Author: Iannarelli, Carmen

Title: Socialization and Hmong Student Success in Career and Technical Education

The accompanying research report is submitted to the **University of Wisconsin-Stout**, **Graduate School** in partial completion of the requirements for the

Graduate Degree/ Major: Ed.S. Career and Technical Education

Research Adviser: Dr. Carol Mooney

Submission Term/Year: May, 2013

Number of Pages: 73

Style Manual Used: American Psychological Association, 6th edition

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STUDENT:

NAME Carmen Iannarelli

ADVISER: DATE: May 8, 2013

NAME Dr. Carol Mooney

This section for MS Plan A Thesis or EdS Thesis/Field Project papers only Committee members (other than your advisor who is listed in the section above)

1. CMTE MEMBER'S NAME: Dr. Bruce Pamperin DATE: May 2, 2013

2. CMTE MEMBER'S NAME: Dr. Jeffrey Sweat DATE: May 2, 2013

This section to be completed by the Graduate School

This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies: **DATE:**

Iannarelli, Carmen. Socialization and Hmong Student Success in Career and Technical Education

Abstract

This study examines factors affecting the academic performance of Hmong students at Chippewa Valley Technical College. Factors specifically analyzed for their impact upon student success are socioeconomic status, family support, the use of academic support programs, and the influence of agents of socialization. Through the use of archival institutional data, Hmong students were compared to white students at CVTC in terms of their relative grade point averages, course completion rates, and retention rates. Data revealed significant disparities in grade point average performance between Hmong and white students. The data also showed that eligibility for financial aid was significantly higher among Hmong students, and that this difference was commensurate with educational performance gaps between the two groups. Additionally, online surveys were used to assess family support while attending CVTC, the role of academic support programs, and influential agents of socialization. Gender differences in grade point average performance and socialization also were analyzed. Implications of the study's findings are discussed and recommendations for improving the performance of Hmong students are provided.

Acknowledgements

I would like to thank a number people who assisted me throughout the completion of this research project. First, I would like to thank the members of my research committee -- Dr. Pamperin, Dr. Sweat, and Dr. Mooney -- for all their time and efforts. Dr. Mooney has not only served as the chair of this committee, but has also provided me with invaluable guidance and insight throughout my Ed.S. program. Additionally, I would like to thank Susan Greene for her technical and statistical assistance with my data.

Throughout this process I have been especially thankful for the support of my family and my partner. Without the unflagging support of my parents, I would never have reached this point in my education. From early childhood they instilled in me the importance of education, and they have continued to show their support throughout the course of my collegiate and professional careers. My partner, Collin, has lived every word of this project, from topic development to conclusions. He has celebrated with me the completion of each chapter and cheerfully endured endless hours of discussion. I appreciate his ability to tolerate my need to sit at the computer all weekend while he cooked, cleaned, and took care of everything else so that I could focus on writing. I am endlessly grateful for everyone's support and love.

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Chapter I: Introduction

The United States population continues to increase in diversity, making understanding racial, ethnic, and immigrant variation in educational achievement and attainment more essential than ever. Minority children and youth make up the fastest-growing group in United States schools (Fix & Passel, 2003). Latinos, Asians, and Caribbean and African Blacks are the largest immigrant groups pursuing education in the United States (Rong & Preissle, 1998). The state of Wisconsin has seen significant increases in minority and immigrant populations in the last decade (United States Census Bureau, 2010). These trends provide foresight into potential demographic changes career and technical educational institutions will continue to experience as these children progress into adulthood and seek additional education.

Historically, research on racial attainment gaps has focused on broad racial comparisons that obscure considerable heterogeneity within panethnic groups (Jencks, 1972; Miller, 1995; Jencks & Phillips, 1998). Research has significantly documented educational achievement gaps among the Latino and Black population. Asian populations, however, have largely been understudied, and have been painted with the broad-brush stereotype of a "model minority," which obscures the extensive heterogeneity within the panethnic grouping. Current research lacks permeation into certain ethnic groups, notably Hmong populous and the educational attainment gap when disaggregated from the panethnic racial classification of Asian.

To date, research on Hmong educational attainment and achievement is frequently found within larger studies focused on minority achievement collectively or within the panethnic grouping of "Asian." In Kao and Thompson's (2003) review synthesis of current research on racial and ethnic gaps in educational achievement and attainment, particular attention was paid to ethnic and immigrant differences in educational achievement and attainment and current

theories' attempts to explain racial and ethnic group differences. Grades, test scores, course taking, tracking, high school completion, transition to college, and college completion are the measures of education achievement and attainment used as benchmarks in the Kao and Thompson study.

Although this article discusses racial and ethnic stratification of all minority groups, there is notable discussion of the "model minority" stereotype applied to the Asian panethnicity and the critical educational achievement and attainment difference found when this category is disaggregated. High school graduation rates show that among Asian Americans, much variation exists as Japanese, Chinese, and Asian Indians have much higher graduation rates than Laotians, Hmong, and Vietnamese (Miller, 1995). Further differences were observed in the percentages of ethnic groups that had completed four or more years of college:

Twenty-six percent (26%) of Japanese, 37% of Chinese, and 52% of Asian Indians had completed four or more years of college in 1980 (persons aged 25–29), whereas only 6% of Laotians, 3% of Hmong, 13% of Vietnamese, 10% of Native Hawaiians, 11% of Melanesians, and 7% of Samoans did the same. (Kao & Thompson, 2003, p. 421)

Research presented shows limited changes since the 1980's

Only 35% of Cambodian foreign-born adults (aged 25 or over) have a high school diploma, and only 5% have a 4-year college degree; similarly, 37% of foreign-born Hmong have a high school diploma, and only 4.6% have a 4-year college degree in 2008. (Kao & Thompson, 2003, p. 421).

Other research has also analyzed how the panethnic label has negative consequences for Asian ethnic groups. Lew (2005) discusses the issue and impact of the nomenclature "Asian" itself, contending that a monolithic interpretation of Asians, vis-à-vis educational attainment, is

overly simplistic and parochial, camouflaging broad variance within the group. In a report commissioned by the National Commission on Asian American and Pacific Islander Research in Education, researchers attempted to examine the culturally axiomatic role of Asian American and Pacific Islander (AAPI) students as the "model minority" in higher education. They do so through a concerted effort to expose spurious and erroneous assumptions made about AAPIs in education — misconceptions that researchers contend are not merely misleading, but actively harmful to both AAPI students and the post-secondary system. Research conducted by Woo (2007) further supports the need to disaggregate the Asian category and explains that South-East Asian exceptionalism has created the need for independent study of specific groups, groups whose lag in achievement and attainment is often obscured by the relative socioeconomic success of other disparate ethnic groups also classified under the broad heading of "Asian American."

Research specifically addressing Hmong educational experiences began to emerge during early 1990s; however, it is still quite limited. Hutchison (1997), on behalf of the Wisconsin Policy Institute, conducted research examining educational performance of Hmong students throughout Wisconsin. In 1997, Hmong students in six school districts in Wisconsin — districts in which Hmong students were the largest minority — were examined for educational attainment markers in the K-12 system as well as for their post-secondary educational activity. Successful completion of secondary education is a critical predictor for entering post-secondary education. In this research, Hutchinson concludes that Hmong students will be more successful in their educational careers than any other immigrant or refugee group ever to come to the United States. Students in the study showed scores above the national norms in standardized tests, in graduation rates, in entering post-secondary institutions, and in retention rates within the University of

Wisconsin system, albeit with the prevalence of risk factors, including poverty, welfare dependency, and teen pregnancy. However, the success indicated in Hutchinson's research stands in stark contrast to most other research on Hmong educational attainment and achievement.

In a study examining the post-secondary educational attainment of South-East Asian Americans, specifically Cambodians, Laotians, Vietnamese, and Hmong second-wave Americans, researchers found clear achievement deficiencies in these groups vis-à-vis white students (Woo, 2007). The authors specifically studied second generation South-East Asian students for comparison, thus controlling for immigrant-specific exogenous variables. The authors concluded there is wide variance in educational gaps, even within the South-East Asian grouping. Vietnamese immigrants outpace their Cambodian, Laotian, and Hmong counterparts. Similarly, the authors determined that gender and socioeconomic status also are significant determinates of educational attainment, with women often fairing worse than their male counterparts (Woo, 2007).

The locus of explanation for these gaps in educational attainment has tended to focus on gender, socioeconomic status, and the role of culture. Research by Lee and Madyun (2008) showed a lack of connection between socioeconomic status and academic achievement, which, they concluded, pointed to the critical role of culture and the impact of the socialization process related to education on the Hmong populous. When Hmong participation in higher education is analyzed, the role of culture has been used to explain gender achievement and attainment gaps of Hmong women vis-à-vis Hmong men (S. Lee, 1997). In qualitative research addressing the key life experiences contributing to Hmong students' matriculation, retention, and graduation from college, culture and socioeconomic status were also the focus (Lor, 2008). A single cause for

this educational stratification is unlikely, however the influence of each of these factors is unclear and will require further investigation.

According to the 2010 census, Hmong people are a significant minority group throughout the state of Wisconsin and the largest ethnic group within the Asian category. Hmong students are the largest minority group at Chippewa Valley Technical College in Eau Claire and a significant minority group throughout the Wisconsin Technical College System, making investigation of this group meaningful to career and technical education (CTE) throughout the state.

