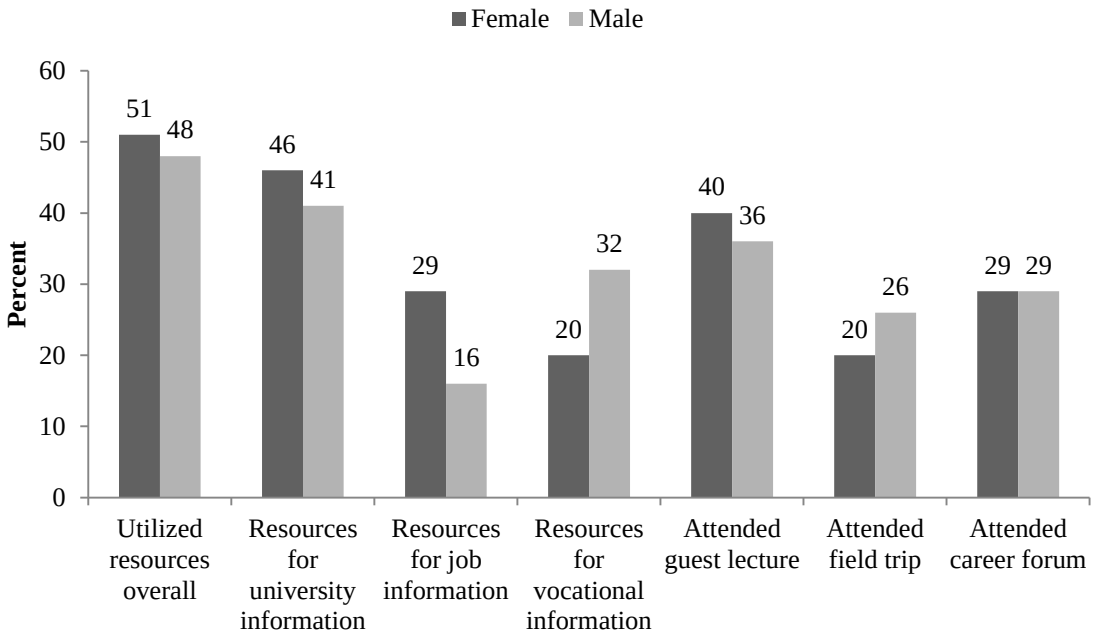

Figure 1. Percent of students using different resources and using resources for different purposes by gender.

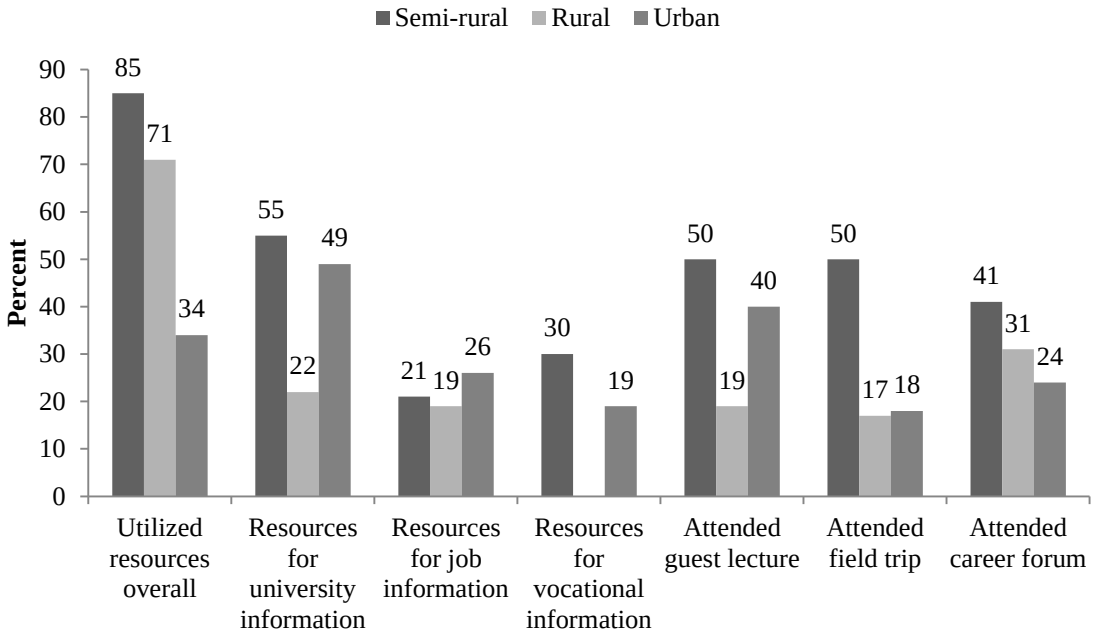

Figure 2. Percent of students using different resources and using resources for different purposes by school location. Percent of students using 'Resources for vocational information' was not calculated for the rural school due to low response rate.

The data from the Graduating Student Survey indicated that female students utilized career and university preparation resources overall slightly more than male students and that the semi-rural school used resources more than either the rural or the urban school.

Several statistical tests were conducted to test the research hypotheses. To test the connection between resources and post-secondary plans, a chi-squared test was conducted to see if there is a relationship between usage of career and university preparation resources and citing enrolling in and attending university as a post-secondary plan. The test was run between a variety of independent variables and post-secondary plans. A chi-squared test is most appropriate because it allows for comparison between two different categorical variables, in this case whether or not students plan on attending university ('yes' or 'no') compared to several

independent categorical variables measuring socioeconomic status, computer usage, and English proficiency. The results of the chi-squared analysis are shown in the Table 2.

Table 2

Chi-squared test between independent variables and plans to attend university

	Yes	No
	% (N)	% (N)
Usage of Resources		
Utilized career/university preparation resources	48.75 (39)	52.58 (51)
Used resources for university information	42.86 (27)	48.78 (40)
Used resources for career information	15.15 (1)*	29.89 (26)
Used resources for vocational information	14.52 (9)*	28.75 (23)
Attended guest lecture	40.91 (27)	37.87 (34)
Attended career field trip	25 (17)	24.18 (22)
Attended career forum	28.17 (20)	27.66 (26)
Socioeconomic Status		
Have electricity at home	78.31 (65)*	64.65 (64)
Have computer at home	37.80 (31)	25.77 (25)
Traveled to Phnom Penh	63.41 (52)*	44.55 (45)
English Proficiency		
Take English classes outside of school	92.77 (77)	84.31 (86)
Family members speak English	44.05 (37)*	29.59 (29)
Computer Proficiency		
Use computer at home every day	13.58 (11)*	4.17 (4)
Use internet every day	18.29 (15)*	8.51 (8)

*$p<.05$, N=210

A logistic regression analysis was considered to determine the relationship between each of the above variables with students' plans to attend university, but was not used due to the small sample size. Further examination of computer proficiency variables shows that students who attended the urban school used computers at home most frequently.