Brief History of the Hmong

The Hmong largely arrived in the United States in the late twentieth century as a result of their involvement in the postcolonial Indochina war. Prior to this the Hmong were largely farming peoples living in the highlands of Laos (G. Lee, 2007). During the Vietnam War, the United States Central Intelligence Agency (CIA) recruited thousands of Hmong men and boys to serve as soldiers for the American army. For their assistance the United States gave the Hmong food, weapons, medical supplies, and verbal assurance that they would be taken care of if the United States did not win the war (Yang, 1993). In 1975, the United States left Saigon, marking the end of its involvement in Vietnam. This resulted in more than 100,000 Hmong soldiers and dependents being abandoned and having to fend for themselves. Fearing for their lives, thousands of Hmong fled to Thailand, where refugee camps were established (McClain-Ruelle & Xiong, 2005).

Life in the refugee camps was harsh; additionally, the camps did not provide adequate schooling for the Hmong children. While in the camps, the Hmong waited for placement in France, Australia, and the United States in order to start new lives. Late in 1975 the United

States granted asylum to those Hmong individuals who could show direct correlation to those Hmong who had served the American army. Upon showing this correlation the Hmong were sent to a transitional training camp, Phanat Nikhom, to learn about life in America (Lo, 2001). Between 1975 and 1978, 9,000 Hmong refugees arrived in the United States, followed by 43,000 between 1979 and 1981. By 1982 some 90,000 Hmong refugees had been admitted to the United States. The majority of Hmong immigrants settled in three states: California, Minnesota, and Wisconsin (Hutchison, 1997).

In light of these travails, a better understanding of this ethnic group and its educational attainment begs further investigation. If Hmong people continue to be overlooked and aggregated into panethnic groupings such as "Asian" by researchers and if gaps in educational attainment persist, this population will continue to experience high rates of poverty and the myriad social problems that come with it. This phenomenon, therefore, begs further investigation into the factors that influence successful educational attainment and the application of theories regarding the importance of the socialization process on the Hmong populous.

Statement of the Problem

The majority of studies concerning educational attainment and the factors that influence educational success use aggregated racial labels, resulting in the masking of heterogeneity of groups such as "Asian." Additionally, a problem exists in the dearth of information specially focusing on Hmong educational attainment and factors that influence this particular group's educational success.

Purpose of the Study

As stated in the background of the problem, numerous Hmong immigrants settled in Wisconsin, including the Chippewa Valley. Chippewa Valley Technical College serves a

significant and growing Hmong population. To date, there has been a deficiency in research conducted to measure educational attainment and success of Hmong students in career and technical college education programs. The purpose of this investigation is to analyze educational attainment among Hmong students at Chippewa Valley Technical College and the factors that influence educational success of this group. Secondary analysis was conducted on enrollment, grade point average (GPA), and retention data of students at Chippewa Valley Technical College. Additionally, online surveys were used to address research questions surrounding socialization.

Assumptions of the Study

The aggregation and creation of the panethnic label "Asian" masks extensive differences in educational experiences and success within the group. It is with this in mind that the following assumption is put forth — disaggregating the panethnic label Asian and studying Hmong students as a specific ethnic group would be beneficial for understanding educational attainment. It is with this assumption put forth: Hmong students have unique cultural influences and experiences that influence educational success.

Research Questions

The primary focus of this investigation is to identify variables that influence educational success of Hmong students and create a profile of a successful Hmong student.

- Are there significant differences in educational success between Hmong and non-Hmong students at Chippewa Valley Technical College?
- 2. What function does family serve in the educational process of successful Hmong students?

- 3. What function do academic support programs serve in the educational process of successful Hmong students?
- 4. How were successful Hmong students socialized in regard to education?
- 5. Which agents were instrumental in the educational socialization process for successful Hmong students?
- 6. Are there gender differences in the educational success and the socialization process for Hmong students?
 - a. If so, what are those differences?
 - b. What are the ramifications of those differences?

Definitions of Terms

Asian. "Refers to a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam" (United States Census Bureau, 2010).

Educational attainment. The highest level of education that an individual has completed (United States Census Bureau, 2010).

Educational success. Successful graduation or completion of an educational program. Or, for current students, the likelihood of doing so as represented by grade point average (GPA) and other indicators.

Hmong. An ethnically tribal minority group of people living traditionally in mountain villages in southern China and adjacent areas of Vietnam, Loas, and Thailand. Many of these people emigrated to the United States, following the Vietnam War (G. Lee, 2007).

Panethnicity. The erroneous grouping and communal labeling of various autonomously distinguishable and self-identified ethnicities into one aggregate group of people; this aggregation is found based on similarities in physical appearance, common language, or common religion.

White. "A person having origins in any of the original peoples of Europe, the Middle East, or North Africa" (United States Census Bureau, 2010).

Limitations of the Study

This investigation is based on archival institutional data and online surveys. The data on educational success and retention is taken from Chippewa Valley Technical College in Eau Claire, Wisconsin; therefore, it is dependent on the accuracy of that source material. All online surveys have known limitations, notably response rates. Although all students meeting the criteria were contacted, responses were limited. The population of this online survey is limited to Hmong students enrolled in credit courses at Chippewa Valley Technical College during the Fall 2012 and Spring 2013 semesters.

Methodology

Multiple quantitative methods were employed to investigate this multifaceted topic.

Descriptive statistics were used to analyze the educational success of Hmong students and to compare success rates between Hmong and non-Hmong students at Chippewa Valley Technical College. Online surveys were used as a quantitative approach to assess the influence of socialization on successful Hmong students. The rationale for this multiple method approach was to create a better understanding of the influence of socialization on the educational success of Hmong students at Chippewa Valley Technical College. This design allows the quantitative

results to connect and expand on the quantitative findings to more fully explore the research questions.

Chapter II: Literature Review

A review of literature examined current research on educational attainment of minority groups, including: 1) aggregated and disaggregated studies of minority educational achievement; 2) the influence of socioeconomic status; 3) the impact of gender and culture; 4) the role of socialization on minority student success.

Minority Educational Success and Achievement Gaps

Racial achievement gaps are widely regarded as one of the most pressing problems confronting American education. Studies on racial attainment gaps among minority populations have documented significant gaps among Latino and Black populations; however, the Asian population has been understudied and subgroup discrepancies, masked by the "model minority" stereotype, obfuscate widespread heterogeneity within the panethnic grouping. The majority of research on Hmong educational attainment and achievement can be found within larger studies focused on minority achievement collectively or within the panethnic grouping of "Asian" (Jencks & Phillips, 1998).

Current research and theoretical analysis on racial and ethnic gaps in educational achievement and attainment pay particular attention to ethnic and immigrant disparities. Grades, test scores, courses taken, tracking, high school completion, transition to college, and college completion are the measures used as benchmarks to study educational achievement and attainment (Escueta & O'Brien, 1991; Kao &Thompson, 2003; Miller, 1995).

The "model minority" label has largely been applied to Asian Americans since the late 1960s (Hein, 2006). This stereotype was largely propagated by the media, as illustrated by *U.S.*News and World Report's claims that "few groups are as determined to get ahead as those whose roots are in the Pacific and Far East" (McBee, 1984, p. 41). The Wall Street Journal and New

York Times Magazine also made similar assertions based upon the quick adaption of new Asian immigrants and how "Asian Americans thrive by transplanting old values" (Oxnam, 1986, p. 70). However, an article in Fortune magazine went one step further by referring to Asians as "America's super minority," declaring that this group has "wasted no time laying claim to the American dream. They are smarter and better educated and make more money than everyone else" (Ramirez, 1986, p. 148). Lew (2005) discusses the issue and impact of the nomenclature "Asian" itself, contending that a monolithic interpretation of Asians, vis-à-vis educational attainment, is overly simplistic and parochial, thereby camouflaging broad variance within the group.

In a report commissioned by the National Commission on Asian American and Pacific Islander Research in Education, researchers attempted to examine the culturally axiomatic role of Asian American and Pacific Islander (AAPI) students as the "model minority" in higher education. This was done through a concerted effort to expose spurious and erroneous assumptions made about AAPIs in education — misconceptions that researchers contend are not merely misleading, but actively harmful to both AAPI students and the post-secondary system. The authors go further, questioning the legitimacy of previous research and standards as they relate to the monolithic and flawed construct of "Asian Americans" (National Commission on Asian, 2008). Research conducted by Woo (2007) further supports the need to disaggregate the Asian category and explains that South-East Asian exceptionalism has created the need for independent study of specific groups, particularly those whose lag in achievement and attainment is often obscured by the relative socioeconomic success of other disparate ethnic groups also classified under the broad heading of "Asian American."

Research has clearly documented the educational success of Asians as an aggregated panethnic category. When the category is disaggregated, however, critical educational achievement and attainment differences are revealed (Escueta & O'Brien, 1991; Kao & Thompson, 2003, Miller, 1995). The discrepancies in academic success have been especially noteworthy for Southeast Asian refugees, particularly the Hmong and Loa (S. Lee, 2007). An analysis of high school graduation rates shows differences due to the fact that Japanese, Chinese, and Asian Indians have much higher graduation rates than Laotians, Hmong, and Vietnamese (Miller, 1995). This is consistent with earlier findings in which only 22 percent of the Hmong population and 43 percent of the Cambodian population completed high school, compared with more than 80 percent of Asian Indian, Japanese, Indonesian, and Pakistani populations (Escueta & O'Brien).

High school achievement gaps manifest into post-secondary achievement differences.

Escueta and O'Brien's (1991) research found that only 8 percent of Hmong and Cambodian populous attended four or more years of college, compared to the more than half of Asian Indian and Pakistani adults who did so. Similar educational achievement gaps have also been observed in earlier studies:

26 percent of Japanese, 37 percent of Chinese, and 52 percent of Asian Indians had completed four or more years of college in 1980 (persons aged 25–29), whereas only 6 percent of Laotians, 3 percent of Hmong, 13 percent of Vietnamese, 10 percent of Native Hawaiians, 11 percent of Melanesians, and 7 percent of Samoans did the same. (Kao & Thompson, 2003, p. 421)

More recent research has indicated limited changes since the 1980s, as "only 35 percent of Cambodian foreign-born adults (aged 25 or over) have a high school diploma, and only 5

percent have a 4-year college degree; similarly, 37 percent of foreign-born Hmong have a high school diploma, and only 4.6 percent have a 4-year college degree in 2008" (Kao & Thompson, 2003, p. 421). The 2010 Census illustrated similar findings in educational attainment. For the Hmong population 25 years or over, 35.5 percent had less than a high school diploma, 22.3 percent had a high school diploma or its equivalency, 11.5 percent had a bachelor's degree, and 3.6 percent had a graduate or professional degree (U.S. Census Bureau, 2010). These gaps persist at a time when the aggregated racial category of "Asian" has seen enrollment trends increase in higher education and has seen nearly commensurate increases in degree completion at the bachelor's and master's levels (Kao & Thompson, 2003).

Research specifically addressing Hmong educational experiences began to emerge in the early 1990s; however, it is still quite limited. Hutchison (1997), on behalf of the Wisconsin Policy Research Institute, conducted research examining the educational performance of Hmong students throughout Wisconsin. Hmong students in six school districts — districts in which Hmong students were the largest minority — were examined for educational attainment markers in the K-12 system as well as post-secondary educational activity. Successful completion of secondary education is, ostensibly, an antecedent to entering post-secondary education. In this research, Hutchinson concludes that Hmong students will be more successful in their educational careers than any other immigrant or refugee group ever to come to the United States. Students in the study showed scores above the national norms in standardized tests, graduation rates, entering post-secondary institutions, and retention rate within the University of Wisconsin System, albeit with the prevalence of risk factors, including poverty, welfare dependency, and teen pregnancy. This postulation has also been supported by Pobzeb (2001), who indicated that Hmong Americans are making gains in higher education. The success predicted in these studies,

however, stands in stark contrast to other research on Hmong educational attainment and achievement.

In a study examining the post-secondary educational attainment of South-East Asian Americans — specifically Cambodians, Laotians, Vietnamese, and second-wave Hmong Americans — researchers found clear achievement deficiencies in these groups vis-à-vis white students. The authors specifically studied second-generation South-East Asian students for comparison, thus controlling for immigrant-specific exogenous variables. The authors concluded there is wide variance in educational gaps, even within the South East Asian grouping. Vietnamese immigrants outpaced their Cambodian, Laotian, and Hmong counterparts (Woo, 2007).

Socioeconomic Status

The locus of explanation for these gaps in educational attainment has tended to focus on socioeconomic status, the role of culture, socialization, and academic support programs. It has long been established that parents' socioeconomic status (SES) has a strong, positive correlation to children's achievement. Thus, differences in SES of Hmong Americans compared to whites constitute a plausible explanation for the gaps in educational achievement. In 2010, the poverty rates for all Hmong families was 27.8 percent, compared to a national poverty rate for all races of 15.1 percent and a poverty rate within the aggregated racial category of "Asian" of only 12.1 percent (United States Census Bureau, 2010).

Research on the influence of the SES of Hmong students yields mixed results. In studies that disaggregated the panethnic category of "Asian," it was concluded that a determining factor for the wide variance in educational gaps, even within the South-East Asian grouping, was socioeconomic status (Woo, 2007). In a study that compared the educational achievement of

poor Hmong students to that of poor non-Hmong students in the Minneapolis-St. Paul area, poor Hmong students outperformed their counterparts in grade-point averages (Call & McNall, 1992). In research analyzing the educational success of Asian students at two-year, post-secondary institutions, it was also concluded that socioeconomic status influences performance (Lew, 2005). DePouw (2006) also confirmed the economic barriers were inhibitions on Hmong college students on educational attainment and success. Qualitative research has also revealed that economic hardships negatively affect educational attainment and success (Root, Rudawski, Taylor, & Rochon, 2003; S. Lee, 1997; Lee & Xiong, 2011; Lor, 2008; Xiong, 1996). Other research finds the socioeconomic explanation of educational attainment gaps to be unsatisfactory and a gross oversimplification. Lee and Madyun's (2008) research showed a lack of connection between socioeconomic status and academic achievement, which, they concluded, pointed to the critical role of culture and the impact of the socialization process related to education on the Hmong populous. Similar were the findings when Hmong participation in higher education was analyzed. The role of culture has been used to explain gender achievement and attainment gaps of Hmong women vis-à-vis Hmong men versus socioeconomic status (S. Lee, 1997).

Culture

A common theme throughout research on educational achievement of Hmong Americans is the role of culture. A "cultural clash" between traditional Hmong culture and the American educational systems has often been identified as the cause of educational attainment gaps and gender differences in achievement (DePouw, 2012; Ngo, 2008). Historically, Hmong culture was an oral culture; it did not take on a written language until the 1950s. Formalized education was intermittent, with few Hmong villages having schools. Further, education of sons over daughters was historically valued. When emigration to the United States began, Hmong

illiteracy was common (Timm, 1994). The attachment to traditional Hmong values has been shown to be largely an aligned generational status, with older generations reporting more "concern about keeping Hmong values and traditions as they existed back in Laos" (Timm, 1994, p. 38). Qualitative research has noted the Hmong value of kinship and cooperation over individualism, which starkly contrasts with the competitive individualism of the dominant American educational system (Ngo & Lee, 2007). Similarly, Walker-Moffat (1995) asserted that emphasis on cooperation over individualism may explain the difference in performance on standardized testing. This emphasis on the "cultural clash" has also been used to explain gender differences in educational attainment and achievement gaps.

However, there are scholars who postulate that Hmong culture positively influences educational attainment and achievement. Hutchinson & McNall (1994) note that the Hmong community's belief that education is a key pathway out of poverty is a clear indication that education is supported by the group. This direct and indirect support of education has also been found in other research (Hutchinson, 1997; Lee & Madyun, 2008). Lee and Madyun (2008) specifically challenge the cultural clash as an explanatory factor for achievement gaps. They contend that Hmong families embrace the importance of education and that linguistic and ethnic segregation negatively impacted academic achievement resulting in achievement gaps compared to other East-Asian groups. Rumbaut (1989) concluded that the family structure present in the Southeast Asian group — including Hmong, Vietnamese, and ethnic Chinese — underpins high educational achievement and attainment for youth. Similarity, Timm (1994), found that "Hmong parents reported that they believe getting a good education is the way for their children to attain personal success and a good life" (p. 39). This family support of education is consistent with

Hutchinson's (1997) research, which notes that Hmong adolescents had more family support than other teens. Lor (2008) examined key life experiences of Hmong college students to analyze their influence in matriculation, retention, and graduation from college. Responses were classified and indicated

Five cluster of key life experiences: supportive family environment, social and academic support in formal education environment, life lessons: embracing hardships and challenges, vision and drive for success that includes a college education and financial support. (Lor, 2008, p. 39)

These findings further support the positive role culture may play in the educational success of Hmong students.

Gender

The patrilineal and patriarchal norms of Hmong culture have been ubiquitously cited by researchers as factors that influence gender differences in educational attainment and achievement. Research from the mid-1980s showed extremely elevated high school drop-out rates among Hmong females in the Minneapolis-St. Paul area (Downing, Olney, Mason, & Hendricks, 1984). Although the research from the 1990s showed marked improvements, gender differences persisted (Hutchison, 1997). In 2011 the American Community Survey (ACS) indicated that gender differences in educational attainment persisted for the Hmong population. The US Census has reinforced these observations, indicating that for individuals over the age of 25, 69.6 percent of males and 59.4 percent of females had a high school level of education or greater, and 16.6 percent of males and 14.7 percent of females had a bachelor's degree or higher (United States Census Bureau, 2010).

Traditional Hmong culture has embraced early marriage and childbearing, which are significant barriers to educational persistence and attainment for Hmong females. Additionally, qualitative research has posited that, for Hmong men, status is gained through education, whereas Hmong women advance their status through marriage and motherhood (Donnelly, 1994; Goldstein, 1985). Further, it was found to be more acceptable for Hmong females to drop out of high school; "girls who dropped out for domestic reasons won community approval by moving into valued gender roles" (Goldstein, 1985, p. 276). Similarly, it is a cultural expectation that females care for their younger siblings and perform the majority of domestic duties, which also can negatively impact educational attainment (Donnelly, 1994; Ngo, 2000). Moreover, for Hmong females pursuing education often comes at the cost of being devalued as a wife. This was illustrated in Donnelly's research: "Educated girls quickly fell into disfavor as wives, since traditional parents wanted obedient daughters-in-law and urged their sons to choose compliant girls" (p. 139). Research continues to discuss the impact of gender and how many Hmong females still are forced to strike the difficult balance between educational aspirations and family responsibilities (Hein, 2006; Lor, 2008; Ngo, 2000).