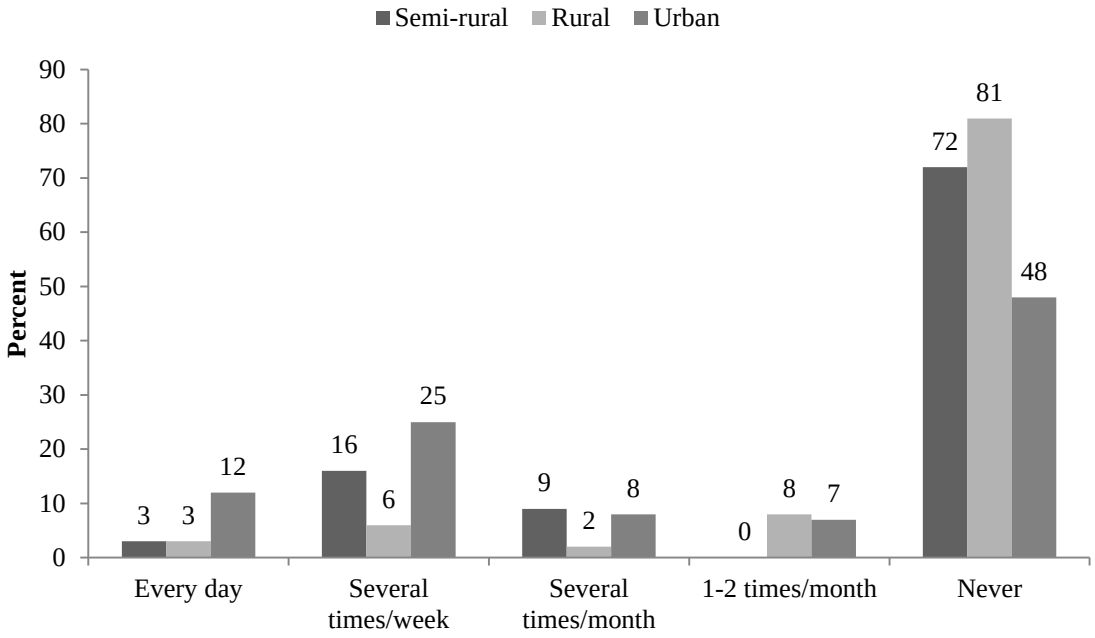

Figure 3. Percent of students who use a computer at home by frequency and by school location. $X^2(8, N=198)=19.63$, $p<.05$.

Many of the key independent variables measuring usage of career and university preparation resources were found not to be significant. Only two measures – utilizing resources for career information, $X^2(1, N=153)=4.53$, $p<.05$, and utilizing resources for vocational information, $X^2(1, N=142)=4.05$, $p<.05$, were found to be significantly related to post-secondary plans. Those who utilized resources for career and vocational information were more likely to cite not enrolling in university rather than enrolling in university as a post-secondary goal. Several other variables were found to be significantly related to post-secondary university enrollment plans, and will be discussed further in the discussion section.

Student participants were also asked what their own and their family's expectations were for them concerning enrolling in university. Participants responded either 'yes' or 'no' to questions asking whether or not people in their lives expected them to attend university, and

responses were coded 0 for ‘no’ and 1 for ‘yes’. A variable was created from 6 items: mother, father, siblings, teacher, relatives, and personal expectations of continuing onto university. The internal consistency (Cronbach’s alpha) of this created variable is measured at .81. An independent samples t-test was conducted between university expectations and several key independent variables. A t-test was most appropriate because it is a test that is used to compare the mean of two different groups based on a continuous dependent variable. More specifically, the dependent variable, university enrollment expectations, is a continuous variable with a score ranging from 0 to 1, and the independent variables (e.g. having a TV at home, using career and university preparation resources, etc.) are categorical, with a response of either ‘yes’ or ‘no’. The t-test showed if there was a significant difference in expectations placed on students depending on whether or not they answered ‘yes’ or ‘no’ to certain questions. The interpretation of the results is based on the *p*-value and the mean values of the groups being compared. A *p*-value of less than .05 indicates a statistically significant result. The results are shown in Table 3.

Table 3

Effect of independent variables on university enrollment expectations

	Expectation for university enrollment		
	M	SD	t-test
Utilization of resources			
Yes	0.85	0.03	1.61
No	0.91	0.02	
Have electricity at home			
Yes	0.92	0.02	-3.29**
No	0.78	0.04	
Have TV at home			
Yes	0.89	0.02	-2.09*
No	0.8	0.05	
Have computer at home			
Yes	0.93	0.02	-2.54*
No	0.85	0.02	
Travel to Phnom Penh			
Yes	0.91	0.02	-2.12*
No	0.84	0.03	
Study extra English			
Yes	0.9	0.02	-2.13*
No	0.76	0.06	
Family member speaks English			
Yes	0.92	0.02	-2.58**
No	0.85	0.02	

Note. *p<.05, **p<.01

There was a significant effect for six of the seven variables listed above. There is a significant relationship between having electricity at home, $t(74.4)=-3.29$, $p<.01$, having a TV at home, $t(207)=-2.09$, $p<.05$, having a computer at home, $t(166)=-2.54$, $p<.05$, traveling to Phnom Penh, $t(179)=-2.12$, $p<.05$, taking extra English classes, $t(27)=-2.12$, $p<.05$, having a family member who speaks English, $t(202)=-2.58$, $p<.01$, and having increased expectations for university enrollment. Students who responded yes to any of these variables were more like to be expected to attend university by their teachers, family, and relatives.

A one-way analysis of variance (ANOVA) was conducted to determine whether or not the education level of a student's parents had any effect on the expectations placed on a student to attend university. ANOVA tests are used to compare a categorical independent variable consisting of more than two groups with a continuous dependent variable. An ANOVA test was most appropriate because it would show any difference in the average expectations (dependent continuous variable) placed on students between different levels of education obtained by their parents (independent categorical variable). The interpretation of the results is based on the *p*-value and the mean values of the groups being compared. The results are shown in Table 4.