In contrast to earlier research that showed low matriculation rates among Hmong females, the number of Hmong women pursuing post-secondary education is rising (Hutchison, 1997; S. Lee, 1997; Lor, 2008). Further, there has been an increase in Hmong females expressing interest in postponing marriage to pursue post-secondary education. In S. Lee (1997) researchers examine the participation of Hmong women in higher education. Specifically, they look at educational attainment within Hmong culture and seek to explain the stratification between genders. Lee takes pains to refute common misconceptions that seek to place the onus for gender attainment gaps in education on Hmong culture. Rather, the author examines

exogenous variables, such as socioeconomic status and racism, as contributing factors toward this gap. Through this qualitative methodology, researchers examined the challenges and experiences that these women faced in their attempts to attain degrees, concluding that, while cultural barriers to higher education for Hmong women remain, there are a host of other socioeconomic factors that also are restricting the access of these women to educational attainment. Some scholars attribute the trend of more Hmong women pursuing higher education to cultural transformation within the Hmong American community (Ngo & Lee, 2007).

Agents of Socialization

Sociologists have long studied the influence of "significant others" on educational achievement and attainment (Cooley, 1902; Mead, 1934). Significant others are usually described as "people who exercise major influence over the attitudes of individuals" (Woelfel & Haller, 1971, p. 75). Research has supported the belief that significant others serve both direct and mediating factors in forming children's educational ambitions and that these ambitions profoundly impact educational attainment (Cheng & Starks, 2002). Research also has indicated that Asian American parents tend to hold higher educational aspiration for their children than do white parents (Cheng & Starks, 2002). It has also been reported that immigrant youth have a greater sense of obligation to their parents, resulting in greater effort and focus being placed on education (Fuligni, Tseng, & Lam, 1999). Considering this research together, parental behavior and the importance of family may positively affect the educational aspirations of Hmong youth (Supple, McCoy, & Wang, 2010).

As individuals progress into adolescence, the role and influences of peers becomes increasingly important in shaping educational aspirations. Phelan, Davidson, and Ya (1998) documented the role of peer groups in shaping orientation towards schooling and how some peer

Asian categories and specifically addresses the influence of peers on Hmong educational aspirations could not be found; however, peers have been documented to influence other behaviors of Hmong youth (Zha Blong & Ju-Ping, 2011). Cheng and Starks (2002) noted "racial differences in the level of perceived educational aspirations from teachers and peers; the effect of these aspirations are generally similar across races" (p. 320).

Although research indicates that teachers tend to have higher educational aspirations for Asian students as an aggregate (Cheng & Starks, 2002), research again specifically addressing Hmong students does not indicate the same expectations. S. Lee (2001, 2005, 2007) and Thao's (1999) research has shown that non-Hmong teachers often single out Hmong youth, treat them as foreigners and at-risk students, and at times apply to them labels such as "gang bangers." All of this indicates lower educational aspirations among teachers for their Hmong students; this can negatively impact educational aspirations, attainment, and achievement. Stanton-Salazar (2001) and Noguera (2004) have examined the role of counselors and teachers and how they serve as gatekeepers and/or brokers who can either extend or constrain access to educational opportunities. Furthermore, the impact of tracking by schools has been documented to significantly influence the academic trajectories of various racial and ethnic groups (Noguera, 2003). When schools embrace academic support programs for Hmong students, those students who utilize these programs report positive experiences (Lee & Xiong, 2011).

Summary

There is a great deal of information pertaining to the forces that act upon Hmong students. There is also a great deal that remains a mystery regarding the educational achievement and attainment of Hmong students vis-à-vis their counterparts under the "Asian"

panethnic aggregation. While researchers are able to identify a litany of factors that influence attainment and achievement, research has been inconclusive in providing a specific and broadly applicable answer to the problem. Taking into account the limited body of research on Hmong educational attainment and achievement, the results of the research in this report will attempt to add to that limited pool.

Chapter III: Methodology

Hmong student academic success has serious ramifications, especially in Wisconsin. Not only does it pose an interesting challenge for the Wisconsin Technical College System, it has broader implications for statewide racial relations. And given the current so-called "skills gap" in Wisconsin's employment sectors, there are very real economic consequences for a lack of success in education.

This section will explain the methods used to determine if achievement gaps do indeed exist between white and Hmong students, and to better understand why they might. It will begin by examining the subjects of the studies conducted, then explore the instruments used to study them and the procedures used in data collection. It will conclude by acknowledging the limitations of this approach.

Subject Selection and Description

The most efficient method for measuring the academic success of Hmong students is also the most obvious: through secondary data analysis of those students enrolled (and formerly enrolled) at Chippewa Valley Technical College who chose to self-identify as "Hmong" in the Race/Ethnicity section of college enrollment forms. Chippewa Valley Technical College only began to disaggregate the Hmong category from other Asian students in Summer 2011, so data available only reflect the academic period of Summer 2011 through Fall 2012.

With an N of 181, there were 107 female Hmong students and 74 male, all non-reporting were removed from the sample. The average age of Hmong students sampled was 23 years old, with the oldest being 46 and the youngest 18. The gender breakdown saw little variance in age range, with the average male being 24 and the average female 23. A plurality of students in the sample (25) were enrolled in the liberal arts program as of the most recent semester.

In terms of economic status, a staggering 92.8 percent (168) of students in the sample were eligible to receive some sort of financial assistance (financial aid, grants, scholarships, or work-study funds) at some point during their enrollment. This stands in stark contrast to the 64 percent of white students enrolled during the same period who qualified for some sort of financial assistance. While it's dangerous to extrapolate too much, in terms of financial need, from these numbers (given possible differences in qualifications for scholarships and other assistance on the basis of race/ethnicity), the data still provide some interesting insight into the possible allocation of these scarce resources.

This data set does not, however, provide some much-needed context for the numbers. For example, we may see a significant difference in GPA or completion rates of classes, but the numbers alone don't provide insight as to why these discrepancies exist. To better understand the contextual antecedents that impact these numbers, a survey must be conducted to explore the impact of agents of socialization, personal challenges, immigration status, and other variables affecting academic success.

The survey, which was administered between January 22 and February 5, 2013, drew from a sample of students enrolled for the Fall 2012 and/or Spring 2013 semesters. The reason for this narrower N was logistical in nature, namely these students have current Chippewa Valley Technical College email addresses and could, therefore, be surveyed via email. To broaden the sample further, the survey was sent to all students self-identifying as "Asian" in their enrollment paperwork, and a control question was implemented to "weed-out" non-Hmong Asian students.

Utilizing these methods, a survey questionnaire was sent out to 257 students. One hundred and twenty-one surveys were completed, with 91 Hmong respondents, 60 of those being female and 31 male. Health Sciences was the most ubiquitous academic area represented, with

30 students. As a side note, students responded positively to the offer of a donation to the Eau Claire Area Hmong Mutual Assistance Association for each survey completed, which may have contributed to the unusually high response rate.

Instrumentation

Chippewa Valley Technical College provided archival data, which allowed for analysis and comparison of Hmong student success versus the retention of white students. This did not, however, provide the needed information to evaluate the possible variables that may impact student performance and success. After an extensive review of literature, a voluntary 31question online survey was developed and deployed using the Qualtrics survey software. The survey gathered descriptive demographic information about the sample, including gender, age, race/ethnicity, immigration status, program of study, cumulative grade point average, and financial support. Questions were developed to address key research elements. The respondents were questioned about their participation in academic and peer-support programs; further, they were allowed to rate the efficacy of the support programs they participated in utilizing a Likert scale. Familial educational expectations and support were also addressed in a number of different questions, including questions that assessed familial assistance throughout the students' time at Chippewa Valley Technical College. Also measured was how family members discussed the importance of education for adulthood success, both during childhood and over the last year before the study. Questions addressing other key agents of socialization (friends and teachers) also were included. Additionally, survey participants were asked to rate the importance of agents of socialization in influencing their views on education.

Data Collection Procedures and Analyzing Archival Data

Archival data used in this study was obtained from pre-existing records that were available to the researcher through the Chippewa Valley Technical College's computerized record-keeping system known as Banner. All white and Hmong credit students' semester grade point averages for the academic periods Summer 2011, Fall 2011, Spring 2012, and Fall 2012, and their cumulative GPAs were used to analyze differences in academic performance between the two groups. These same data also were used to identify possible gender differences and to determine the students' eligibility for financial aid. Additionally, course retention and successful course completion data was accessed for white and Hmong students over this same time period.

The researcher utilized a number of statistical analyses through Statistical Program for Social Sciences version 21.00 (SPSS, 2012), Microsoft Excel (Microsoft, 2010), and chi-square test (Preacher, 2001). All of these were used to determine if a significant relationship existed between students' grade point average, course retention, and successful course completion and their race/ethnicity, gender, and financial aid eligibility. Independent t-test analyses were conducted to determine if a statistically significance difference existed between the independent categorical variable race/ethnicity (white and Hmong) and the dependent continuous variable grade point average (cumulative and semester). Based on the categorical nature of the variables, chi-squared analyses were conducted to determine if a statistically significance difference existed between white and Hmong students in course completion rates and course success rates. To analyze the quantitative outcome (cumulative grade point average), and two categorical explanatory variables (race/ethnicity and eligibility for financial aid) ANOVA was conducted, with the use of SPSS.

Data Collection Procedures and Analyzing Online Survey

To provide further context to the quantitative archival data, a 31-question online survey was administered with the use of Qualtrics survey software. The survey gathered descriptive demographic information about the sample, including gender, age, race/ethnicity, immigration status, program of study, cumulative grade point average, and financial support. This information was used to create a profile of the Hmong students who completed the survey. Questions were developed to address key research elements. The respondents were questioned about their participation in academic or peer-support programs, familial educational expectations, familial support, key agents of socialization messages about education, and the importance of agents of socialization in influencing their views on education. Cross-tabulation was used to summarize the categorical data and create contingency tables, and to provide a picture of the interrelation and interactions between variables.

Limitations

While interesting conclusions may have been drawn from this study, there are, as with any study, shortcomings and limitations to the research. Primary among these are issues with the sample, whose size, diversity, and temporal range were limited. While an N of 91 students is a rather large sample size vis-a-vis other studies of Hmong students, it is still small enough that sample errors are likely to occur, especially when analysis extrapolated from the pool is applied to a broader population.

Similarly, the sample incorporates only students at Chippewa Valley Technical College, and only over a four-semester time period. Are Hmong students at Chippewa Valley Technical College widely representative of their peers at other CTE institutions, or are they exceptional? Do these numbers even accurately reflect Chippewa Valley Technical College Hmong students

or, given the narrow timeframe, are they merely a snapshot of one particular cohort? These data do not tell, so further study would need to be employed to answer such questions.

There were also a few minor flaws with the instrumentation. It would be better, for example, to be able to compare raw GPA data to the survey results, rather than having students choose an estimated range of grade point average in the survey itself. Not only would this allow for more precision, it would take human error elements out of this association. By and large, however, the survey was accurate and the data it produced were valuable.

Chapter IV: Results

The locus of this research was to explore differences in educational success between Hmong and white students at Chippewa Valley Technical College. The research investigation identified factors that influence the educational success of Hmong students, examined how Hmong students were socialized about education, and created a profile of a successful Hmong student. A desire to understand this under-researched ethnic group — the largest minority group at Chippewa Valley Technical College — was the driving force behind this study.

To answer these questions, data was collected using two different research methods. Archived institutional data provided access for quantitative analyses and primary data was collected using an online survey. This chapter will provide descriptive information about subjects in the quantitative archival data component of this study as well as those subjects who participated in the online survey. Six research questions were posed at the beginning of the study; this chapter will describe the results for each of these questions.

Descriptive Information — Hmong Credit Students at Chippewa Valley Technical College

There were two samples drawn for this research. One was obtained using archival data from all credit students at Chippewa Valley Technical College (CVTC) who self-identified as "Hmong" in the Race/Ethnicity section of college forms from Summer 2011 through Fall 2012. The resulting N of 181 included 107 female Hmong students and 74 male, with all non-reporting removed from sample. The second sample was drawn from an online survey that was administered between January 22 and February 5, 2013, and drew from a sample of students enrolled for the Fall 2012 and/or Spring 2013 semesters. The reason for this narrower N was logistical in nature, namely that these students had current CVTC email addresses and could, therefore, be sent the questionnaire through email. To broaden the sample further, the survey

was sent to all students self-identifying as "Asian" in their enrollment paperwork, and a control question was implemented to "weed-out" non-Hmong Asian students. An email with a link to the online survey questionnaire was sent out to 257 students. One hundred and thirty-eight students began the survey and 121 surveys were completed; among the 91 Hmong respondents, 60 were females and 31 were males.

The average age of Hmong students in the enrollment data sample was 23 years old, with the oldest being 46 and the youngest 18. The gender breakdown saw little variance in age range, with the average male being 24 and the average female 23. The mode age range for both males and females in the online survey was 20-25. The frequencies of the age grouping for both samples are in the Table 1 below.

Table 1

Age of Participants

			Frequency Online	Percentage Online
	Frequency	Percentage	Survey	Survey
Age Range	Enrollment Data	Enrollment Data	Data	Data
18-19	24	15%	17	19%
20-25	110	61%	50	55%
26-30	37	20%	18	20%
31-35	9	5%	5	5%
36-40	0	0%	1	1%
41-45	0	0%	0	0%
over 46	1	.6%	0	0%
Total	181	100%	91	100%

Pluralities of students in both samples were enrolled in the health sciences programs at Chippewa Valley Technical College. The complete distribution of programs is shown in Table 2 below, as enrollment records indicated for the Fall 2012 semester.

Table 2

Program Enrollment of Participants

	Frequency Enrollment	Percentage Enrollment	Frequency Online Survey	Percentage Online Survey
Program Area	Data	Data	Data	Data
Agriculture Food and Natural	0	0%	0	0%
Resources				
Architecture and Construction	4	2%	0	0%
Business, Finance, and Marketing	22	12%	18	20%
Health Sciences	51	28%	30	33%
Human Services	8	4%	6	7%
Information Technology	13	7%	11	12%
Law, Public Safety and Security	5	3%	2	2%
Liberal Arts - Transfer	23	13%	9	10%
Manufacturing	6	3%	2	2%
Science, Technology, Engineering	0	0%	5	5%
& Math (STEM)				
Transportation, Distribution and	5	3%	1	1%
Logistics				
Undecided	44	24%	7	8%
Total	181	100%	91	100%

The archival institutional data yielded a cumulative GPA range for Hmong students from .125 to 4.00, with a mean of 2.73, a median of 2.96, and a mode of 4.00. The educational performance of students was grouped into the ranges and frequencies shown in Table 3 below. Archival cumulative GPA data was regrouped, for comparison purposes, into the same ranges that were developed for the online survey in which respondents self-reported their cumulative GPAs. Frequencies for both are shown in Table 3.

Table 3

Grade Point Averages of Participants

	Frequency Enrollment Data	Percentage Enrollment Data	Frequency Online Survey Data	Percentage Online Survey Data
4.00-3.5	38	21%	14	18%
3.49-3.00	51	28%	47	52%
2.99-2.50	37	20%	17	19%
2.49-2.00	17	9%	11	12%
Under 1.99	38	21%	2	2%
Total	181	100%	91	100%

In terms of economic status, a staggering 92.8 percent (168) of students in the sample were eligible to receive some sort of financial assistance (financial aid, grants, scholarships or work-study funding) at some point during their enrollment. The online survey questioned students about how they supported themselves while attending Chippewa Valley Technical College; their responses are reported in Table 4 below.

Table 4
Financial Support of Participants

	Frequency for Online	Percentage
	Survey	
I supported myself financially	27	32%
My family largely supported me	21	25%
I was supported by another benefactor (third-party)	28	33%
I was given a full scholarship	3	4%
Other	6	7%
Total	85	100%

Research Question 1. Are there significant differences in educational success between Hmong and non-Hmong students at Chippewa Valley Technical College? The first objective was to determine if there was any significant difference in educational success between Hmong and white students at Chippewa Valley Technical College. Educational success was examined through various loci of analysis. An independent-samples t-test was run to determine if there were differences in cumulative GPAs between Hmong and white students; an alpha of p<.05 was set for the test. There were no outliers in the data, as assessed by inspection of a boxplot. The cumulative GPA for white students was higher (M = 2.939, SD = 0.763) than Hmong students (M = 2.731, SD = 0.803), a statistically significant difference of M = 0.208, t (8890) = -3.168, p = .002.

Table 5

t-Test of Cumulative GPA

t-Test: Two-Sample Assuming Equal Variances Cumulative GPA

	Hmong	White
Mean	2.731	2.939
Variance	0.803	0.763
Observations	181	8711
Hypothesized Mean Difference	0	
df	8890	
t Stat	-3.178	
$P(T \le t)$ two-tail	0.002	

An independent-samples t-test was run to determine if there were differences in cumulative GPAs between Hmong female and white female students and Hmong male and white male students; an alpha of p<.05 was set for the test. There were no outliers in the data, as assessed by inspection of a boxplot. The cumulative GPA for white female students was higher (M = 2.992, SD = 0.823) than Hmong female students (M = 2.771, SD = 0.897), a statistically

significant difference, M = 0.221, t (5029) = 2.742, p = .006. The cumulative GPA for white male students was higher (M = 2.870, SD = 0.930) than Hmong male students (M = 2.673, SD = 0.898); however, this difference was not statistically significant M = 0.197, t (2859) = 1.802, p = .072.

Table 6

t-Test Cumulative GPA Female

t-Test: Two-Sample Assuming Equal Variances Cumulative GPA

	Hmong	_
	Female	White Female
Mean	2.771	2.992
Variance	0.897	0.823
Observations	107	4924
Hypothesized Mean Difference	0	
df	5029	
t Stat	2.742	
$P(T \le t)$ two-tail	0.006	

Further analysis of grade point averages was conducted, including the influence of financial aid eligibility, with students ineligible for financial aid due to academic performance removed from the sample. A two-way ANOVA test was conducted to examine the effect of the independent variables of race/ethnicity (Hmong and white) and eligibility for financial aid on the dependent variable (cumulative GPA). There was no significant interaction between the effects of race and financial aid eligibility on cumulative GPA, F (1, 7627) = .002, p = .962. However, the simple main effect analysis showed that eligibility for financial aid significantly negatively impacted the GPAs of both white and Hmong students (p=.049).