Table 4

University expectations by parents' education level

	University attendance expectation		
	M	SD	F
Mother's education level			
No school	0.88	0.18	3.58**
Primary school	0.79	0.29	
Secondary school	0.94	0.18	
High school	0.92	0.23	
Post-secondary	1	0	
Father's education level			
No school	0.82	0.23	2.75*
Primary school	0.83	0.27	
Secondary school	0.86	0.27	
High school	0.93	0.17	
Post-secondary	0.98	0.08	

Note. *$p<.05$, **$p<.01$

Results show that both mother's education level, $F(4, 185)=3.58$, $p<.01$, and father's education level, $F(4, 185)=2.75$, $p<.05$ had a statistically significant relationship with the overall expectations placed on a student to attend university. A post hoc analysis of mother's education

level using Bonferroni's method showed a significant difference in expectations on a student between a mother completing only primary education (M=.80, SD=.29) and a mother completing lower secondary school (M=.94, SD=.18). The same post hoc analysis conducted on father's education level did not show a statistically significant difference between any of the specific groups, although the overall model was significant. The results show that the educational attainment of a student's parents is related to expectations placed on the student to attend university.

Career Goals and Aspirations

To test the second research hypothesis, an independent-samples t-test was conducted to compare students' perceived future career prestige (measured on a ten point scale) in usage of career and university preparation resources and non-usage of career and university preparation resources conditions. A t-test was most appropriate because the test would show if there was a significant difference in perceived level of prestige for desired careers (continuous dependent variable) between students who used career and university preparation resources and those who did not (dichotomous categorical variable). The results of the t-test are shown in Table 5.

Table 5

T-test between utilization of resources and career prestige

	Level of career prestige		
	M	SD	t-test
Guest lecture			
Attended	6.77	0.23	-3.13*
Did not attend	5.77	0.21	
Career forum			
Attended	6.91	0.25	-3.29*
Did not attend	5.79	0.19	
Career field trip			
Attended	6.63	0.31	-1.88
Did not attend	5.95	0.19	

*$p<.05$

There was a statistically significant difference in perceived career prestige between students who attended a guest lecture (M=6.77, SD=0.23) and students who did not attend a guest lecture (M=5.77, SD=0.21), $t(144)=-3.13$, $p<.05$. Additionally, students who attended a career forum (M=6.91, SD=.025) cited a higher level of perceived future career prestige than students who did not attend a career forum (M=5.79, SD=0.19), $t(149)=-3.28$, $p<.05$. However, there was no significant relationship between attending a career or university related fieldtrip and perceived career prestige.

A correlation test was also conducted to see if there was a relationship between the level of usage of career and university preparation resources and level of perceived future career prestige. This type of statistical test revealed whether or not there was a relationship between these two continuous variables (i.e. As usage of resources increases, does perceived career prestige increase as well?) 'Level of resource usage' is a combined variable consisting of yes or no responses to usage of career and university preparation resources, usage of resources for

university information, usage of resources for career information, attendance of guest lectures, attendance of career forums, and participation in career/university related field trips. In the scale, the value of 1 represents complete usage of all resources for all purposes (i.e. a student responded 'yes' to each of the questions that were incorporated into the variable). The value of Cronbach's alpha, or measure of internal consistency between each element of the combined variable, is equal to .65. Table 6 shows the results of the correlation test.

Table 6

Correlation between level of resource usage and perceived career prestige

Measure	Career prestige
Resource usage	0.27*

*p<.01

The results of the correlation test show that a more comprehensive usage of career and university preparation resources is positively related to a higher level of perceived future career prestige.

Discussion

University Enrollment Plans

The first hypothesis of this study stated that students who actively used career and university preparation resources in high school, were more likely to cite enrolling in university as a post-secondary plan. This however was largely not the case for the students participating in this study. In all measures for usage of career and university resources, more students planned on not enrolling in university than planned on enrolling in university. It is also important to note that a majority of students, 60%, were not planning on enrolling in a four year university upon high school graduation. The results showed that this tendency for not planning on attending university held true for usage of each of the types of career preparation resources available to students. The

only two measures that were significant, usage of resources for career information and usage of resources for vocational information, showed a positive relationship between utilizing career and vocational information and not planning on enrolling in university. This could mean that students who used resources specifically to find out more information about non-university options were more likely to forgo university all together in favor of directly entering the job market.

Several other variables measuring socioeconomic status and computer and English proficiency, in contradiction with a human capital framework, were found to have a significant relationship with students' desire to enroll in university. Both having electricity in the home and traveling to the capital city, Phnom Penh, were associated with an increased likelihood of planning to enroll in university. Both of these measures may indicate higher socioeconomic status of student participants. In a country where household electricity is not standard, the presence of electricity in the home often signals greater financial resources belonging to the family. The survey item regarding travel to Phnom Penh was an attempt to operationalize exposure to the world beyond village boundaries as well as financial resources of the family, as travel to and from Phnom Penh (approximately six hours from the city where the study was conducted) is considerably expensive for many Cambodian families. These relationships may indicate that students that have access to more familial resources, including financial resources, are more likely to have a desire to continue to tertiary education. Perhaps higher socioeconomic status represents a higher pressure on students to continue their education beyond high school in order to prosper economically. When considering travel to Phnom Penh, perhaps students who had traveled to the city were exposed to more possibilities and information than their counterparts who had not strayed far from their local villages. The capital city, where many of the nation's better universities are located, including the country's oldest university, Royal

University of Phnom Penh, is an area of increasing economic prosperity and access to resources not previously available in Cambodia. It is possible that students who had seen this type of environment desired to pursue higher education in order to achieve the type of economic prosperity seen in Phnom Penh.

Some aspects of English and computer proficiency also had a significant relationship with a student's plan to enroll in university upon high school graduation. Although taking English classes outside of school, something which is relatively common in Cambodia, was not related to increased desire to enroll in university, having a family member who spoke English was significantly related to the likelihood of students citing university enrollment as a post-secondary plan. Having a family member that speaks English not only points to the possibility that students are more proficient in the language, but also that their families may be of a higher socioeconomic status. In a region where knowledge of English is valued and often equates to greater economic opportunities, students with family members who speak English may come from a family with more financial resources. The frequency of computer and internet usage among students was also significantly related to whether or not students planned on enrolling in university upon graduation. Among students who used the internet and computer every day, there is a greater chance that students will plan on enrolling in university as opposed to choosing another option. This could be due to a variety of factors. Perhaps students who frequently use the computer and the internet are more confident in their intellectual abilities and practical technology skills and are therefore more likely to pursue higher education. This relationship may also be contributed to the greater access to knowledge and information about different opportunities that are afforded to individuals who know how to access digital information.