Table 7

ANOVA Race, Financial Aid and Cumulative GPA

Descriptive Statistics

Race white=0 Hmong=1	Ever FA	Mean	Std. Deviation	N
	N	3.331	.580	2757
White	Y	3.139	.547	4731
	Total	3.210	.567	7488
	N	3.304	.631	8
Hmong	Y	3.102	.490	135
	Total	3.112	.498	143
	N	3.331	.580	2765
Total	Y	3.138	.545	4866
	Total	3.208	.566	7631

Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	66.221 ^a	3	22.074	70.891	.000
Intercept	1246.701	1	1246.701	4003.898	.000
Racewhite0hmong1	.032	1	.032	.103	.748
Ever FA	1.172	1	1.172	3.765	.049
RaceWhite0Hmong1 *	.001	1	.001	.002	.962
EverFA					
Error	2374.833	7627	.311		
Total	80977.625	7631			
Corrected Total	2441.054	7630			

a. R Squared = .027 (Adjusted R Squared = .027)

Finally, Chi-square tests were utilized to determine what, if any, relationship exists between race/ethnicity (Hmong and white), successful course completion (as defined by the CVTC criteria for completing a course with a C- or higher) and semester-to-semester retention (as defined by the CVTC criteria of course completion with a D- or higher and continued

enrollment). A Chi-square test for association was conducted between race/ethnicity and successful course completion for four semesters (Summer 2011, Fall 2011, Spring 2012, and Fall 2012). All expected cell frequencies were greater than five. There was no statistically significant association between race/ethnicity and successful course completion for the following semesters: Summer 2011 χ 2(1) = 1.133, p = .287; Fall 2011 χ 2(1) = .655, p = .418; and Spring 2012 χ 2(1) = .655, p = .418. There was a statistically significant association between race/ethnicity and successful course completion for Fall 2012 χ 2(1) = 5.19, p = .023; however, at the time data was collected, incomplete grades still were outstanding.

A Chi-square test for association also was conducted between race/ethnicity and semester-to-semester retention for four semesters (Summer 2011, Fall 2011, Spring 2012, and Fall 2012). All expected cell frequencies were greater than five. There was no statistically significant association between race/ethnicity and semester-to-semester retention for the following semesters: Summer 2011 χ 2(1) = 2.491, p = .115; Fall 2011 χ 2(1) = .027, p = .869; and Spring 2012 χ 2(1) = .144, p = .704. There was a statistically significant association between race/ethnicity semester-to-semester retention for Fall 2012 χ 2(1) = 6.957, p = .008; however, at the time data was collected, incomplete grades still were outstanding.

Question 2. What function does family serve in the educational process of successful Hmong students? The second objective was to evaluate the function of family in the educational process of successful Hmong students. The survey results were used to address this objective. Of students who completed the online survey, only two reported their GPA as under 1.99; therefore, their responses were not used to address this research question. Respondents were asked to respond (yes/no) to a list of ways in which family provided them support while they pursued their education at Chippewa Valley Technical College. Frequencies are shown in

Table 8 below. Verbal encouragement (84%), food, housing or other material support (79%), emotional support (77%) and spiritual support (71%) were the most common ways respondents reported that their families provided support. Additionally, a combined total of 99% of respondents reported that while attending CVTC their families were somewhat supportive, supportive, or very supportive; only 1% of respondents reported that their families were not supportive. Furthermore, 83% of respondents reported that their families asked them about the subject or material of courses in which they were enrolled at least once per semester, 82% of respondent reported that their families asked them about their grades or course progress at least once per semester, 90% of respondents reported that their families asked them about their future educational plans at least once per year, and 88% of respondents reported that their families asked them about their future career goals at least once per year.

Table 8

Family Support

Question	Yes	No	
Assisted in filling out paperwork to enroll in school	40	45	85
Childcare during scheduled classes or while doing homework	32	53	85
Emotional support	65	20	85
Financial support	54	30	84
Food, housing or other material support	68	18	86
Spiritual support	60	25	85
Verbal encouragement	71	14	85

Question 3. What function do academic-support programs serve in the educational process of successful Hmong students? The third objective was to evaluate the function of academic-support programs in the educational process of successful Hmong students. The survey results were used to address this objective. Of the 89 successful Hmong students who completed the online survey, 27 (30%) reported using at least one academic-support program and

62 (70%) did not use any academic-support programs. Respondent were asked (and were allowed to select multiple answers) which factors prevented them from participating in academic- or peer-support programs. Results were as follows: did not have time to participate in programs, 50 (60%); not interested in participating, 27 (33%); not aware of the programs, 21 (25%); and programs available did not meet my needs, 8 (10%). Of those respondents who did participate in academic- or peer-support programs, analysis indicates they found the programs to be overwhelmingly supportive. Complete frequencies and percentages of responses are found in Table 9 below.

Table 9

Academic Support Program

			Direct contact with	
	Diversity Student	Academic	Diversity Services	
	Organization	Services	Specialist	Peer Tutoring
	Frequency/%	Frequency/%	Frequency/%	Frequency/%
Not at all supportive	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Slightly supportive	0 (0%)	5 (25%)	0 (0%)	2 (29%)
Somewhat supportive	1 (33%)	6 (30%)	0 (0%)	1 (14%)
Very supportive	1 (33%)	8 (40%)	0 (0%)	1 (14%)
Extremely supportive	1 (33%)	1 (5%)	1 (100%)	3 (43%)
Total	3 (100%)	20 100%	1 (100%)	7 (100%)

Question 4. How were successful Hmong students socialized about education?

Online survey questions addressed the fourth and fifth research objectives. Respondents were asked to reflect on the messages they received about the importance of education during their childhoods and during the year prior to this study. In childhood, the plurality of successful Hmong respondents (85%) reported that their families discussed education as being important or necessary for success in adulthood. The discussions among friends in childhood yielded

different messages, however, with only 50% of respondents reporting childhood conversations with friends stressing the importance or necessity of education for success in adulthood.

Conversely, 26% of respondents reported childhood discussions of education being unimportant or only somewhat important for success in adulthood, 9% reported they did not discuss education with friends, and 15% reported inconsistent messages from friends about the importance of education for success in adulthood.

Respondents reported less consistency in the messages they received from elementary, middle, and high school teachers. Sixty-six percent reported that most teachers encouraged them to pursue education beyond high school; however, 12% reported that most teachers encouraged them to merely stay focused on completing high school, 8% reported no discussion about future education plans from teachers, and 3% indicated that teachers did not encourage them to attend college at all. Ten percent reported hearing inconsistent messages from teachers about the importance of continuing their education.

Respondents were then asked to reflect on messages they received from friends and family on the importance of education within the year prior to this study. Respondents reported an increased emphasis on the importance of education by both family and friends during the year prior to this study vis-à-vis childhood — with friends moving from 50% in childhood to 75% in the last year, and family moving from 85% to 88%.

Question 5. Which agents were instrumental in the educational socialization process for successful Hmong students? The online survey asked respondent to rate how important a list of factors were in influencing their views on education. All factors are considered to be important agents of socialization. Frequencies are reported in Table 10 below. Respondents reported family and teachers to be the two agents that most influenced their opinions on the

importance of education. Friends were rated below teachers, but above religious leaders and the media.

Table 10

Agents of Socialization and Opinions on the Importance of Education

Agent of socialization	Extremely Important	Very Important	Somewhat Important	Neither Important nor Unimportant	Somewhat Unimportant	Very Unimportant	Not at all Important	Total
Family	59	21	2	2	1	0	1	86
Friends	17	26	25	12	2	1	2	85
Media (television, movies, magazines, etc.)	3	14	22	31	5	2	9	86
Teachers	24	31	16	11	2	0	1	85
Religious leaders	12	11	18	29	0	0	16	86

Question 6. Are there gender differences in educational success and the socialization process for Hmong students? The sixth objective was to determine if there was any significant difference in educational success between male and female Hmong students at Chippewa Valley Technical College. An independent-samples t-test was run to determine if there were differences in cumulative GPAs between male and female Hmong students; an alpha of p<.05 was set for the test. There were no outliers in the data, as assessed by inspection of a boxplot. The cumulative GPA for Hmong female students was higher (M = 2.771, SD = 0.897) than Hmong male students (M = 2.673, SD = 0.898); however, this difference was not statistically significant (M = 0.098, t (179) = .722, p = .471).

The online survey results were regrouped by gender, allowing for analysis of socialization process by gender; there were 58 female and 32 male respondents. Respondents' results showed some differences in family educational expectations by gender. Eighty-four

percent of females and 80% of males indicated family expectations of completing some form of post-secondary education. If post-secondary training were to be disaggregated into different levels of academic achievement (associate, bachelor, and post-graduate), some difference between genders would be seen. In terms of graduating from a CTE program, the percentages were quite similar: 40.63% (male) and 43.10% (female). Differences were seen, however, at the four college completion and post-graduate levels. Only 17.24% of Hmong females reported their families expected them to graduate from a four-year college, compared to 34.38% of Hmong males. Conversely, a higher percentage (24.14%) of Hmong females than Hmong males (6.25%) reported family expectations of completion of graduate level of education.