Plans versus Expectations

Because this study was concerned with not only students' post-secondary plans but also with students' aspirations and expectations, secondary analysis was conducted comparing expectations for attending university with several key variables that measured usage of resources and socioeconomic status. When asked what their family and teachers' expectations were for them in terms of continuing on to university, many of the students reported that most people in their lives expected them to go to university. Additionally, a majority of the students, 98% (N=205), reported that they themselves expected to go to university. This percentage was noticeably higher than the 45% of students who planned on attending university after graduating from high school. There is clearly a discrepancy between what students expected from themselves and what they were actually planning to do, or at least a conceptual difference between plans and expectations. This also could mean that students do not plan on attending university right away, but expect that they will obtain a university education at some point in their lives. Most noticeably, the utilization of career and university preparation resources had no bearing on the expectations placed on students to attend university by their teachers, family, and relatives. However, many of the factors associated with socioeconomic status did have a statistically significant relationship with university attendance expectations. For example, having electricity at home, having a TV at home, having a computer at home, and traveling to Phnom Penh all corresponded to an increased expectation for a student to enroll in university. If a student took English classes outside of school or had a family member who spoke English, this also signified a higher expectation for university attendance. A one-way analysis of variance also showed a significant relationship between parents' education level and the university attendance expectations placed on a student. The results indicate not only a relationship between

expectations and socioeconomic status, as higher levels of education often equate to greater economic opportunities, but also a potential link between family and educational legacy. Perhaps if a student's parents attended university, then that student is automatically expected to attend as well by their relatives and peers. Further research should be done to better understand familial lineages in terms of educational attainment. These results again signified a stronger relationship between university plans and expectations and socioeconomic status of the students' families than between university plans and usage of career and university preparation resources.

Future Career Goals

This study was also concerned with the future career goals and aspirations of students. It is important first to understand the types of careers desired by students in the area of Siem Reap. Students cited a variety of career aspirations, from doctors, to farmers, to development officers. Twenty eight separate careers were recorded and regrouped according to the International Labour Organization's International Standard Classification of Occupations (ILO, 2007). The results of these groupings provided valuable information about the types of careers that Cambodian high school students desire.

Table 7

Desired career by gender

	Female	Male	Total
Career Category	% (N)	% (N)	% (N)
High-skilled, non-manual			
Managers	5.08 (6)	8.79 (8)	6.70 (14)
Professionals	54.25 (64)	45.05 (41)	50.24 (105)
Associate professionals	0.85 (1)	-	0.48 (1)
Low-skilled, non-manual			
Clerical Support	-	-	-
Service and Sales	16.95 (20)	12.09 (11)	14.83 (31)
Skilled, manual			
Skilled agriculture	0.85 (1)	2.20 (2)	1.44 (3)
Crafts and other trades	2.54 (3)	3.30 (3)	2.87 (6)
Plant and machine operations	-	-	-
Elementary	0.85 (1)	3.30 (3)	1.91 (4)
Unsure	18.64 (22)	25.27 (23)	21.53 (45)
Total	100 (118)	100 (91)	100 (209)

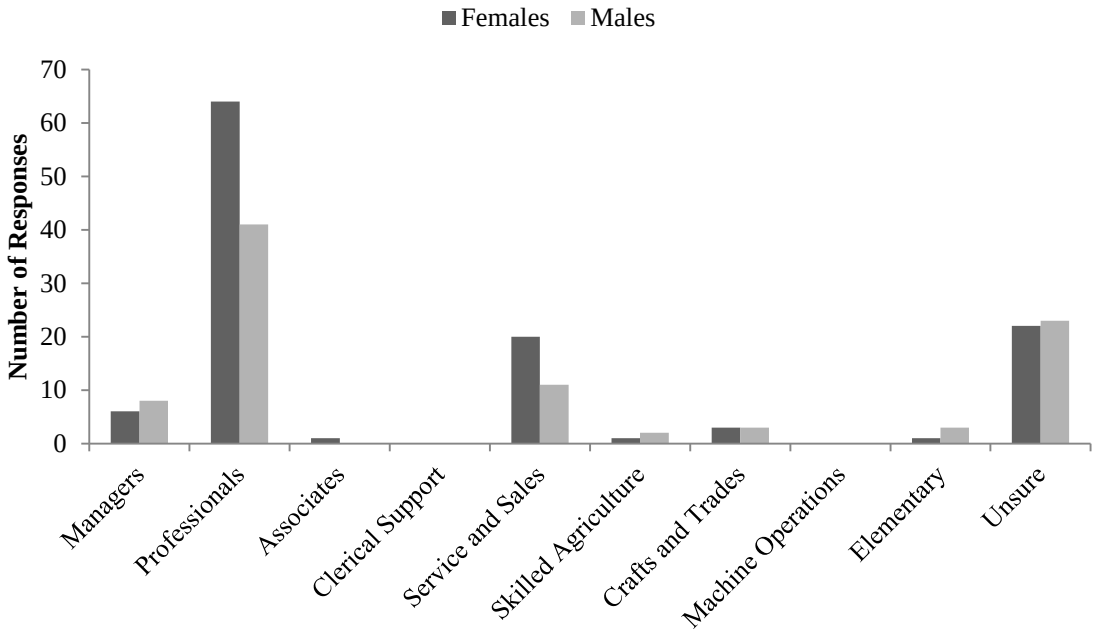

Figure 4. Desired careers of students by gender.

According to survey responses, a majority of male and female students desired professional careers. These types of careers include doctors, lawyers, teachers, accountants, marketing professionals, and development officers, among others. The percentage of students desiring these types of careers (50.24%) is similar to the percentage of students who planned on enrolling in university (45.15%). Very few students desired either manual or elementary jobs. This is perhaps a reflection of the increased emphasis the Cambodia government, and in turn the general population, is placing on skilled careers that require higher levels of education. Given the status of Siem Reap as the primary tourist hub of Cambodia and the prevalence of job opportunities within that sector, a relatively low number of students planned on pursuing jobs in the service and sales sector compared with the professional sector. Among the most popular individual career responses were hotel/tourism, accounting, teaching, doctor, and teaching English literature.

Additional observations were also made aligning career aspirations by school location. Based on the data, students from urban areas appeared to be of a higher socioeconomic status than students from either rural or semi-rural schools. Figures 5 and 6 show the socioeconomic status of students at each of the three schools by both the presence of electricity in the home and mother's education level, respectively.