Although both male and female Hmong students reported high levels of support from family while attending Chippewa Valley Technical College, males reported receiving a higher level of support from family: 48.28% of males and 37.93% of females reported that their families were very supportive and 24.14% of females and 13.79% of males reported that their families were somewhat supportive. Female Hmong respondents reported receiving stronger messages from their families about the importance of education, both during childhood (89.66%) and in the year prior to this study (91.38%) compared to male Hmong students (78.13% and 84.38% respectively). Both genders reported similar discussions during childhood and in the year prior to this study with their friends about the importance of education. Messages received from teachers throughout elementary, middle, and high school yielded notable gender difference; 72.41% of females and only 56.25% of males reported that most of their teacher encouraged them to pursue education beyond high school.

The rating of agents of socialization that influenced male and female Hmong students' views of education showed similarities and differences. Both male and female Hmong students

reported family and teachers to be the two agents that most greatly influenced their opinions on the importance of education. The importance of friends was also similar between both groups. Conversely, the importance of religious leaders and media yielded differences between genders, with 28.13% of male Hmong students reporting that the media was extremely important or very important in influencing their ideas about the importance of education and only 13.79% of female Hmong students reporting this same level of influence. However, religious leaders appeared to be more influential among female Hmong students than among male Hmong students, with 37.93% of females and 9.38% of males reporting that this group was extremely important or very important in the influencing their ideas about the importance of education.

Chapter V: Discussion

The locus of this research was to explore educational success differences between Hmong and white students at Chippewa Valley Technical College. The academic success of Hmong students has serious ramifications, especially in Wisconsin. The state of Wisconsin has the third largest Hmong population in the United States, and between 1990 and 2010 that population increased 190% (Pfeifer, Sullivan, Yang & Yang, 2012). The poverty rate among Hmong people has shown marked improvement between 1990 and 2010. "Whereas 64% lived below the poverty line in 1990 (compared to 14% in the United States population), in 2000 the Hmong poverty rate was reduced to 38% (compared to 12% in the United States population), and by 2010, the rate had decreased to 25% (compared to 11% in the United States population)" (Vang. 2012, p. 9). While these improvements are notable, they should not be allowed to mask the fact that Hmong-American poverty still was double the rate of the general United States population in 2010. In Wisconsin the poverty rates among Hmong people is nearly two and half times the rate within the general population — 19% versus 8% (Vang, 2012). It is axiomatic that education is one of the best methods for reducing poverty, especially in groups with statistically lower rates of educational success and attainment. Not only does this pose an interesting challenge for the Wisconsin Technical College System, it has broader implications for statewide racial relations. And given the current so-called "skills gap" in Wisconsin's employment sectors, there are very real economic consequences if the academic success of Hmong-Americans does not continue to see marked improvement.

This research investigation posed six research questions, beginning with the analysis of educational success differences between Hmong and whites, then identifying the role of family and academic support programs in the successful Hmong students. This study also examined the

socialization process and influential agents of socialization for successful Hmong students and, finally, determined if there were gender differences in success and socialization for successful Hmong students. A desire to understand this under-researched ethnic group, which is the largest minority group at Chippewa Valley Technical College, was the driving catalyst behind this study.

Limitations

While interesting conclusions may have been drawn from this study, there are, as with any study, shortcomings and limitations to the research. Primary among these are issues with the sample; its size, diversity, and temporal range were limited. A total of 91 students enrolled at Chippewa Valley Technical College participated in this study. This is a rather large sample compared to many studies of Hmong students, but it is still small enough that sample errors are likely to occur, especially when analysis is extrapolated and applied to a broader population.

Similarly, the sample incorporates only students at one technical college — CVTC, and only over a four-semester time period. It is unknown if Hmong students at CVTC are widely representative of Hmong students in other CTE institutions. Additionally, these findings provide a snapshot of this particular cohort of students versus insight into previous or future cohorts at CVTC. These data do not reveal the answers to such questions, and further study would need to be employed to determine the impact of these exogenous variables.

In addition to the aforementioned sampling issues, there also were a few minor flaws with the instrumentation. It would be better, for example, to be able to compare raw GPA data to the survey results, rather than having students choose an estimated range of grade point average in the survey itself. Not only would this allow for more precision, it would have taken human

error elements out of this association. By-and-large, however, the survey was accurate and the data it produced were valuable.

Summary of Key Findings

The analysis of data in this study revealed several findings, including the following:

- (a) There was a statistically significant difference in cumulative GPA performance between Hmong and white students, with Hmong students performing at a lower level.
- (b) There was a statistically significant difference in cumulative GPA performance between Hmong female and white female students, but not between Hmong male and white male students.
- (c) The eligibility to receive financial aid, negatively influenced GPA performance for both racial/ethnic groups.
- (d) The families of successful Hmong students were supportive during their education at Chippewa Valley Technical College.
- (e) Successful Hmong students were socialized to believe that education is important or necessary for success in adulthood. Family and teachers were the two most critical agents in this socialization concerning the importance of education.
- (f) There were not statistically significant differences in gender in cumulative GPA performance among Hmong students. However, there were some gender differences in socialization concerning the importance of education and the agents that were most influential.

Conclusions

Differences in GPA performance. Independent-sample t-test revealed significant differences in cumulative GPAs between Hmong and white students, with whites performing significantly better than Hmong students — white students (M = 2.939, SD = 0.763) and Hmong students (M = 2.731, SD = 0.803), a statistically significant difference (M = 0.208, t (8890) = -3.168, p = .0015.) Cumulative GPA was further analyzed by gender and race/ethnicity; independent-sample t-test revealed significant differences in cumulative GPAs between female Hmong and female white students, but not between male Hmong and male white students. The cumulative GPA for white female students was higher (M = 2.992, SD = 0.823) than Hmong female students (M = 2.771, SD = 0.897), a statistically significant difference (M = 0.221, t (5029) = 2.742, p = .006). The cumulative GPA for white male students was higher (M = 2.870, SD = 0.930) than Hmong male students (M = 2.673, SD = 0.898); however, this difference was not statistically significant (M = 0.197, t (2859) = 1.802, p = .072.).

The educational performances gaps in CTE between Hmong and whites revealed in this study are consistent with earlier research that disaggregates Hmong students from the "Asian" category in studying post-secondary educational performance (Escueta & O'Brien, 1991; Kao & Thompson, 2003; Miller, 1995; Woo, 2007). The findings of this study further expose the danger of the "model minority" stereotype frequently applied to Asian Americans. As discussed in earlier research, there are consequences to using the nomenclature "Asian" itself and aggregating groups when studying educational success. Lew (2005) contended that a monolithic interpretation of Asians, vis-à-vis educational attainment, is overly simplistic and parochial, camouflaging broad variance within the group.

Financial aid negatively influenced GPA performance. Further analysis of grade point averages was conducted, including the influence of financial aid eligibility, with students ineligible for financial aid due to academic performance being removed from the sample. A two-way ANOVA test was conducted to examine the effect of the independent variables of race/ethnicity (Hmong and white) and eligibility for financial aid on the dependent variable (cumulative GPA). Simple main effect analysis showed that eligibility for financial aid significantly negatively impacted GPAs of both white and Hmong students (p=.049).

Furthermore, Hmong students were significantly more likely than white students to be eligible for financial aid — 92.8 percent of Hmong students in the sample were eligible to receive some sort of financial assistance (financial aid, grants, scholarships or work-study funding) at some point during their enrollment compared to 64 percent of white students enrolled during the same period.

Research has long established that parents' socioeconomic status (SES) has a strong and positive correlation to children's achievement. Thus, differences in SES of Hmong-Americans compared to whites constitute a plausible explanation for the gaps in educational performance. In Wisconsin, the poverty rate among Hmong people is nearly two and half times the rate among the general population —1 9% versus 8% (Vang, 2012). This study's findings are consistent with the majority of earlier research indicating that economic barriers influence student success and educational performance (DePouw, 2006; S. Lee, 1997; Lee & Xiong, 2011; Lew, 2005; Lor, 2008, Root, Rudawski, Taylor, & Rochon, 2003; Woo, 2007 Xiong, 1996).

Families support and socialization of education. Online survey results clearly indicated that families of successful Hmong students were supportive during their education at Chippewa Valley Technical College. Ninety-nine percent of respondents reported the overall

level of support from their families while attending CVTC as somewhat supportive, supportive, or very supportive; only 1% of respondents reported that their families were not supportive. Additionally, respondents overwhelming reported that their families continued to engage them in conversations about their education and to provide support in various ways. The family support for education found in this study is consistent with scholars who postulated that Hmong culture positively influences educational achievement. As Hutchinson and McNall (1994) noted, the Hmong community belief that education is a key pathway out of poverty is a clear illustration that education is supported by the group. Similarly, Timm (1994) found that "Hmong parents reported that they believe getting a good education is the way for their children to attain personal success and a good life" (p. 39). Hmong families embracing the importance of education and supporting their children throughout the process is also found in more recent research (Lee & Madyun, 2008; Lor, 2008). The findings in this study, along with previous research, further supports the positive role culture may play in the educational success of Hmong students.

Survey results also indicated that successful Hmong students were socialized by their families to believe that education was important or necessary for success in adulthood. Research has supported the belief that significant others serve as direct and mediating factors in forming students' educational ambitions and that these ambitions profoundly impact educational attainment (Cheng & Starks, 2002). Asian Americans, as an aggregate, have been shown to hold higher educational aspirations for their children than do white parents (Cheng & Starks). Results of online student surveys conducted as part of this research also indicated that high educational aspirations by family were present. Considering the existing and current research together, family behavior and the importance of family may positively affect the educational aspirations of

Hmong students (Cheng & Starks; Hutchinson & McNall, 1994; Lee & Madyun, 2008; Lor, 2008; Supple, McCoy, & Wang, 2010; Timm, 1994).