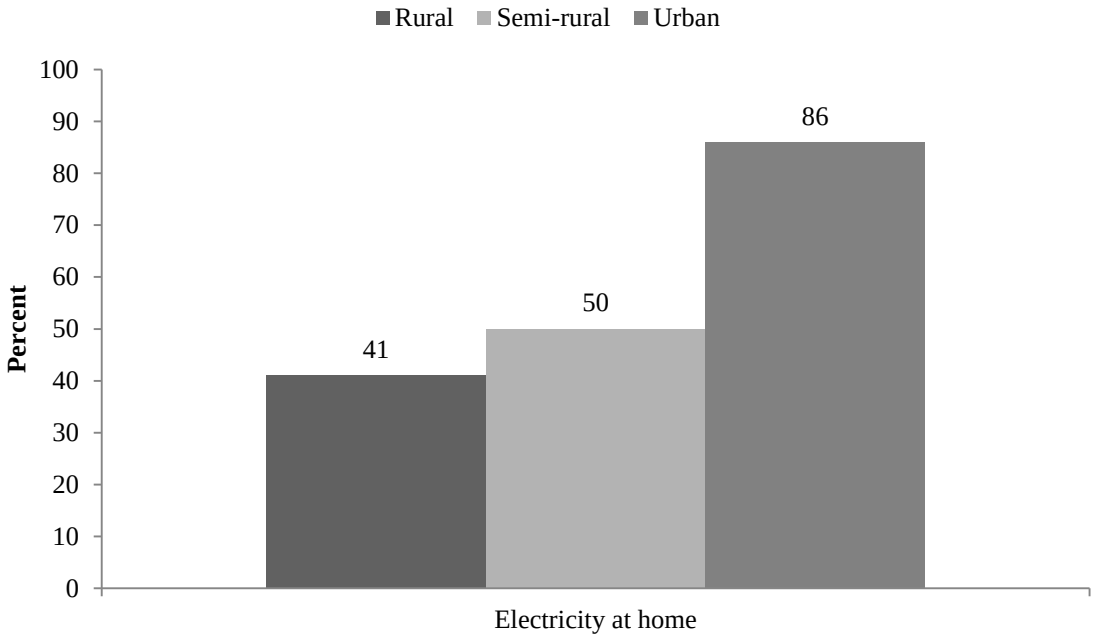

Figure 5. Percentage of students who have electricity at home at each school location. X^2(2, N=206)=40.47, p<.001.

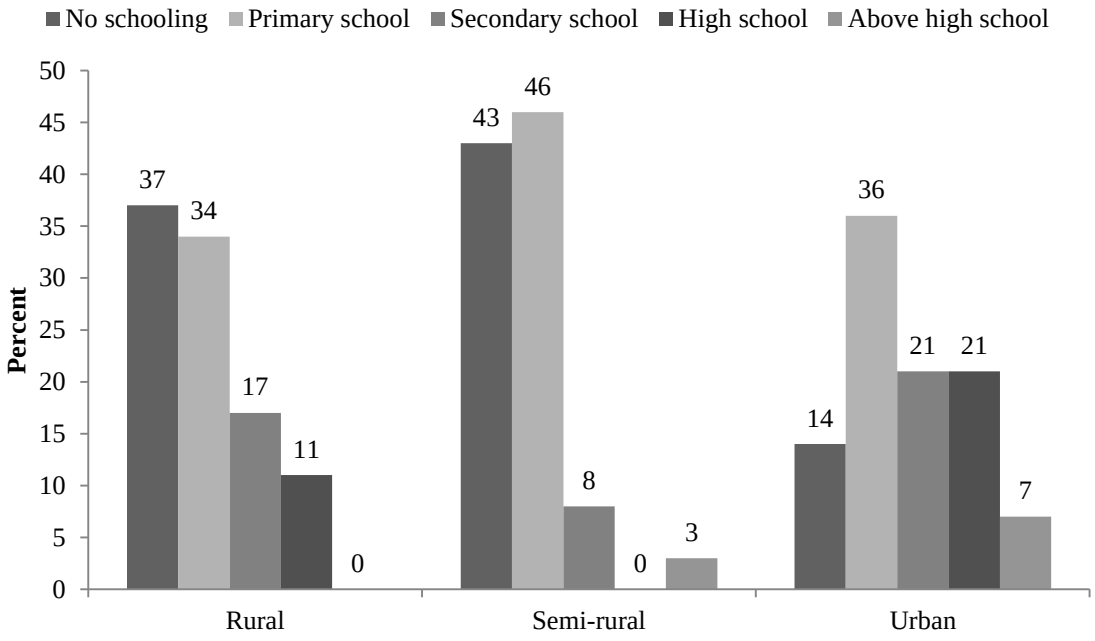

Figure 6. Percentage of mothers with different levels of education by school location. X^2(8, N=190)=27.88, p<.001.

Supporters of the positive effect of socioeconomic status on labor market returns and employment would expect that students in urban areas, due to higher levels of socioeconomic status, would have a greater desire to pursue professional careers than students who lived in rural environments. Table 8 shows the same career categories regrouped for each school according to the larger occupation categories outlined by the International Standard Classification of Occupations.

Table 8

Desired career by school location

	Semi-rural	Rural	Urban	Total
Career Category	% (N)	% (N)	% (N)	% (N)
High-skilled, non-manual	54.05 (20)	62.16 (23)	57.35 (78)	57.62 (121)
Low-skilled, non-manual	13.51 (5)	8.11 (3)	16.91 (23)	14.76 (31)
Skilled, manual	5.41 (2)	5.41(2)	3.68 (5)	4.29 (9)
Elementary	2.70 (1)	-	2.21 (3)	1.90 (4)
Unskilled/Unsure	24.32 (9)	24.32 (9)	19.85 (27)	21.43 (45)

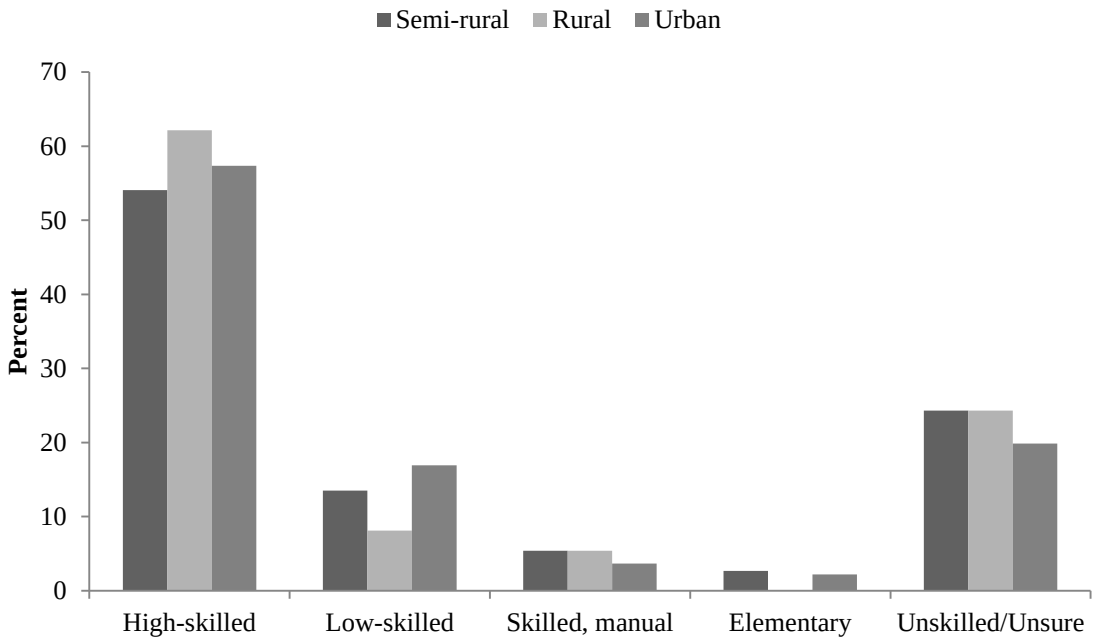

Figure 7. Percentage of students who desired different types of careers by school location.

Again, a majority of the students across the three schools in the study desired high-skilled, non-manual jobs as opposed to low-skilled or manual jobs. As shown in the breakdown of specific career categories, the least popular career goals across the three schools were for manual and elementary jobs. There was no significant difference in the types of careers desired between the three schools. Results show that students from rural areas are just as likely to desire professional and managerial careers as their urban counterparts. Although no relationship was found between the usage of career and university preparation resources and specific career goals, perhaps this points to the increasing availability of general information and resources to individuals across Cambodia, and not just in the urban centers.

Perceived Career Prestige

This study was not only concerned with future career goals of students, but also with the perceived prestige of these goals. The second research hypothesis of this study stated that students who actively used career and university preparation resources would perceive their career goals as having a higher level of prestige than students who did not use career and university preparation resources. The results show a significant relationship between some of the types of career and university preparation resources and perceived level of future career prestige. Both attending guest lectures and attending a career fair/forum were related to an increase in perceived career prestige. Students who utilized these types of resources demonstrated a higher average perceived career prestige, measured on a ten-point scale. These relationships show a possible link between access to and utilization of resources and having higher post-secondary career expectations. If we equate having a higher level of perceived career prestige with having loftier career goals or expectations, then determining what resources affect these goals is important to understand. Only two of the three types of resources available have a positive

relationship with increased career prestige. Although students who attended a career related field trip had a higher level of career prestige than students who did not use this type of resource, the relationship was significant. Perhaps attending guest lectures and career forums expose students to more opportunities and career possibilities than career field trips. Hearing encouraging words from an authority figure (i.e. guest speaker) may have more of an impact on student perceptions of their own potential than merely visiting a university or place of business. The results of the study also show that the overall level of career and university preparation resource usage is significantly related to perceived future career prestige. A one-way analysis of variance showed a significant relationship between how many career and university preparation resources students used and their perceived future career prestige. It is therefore possible that higher career self-expectations are associated with increased availability and usage of resources. Also of note is that the perceived prestige scale does not measure objective career prestige, but rather how students perceive their own future career status. Although it has no objective link, exposure to these types of career and university preparation resources may be the first step towards increasing students' career expectations of themselves.

University Goals versus Career Goals

Overall, the usage of career and university preparation resources was found to be more significantly related to future career goals and prestige than to university enrollment plans and expectations. This could be due to a variety of factors. Perhaps the resources that students are utilizing are more focused on providing job and career information than information about different universities and academic programs. It is also possible that these resources have little to no effect on university plans because of the overall increase in demand for university education among the Cambodian population. No significant relationship was found between plans to attend

university and the level of perceived future career prestige among students. This may indicate that students do not see a link between a university education and the ability to obtain a more prestigious or more economically sound job. Although there is a high demand for a university education among students, it appears they treat future career goals as a separate entity from higher education academic endeavors.

Limitations

As with all research conducted internationally, issues of translation and contextualization present a constant limitation. In order to help mitigate this, the Graduating Student Survey was translated into the native language of Cambodia, Khmer, by a native Khmer speaker who was bilingual in English before it was distributed to the student participants. I wanted to ensure that students understood the survey and could respond in their native language. However, the survey was not back-translated due to time constraints, which may have caused errors in initial survey translation to be overlooked. I also spent a considerable amount of time in Siem Reap, Cambodia at different high schools and in several career preparation centers, and used that knowledge to develop a survey that would make sense based on the resources that were available. Despite these precautionary measures, there was no guarantee that the survey questions were interpreted as intended by the student participants. The survey responses of the student participants then had to be translated back into English for the analysis stage, adding yet another stage where errors in translation could have occurred.

An additional limitation lies in the actual resources utilized by students and how these resources may have been used. Career and university preparation resources are not implemented uniformly across Cambodian high schools and there is no system for ensuring that any resources that do exist are properly maintained. For this study, I had to rely on student reports of what

types of resources they have used in the past. Moreover, even if students did properly use the resources, there is no existing system for quality control of these resources. For example, a student may in fact have attended a field trip to a local university, but the trip may have been poorly planned, or the leader of the trip may not have given adequate information to the students in attendance.

A significant limitation is the relatively low return rate of Graduating Student Surveys. A total of 600 surveys were distributed to schools for completion, but only 210 surveys were returned, indicating a response rate of 35%. This is largely due to the time of the school year that the study was conducted. The Ministry of Education, Youth, and Sport administers national exams for ninth through twelfth grade. Students exiting twelfth grade are required to take the Bac-II, which serves as the national university entrance exam. This exam typically takes place during July (end of the school year) and all students are required to take it. The Graduating Student Survey was administered in late June and early July when many twelfth grade students had already begun skipping school in order to study and prepare for the National Exam. Therefore, when the survey was administered at school, there were fewer students available to complete it.

Implications

This research has the potential to deliver policy recommendations to the Cambodian Ministry of Education, Youth, and Sport based on student usage of career and university preparation resources. Because of the lack of existing research on career and university preparation initiatives in Cambodian high schools, this research provides helpful insight into how these resources are used and what impact they have on student goals and achievement. The Cambodian government is currently focused on a development agenda in terms of improving

education quality and the status of Cambodia compared to the rest of the world. We need to understand student aspirations and expectations for their future in order for the government to implement programs to help students achieve those goals. For example, this study shows that there is little to no link between the existing career and university preparation resources that students use and their plans to enroll in university. If the government wants to maintain the steady increase in university enrollment, then further research needs to be done to determine what programs should be put in place in order to aid students in their post-secondary endeavors. This research also indicates that there may need to be a more standardized implementation of career and university preparation resources that are quality controlled in order to assist students in recognizing and planning for their post-secondary goals.

There is also substantial area for future research regarding the school-to-work transition of Cambodian youth and what most impacts them along that transition. If this research were to be repeated, I would increase the sample size and incorporate students from even more varied socioeconomic backgrounds to further examine the effect of socioeconomic status on students' post-secondary plans and paths. I would also consider incorporating private schools into the sample or examining career preparation centers that are separate from schools to create a more comprehensive picture of the types of resources available to certain groups of students. Perhaps one of the most important opportunities for this type of research is the possibility for longitudinal analysis. If students who originally participated in the study are able to be contacted again since they have graduated from high school, it may show connections between career and university preparation resources or socioeconomic status and the ability of students to actually achieve their post-graduation academic and career goals. For example, if a student responded to the Graduating Student Survey that they planned to enroll in university immediately after high

school but instead is not enrolled in university and is unemployed, then that would indicate a negative relationship between career and university preparation programs and ability to attain post-graduation goals. This research has the capacity to serve as a type of baseline study for future research on students in their school-to-work transition. There is also substantial room for qualitative analysis of the content of these career and university preparation resources that exist in Cambodian secondary schools. Future studies should further evaluate the actual usage and effectiveness of resources in terms of quality and information they deliver.

Additional variables measured in the survey, such as English proficiency and computer skills also provides information on what other factors, aside from career and university preparation resources, have the ability to impact tertiary education and students' ability to find stable careers. Many researchers, and even employers in Cambodia, have a made a case for the importance of learning English and having IT skills. The results of this research have shown that usage of technology for example has at least some impact on students' desire to attend university. Considering that these variables have an impact on students' plans and goals, then perhaps English and computer skills should be emphasized within career and university preparation programs or even as separate skills that are beneficial on the quest for job market success.

Being able to make connections between access to career and university preparation programs and actual student aspirations and achievements is crucial for future policy implementation and improvement. If students desire more for themselves and are able to achieve better, higher salary jobs upon high school graduation or are able to enroll in more prestigious universities as a result of having access to a career or university resource center, then the issue

becomes one of awareness and availability of information. If this is the case, policy makers and schools should make these types of resources available to students.

Conclusion

Given the issues in Cambodia regarding poverty, high dropout rates, unemployment, and limited enrollment in tertiary education, it is crucial for policy makers to develop programs and resources to tackle these issues. Strides have been made in improving education quality, especially through public-private partnerships with NGOs, but little research has been done to assess the impact of these programs. Career and university preparation seems to be an area that is lacking in development, not only in terms of existence, but also in understanding how it impacts students' goals or their life after graduation. Although the results of this study did not show a significant relationship overall between usage of career and university preparation resources and plans for tertiary education, it did reveal links between other factors, like socioeconomic status, and university plans. A significant portion of Cambodian youth plan on enrolling in university and an even more significant portion expect that one day university attendance will become a reality. Regardless of whether or not students notice any link between a university education and success in the job market, the demand for higher education and economic advancement is certainly present among the Cambodian population, and the youth in particular. Cambodia is at the prime moment now to be addressing issues within its education system and labor market and providing students with access to high quality resources, skills training, and awareness in order to succeed upon high school graduation.

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Appendix A

GRADUATING STUDENT SURVEY

Dear graduating student, first of all let us congratulate you for your hard work to graduate from high school. This is such a significant achievement in your life. You are about to graduate and leave this school soon! We are conducting a study to determine how career preparation resources impact student aspirations, expectations, and achievement. For us to be able to keep in touch with you, we would like to get a few pieces of information from you about your future plans and your contact information such as phone number or email address. Knowing what you will be doing after high school will help us understand students' choices and help us to prepare high school students for their careers in the future. There is no right or wrong answer to all the questions in this part. It is about what you think (not what others think). So we need your honest answers. We will not share your answers to anyone else beside the researchers involved in the project. If some questions make you feel bothered, please feel free to skip them, but please answer every question if you are able. If at any point you want to stop the survey and end your participation in the study, you are free to do so. We will use this information to follow up with you after your graduation and after you take the Bac-II exam. We appreciate your help in completing this short survey!

Do you agree to participate in the study? **Yes** ☐ **No** ☐

Instructions: Please fill in the blank to respond to the question. If the question provides answer choices, please circle the appropriate answer.

Demographic Information
Date:
Name:
What is your gender? *(circle one)* **Male Female**
School name: _____
Grade (circle your section): 10 11 12 A B C D E F
Are you a student council member? **Yes No**
Age: _____ years old
Age at first school enrollment: _____years old
Level of education of your mother: **1-no schooling 2- primary school 3- secondary school 4- high school 5-above high school**
Level of education of your father: **1-no schooling 2- primary school 3- secondary school 4- high school 5-above high school**
Total number of siblings: _____
Your birth order: _____
Number of siblings who are in college or have attended college: _____
Do you have electricity in your home? **Yes No**
Do you have TV at home? **Yes No**

How do you come to school? **1-Bike 2- Motorcycle 3- Walk 4- Ride with others**
Academic Related Questions
How often do you take extra classes? **1-Not at all 2- 1-2 hours per week 3- 3-4 hours per week 4- 5-6 hours per week 5- more than 7 hours**
In this past week, did you read for pleasure? **Yes No**
In this past week, did you go to the library? **Yes No**
How many hours per day do you spend studying on your own? _____ hours
How many days were you absent from school in the last month? **1- None 2- 1 or 2 days 3- 3 or 4 days 4- 5 to 10 days 5- More than 10 days**
Have you ever repeated a grade? **Yes No**
About how many books are there in your home? (Do not count magazines, newspapers, or your school books.) **1-None 2-two to three 3- four to five 4-six to seven 5- eight to ten 6-more than ten**
What is your first semester average score? _____ Second semester (if available)? _____
What is your algebra score in the first semester? _____ Second semester (if available): _____
What is your geometry score in the first semester? _____ Second semester (if available): _____
What is your physic score in the first semester? _____ Second semester (if available): _____
What is your chemistry score in the first semester? _____ Second semester (if available): _____
What is your biology score in the first semester? _____ Second semester (if available): _____
What is your Khmer literature score in the first semester? _____ Second semester (if available): _____
What is your English score in the first semester? _____ Second semester (if available): _____
Are you going to take Bac-II exam? **Yes No Maybe**
If you are not planning to take the exam, what is your reason? _____ _____
What grade do you expect to receive for your Bac –II exam? **A B C D E F**
Do you study English classes outside of school? **Yes No**
If so, how often do you study? **1-one time per week 2- 2 times per week 3- 3 times per week 4- 4 times per week 5- 5 times per week 6- 6 times per week 7-7 times per week**
Are there any members of your family speaking English? **Yes No**
On a scale of 1 to 10, 1 being no knowledge of English at all and 10 being fluent, how would you rate your level of English proficiency? **1 2 3 4 5 6 7 8 9 10**
Computer Usage
Do you have a computer at home? **Yes No**
Do you have access to the internet at home? **Yes No**
How often do you use a computer at home? **Every day Several times per week Several times per month Once or twice per month Never**
How often do you use a computer at school? **Every day Several times per week Several times per month Once or twice per month Never**
How often do you use the internet? **Every day Several times per week Several times per month Once or twice per month Never**

Do you have your own cell phone? **Yes No**
Do you have access to the internet on your cell phone? Yes No
Do you use Facebook? **Yes No**
Travel and Resources
Have you ever traveled to Siem Reap Town? **Yes No**
If yes, how many times have you traveled there? _____
Have you been to Phnom Penh? Yes No
If yes, how many times have you traveled there? _____
Do you have any family members that live outside of Cambodia? **Yes No**
Higher Education Resources
Have you received any information regarding university or vocational school scholarships? **Yes No**
Have any organizations or scholarship providers visited your school to provide information about scholarships? **Yes No**
Have you received information from your school about post-graduation academic and career opportunities? **Yes No**
Have you received information from the government about post graduation academic, career, and scholarship opportunities? **Yes No**
Career Preparation
Are you aware of any career preparation resources available at your school? **Yes No**
Have you utilized any career or university related materials available in your school library? **Yes No**
If yes, where did you hear who did you hear about this information from? **Friend Teacher Librarian Other: _____**
If you utilize career preparation resources at your school, how often do you use them? **A few Times per week A few times per month A few times per semester Never**
Which types resources have you used? (circle all that apply) **Information about colleges Information about careers Information about vocational schools/training**
If your school as career preparation resources available but you haven't utilized them, why not? _____
Do you have friends who utilize career preparation resources available at your school? **Yes No**
Have you attended any career or academic related guest-lectures at your school? **Yes No** If yes, how many? _____ Which ones? _____
Have you gone on a career preparation or higher education related field trip ? **Yes No** If yes, how many? _____ Which ones? _____
Have you ever attended a career day or career forum? **Yes No**
Have you utilized career preparation resources to find out about employment after graduation? **Yes No**
Have you utilized career preparation resources or higher education resources to find out about applying to a university after graduation? **Yes No**
I know how to search for jobs on the Internet. **Yes No**
If yes, how did you learn? _____
I know how to create a professional resume. **Yes No**
If yes, how did you learn? _____

What skills do you feel you learned from career preparation resources? (circle all that apply) **It helped me improve my English** **It made me aware of career opportunities** **It made me aware of college opportunities** **It helped me improve my computer skills** **It helped me learn how to write a resume** **I have not learned anything**
Career and College Aspirations
What are your plans for immediately after graduating from high school? (please circle one) **Enroll in college** **Enroll in a vocational school** **Enroll in a 2-year college** **Find a job** **Return to help my family work** **Unsure** **Other: _____**
Does your mother expect you to continue to college? **Yes No**
Does your father expect you to continue to college? **Yes No**
Does your sibling expect you to continue to college? **Yes No**
Do your teachers expect you to continue to college? **Yes No**
Do your relatives expect you to continue to college? **Yes No**
Do you yourself expect to continue to college? **Yes No**
Do you trust that you will get a job after college graduation? **Yes No**
Do your parents trust that you will get a job after college graduation? **Yes No**
Do people in your village trust that there will be jobs available after college graduation? **Yes No**
College education is for students from rich families: **Agree Disagree**
If you plan on continuing your education after high school, what career would you like to have after graduating from college or vocational school? _____
On a scale of 1 to 10, 1 being least prestigious and 10 being most prestigious, how prestigious is the career you named above? **1 2 3 4 5 6 7 8 9 10**

Instructions:
For the following questions or statements, please circle the number that indicates the EXTENT of your agreement / disagreement with by using this scale:

How much do you agree with these statements?	**Disagree**		**Agree**	
	Strongly	Moderately	Moderately	Strongly
Computer knowledge and skills are important for my future.				
English knowledge is important for my future.				
Good academic scores are important for my future.				
Practical skills are important for my future.				
I feel comfortable writing a professional cover letter.				
My parents think that education for sons is better than for daughters				
I think that education is better for men than for women				
My parents think that college is better for sons than for				

daughters				
I think that college is better for men than for women				

How often do the following things happen at home?	Never or almost never	Once or twice a week	Once or twice a month	Everyday or almost everyday
My parents ask me what I am learning in school				
I talk about my schoolwork with my parents				
My parents make sure that I set aside time for my homework				
My parents check if I do my homework				

What do you think about your school? Tell how much you agree with these statements.

	Disagree a lot	Disagree a little	Agree a little	Agree a lot
I like being in school				
I feel safe when I am at school				
I feel like I belong at this school				

What is the best way to keep in touch with you after your graduation? (please provide the three best ways)

_____ Cell phone (please write:_____)
_____ Home phone (please write:_____)
_____ Parents'/ Siblings'/relative's phone (please write:_____)
_____ Neighbor's phone (please write:_____)
_____ Email (please write:_____)
_____Facebook (please write: _____)
_____ Other. Please specify:_____

What is your village/commune? _____

Your name may be called differently at home. If so, what is it? _____

We would like to know what you will be doing after you graduate from high school as it will give us idea of what programs help your fellow students most after they graduate. We will contact you again in approximately three months to see how you are doing.

Other comments:

_____
_____
_____

We are very interested in your career and future plans and we would like to keep in touch with you and for you to keep in touch with us.

Thank you for your participation!
We wish you best of luck with your National Examination and your future endeavors!

Vita

Allyson Baer graduated with a Master of Arts degree in Comparative and International Education at Lehigh University in 2014. Before completing her graduate degree, she completed her undergraduate degree in History and Spanish, also at Lehigh University. Her research interests include globalization, citizenship education, educational resource access, race and class differences, and education policy in Cambodia. During her time at Lehigh University, Allyson served as the graduate assistant in the College of Education's Multicultural Resource Center. She is also an active member of the Caring for Cambodia-Lehigh University Partnership, a Caring for Cambodia United Nations Youth Representative, and sat on the College of Education Diversity Committee for the 2013-2014 school year.