Survey results indicated less consistency in messages received from elementary, middle, and high school teachers. Sixty-six percent of respondents reported that most teachers encouraged them to pursue education beyond high school; however, 12% reported that most teachers encouraged them merely to stay focused on completing high school, 8% reported no encouragement from teachers to pursue further educational plans, and 3% indicated that teachers did not encourage them to attend college at all. Ten percent of respondents reported hearing inconsistent messages from teachers about continuing their education. Research specifically addressing teachers' aspirations and messages for Hmong students differs from that of Asian students as an aggregate. Taken together, these responses indicate lower educational aspirations from teachers for their Hmong students; this can negatively impact those students' educational aspirations, attainment, and achievement (Cheng & Starks, 2002; S. Lee, 2001; S. Lee, 2005; G. Lee, 2007; Noguera, 2004; Thao, 1999).

Gender differences. Independent-samples t-test were run to determine if there were differences in cumulative GPAs between male and female Hmong students; an alpha of p<.05 was set for the test. There were no outliers in the data, as assessed by inspection of a boxplot. The cumulative GPA for Hmong female students was higher (M = 2.771, SD = 0.897) than for Hmong male students (M = 2.673, SD = 0.898); however, this difference was not statistically significant (M = 0.098, t (179) = .722, p = .471). Although there was not a statistically significant difference between genders in cumulative GPA performance among Hmong students, there were some gender differences in socialization concerning the importance of education and the agents that were influential. Research from the mid-1980s showed lower educational

performance for Hmong females compared to Hmong males (Downing, Olney, Mason, & Hendricks, 1984). Since the 1990s, research has shown marked improvement by Hmong females, yet gender differences persisted (American Community Survey, 2011; Hutchison, 1997; United States Census, 2010). The findings in this study are not consistent with earlier research, showing Hmong males performing better than Hmong females.

S. Lee (1997) examined the participation of Hmong women in higher education, specifically looking at how Hmong culture could explain the stratification between genders. This study found that the educational expectations held by teachers and family differed by gender. Eighty-four percent of Hmong females and 80% of Hmong males indicated having family expectations of their completing some form of post-secondary education. Further differences were seen when post-secondary training was to be disaggregated into different levels (associate, bachelor, and post-graduate). Male and females were similarly expected by their families to graduate from a CTE program. Differences were seen, however, when considering academic completion at the four-year college and post-graduate levels. Fewer Hmong females (17.24%) reported their families expected them to graduate from a four-year college when compared to Hmong males (34.38%). Conversely, a higher percentage of Hmong females (24.14%) than Hmong males (6.25%) reported family expectations of completion of graduatelevel education. Furthermore, although both male and female Hmong students reported high levels of support from their families while attending Chippewa Valley Technical College, males reported receiving a higher level of support from their families than did females. Additionally, messages received from teachers throughout elementary, middle, and high school yielded notable gender differences; 72.41% of Hmong females and only 56.25% of Hmong males reported that most of their teachers encouraged them to pursue education beyond high school. The more

positive messages from teachers to Hmong females versus Hmong males is consistent with S. Lee's (2001) study, which reported that Hmong males were likely to be stereotyped as "gangbangers."

Recommendations for Further Study

After examining these data, the following recommendations are offered for further study of Hmong student success in career and technical education and the role of various agents of socialization:

- 1. Hmong students must continue to be disaggregated from the pan-ethnic "Asian" category. The dearth of data relating to Hmong students in CTE programs was perhaps the most limiting factor in this study. To examine issues surrounding their educational performance, we must first disaggregate Hmong students from their disparate peers in the "Asian" category. In doing so, the educational attainment and achievement discrepancies that are obfuscated by the "model minority" stereotype may be highlighted; variance within the broader "Asian" category can no longer be ignored.
- 2. Further study should be conducted into gender gaps between Hmong male and female educational achievement in CTE. The results of this study muddy the waters in regard to performance differences between male and female Hmong students. The study indicated no statistically significant difference in cumulative GPA between genders. This stands in contradiction to the preponderance of research on the topic, which shows males outperforming females. The reasons for this discrepancy may be manifold and complicated. It is possible, for example, that Hmong females are catching up to their male peers. It is also possible, however, that

the gender gaps reported were peculiar to four-year institutions and that CTE has not experienced commensurate achievement stratification. Either way, further research will be able to determine longer-term trends in gender gaps and offer greater insight into what may cause them.

3. More data needs to be collected from at-risk and unsuccessful Hmong students.

One of the shortcomings of this study has been the lack of data from unsuccessful Hmong students. To extrapolate conclusions about the impact of socialization on Hmong student success, comparisons are necessary. While this study produced a panoply of information about which agents of socialization significantly impacted successful Hmong students, little is known about how these same agents did or did not impact unsuccessful Hmong students.

Recommendations for Improving Hmong Educational Performance in CTE

- 1. Greater financial support opportunities are needed for Hmong students. The data clearly indicate that, when controlling for financial aid eligibility, there are no significant disparities in achievement between Hmong and white students. Building on this, the current achievement gaps that may be seen in CTE programs can largely be attributed to socio-economic status. Given recent census data that indicates Hmong families are more than twice as likely to live in poverty when compared to the general population, it becomes clear that poverty, not ethnic exceptionalism, likely drives any achievement gaps. If we are truly seeking to eliminate these gaps for Hmong students, greater access to financial support programs would go a long way toward this end.
- 2. K-12 educators should go further in encouraging Hmong students to pursue postsecondary educational opportunities. The good news is that K-12 educators were

shown to be extremely influential in Hmong students' views concerning post-secondary education. As such, teachers play a critical role in shaping perceptions and laying the groundwork for success in CTE. Educators, therefore, must make a heightened effort to send positive and encouraging messages to Hmong students, in particular about the importance of post-secondary for success in adulthood.

3. CTE needs to actively pursue partnerships with the Hmong community. Career and technical education provides a pathway out of poverty for many. Increasing the exposure of the Hmong community to CTE programs and the high-paying employment opportunities they provide is likely to continue successful integration of Hmong diaspora into American life. The best method for doing this is outreach to Hmong community organizations.

Summary

This study was conducted to examine the educational performance of Hmong students; to investigate the role of family, socialization, and academic support programs among successful Hmong students; and to examine possible gender differences in success and socialization for successful Hmong students. A desire to understand this under-researched ethnic group — the largest minority group at Chippewa Valley Technical College — was the driving catalyst behind this study.

The results from this study indicate that Hmong students performed significantly lower when cumulative GPAs were compared with those of their white peers and that the eligibility to receive financial aid negatively influenced GPA performance. When successful Hmong students were further analyzed, it was found that their families were supportive during their education at Chippewa Valley Technical College and that these students were socialized to believe that

education was important or necessary for success in adulthood. Hmong students reported that family and teachers are the two most critical agents in this socialization concerning the importance of education. Unlike earlier research, this study did not find statistically significant differences in gender in regard to cumulative GPA performance by Hmong students. There were, however, some gender differences in regard to socialization concerning the importance of education and the agents that were most influential.

Continued analysis of Hmong educational performance should be done to better understand racial/ethnic and gender educational attainment gaps for Hmong students. It is also critical to examine the role of poverty and socialization in these performance differences and to develop strategies to improve the success of Hmong students.

Over the last twenty years, significant headway has been made in reducing the poverty rate and increasing the educational success and attainment of Hmong people; still there is significantly more that needs to be accomplished. Although it is important to recognize successes and take stock of them, more must be done to build upon these accomplishments and continue to make progress. Improvements in educational success and attainment rates are likely to manifest in reducing the poverty rates for Hmong-Americans. CTE and the Wisconsin Technical College System are posed to play a critical role in these continued successes. But if they do not fulfill that role, there will be very real economic consequences for Hmong-Americans and society as a whole.

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Appendix A: Online Survey

This survey will ask you questions about the support you received while attending Chippewa Valley Technical College (CVTC). It will also ask you about barriers you may have faced to educational success. Your participation in this study is voluntary and greatly appreciated; all your answers will be anonymous.

1.	What is your gender? Female Male I prefer not to answer
2.	What is your approximate age? 17 and under 18-19 20-25 26-30 31-35 36-40 41-45 over 46
3.	What is your race/ethnicity? White Black Chinese Hmong Korean Japanese Asian Indian Native American Hispanic Other
4.	What is your immigration status? First generation Second generation Third generation Unknown

5. What is your program area of study?
Agriculture Food and Natural Resources
Architecture and Construction
Business, Finance, and Marketing
Health Sciences
Human Services

Information Technology
Law, Public Safety and Security
Liberal Arts - Transfer
Manufacturing
Science, Technology, Engineering & Math (STEM)
Transportation, Distribution and Logistics
Undecided

6. What is your cumulative GPA (grade point average)?

4.00-3.5

3.49-3.00

2.99-2.50

2.49-2.00

Under 1.99

7. Were any of the following examples issues for you during your time at CVTC?

	Yes	No
Child care		
Care for younger siblings or		
family members		
Health problems		
Influence of friends		
Lack of money		
Lack of motivation		
Lack of mentors		
Lack of parental support		
Lack of time to study		
Lack of self-confidence		
Lack of support from		
instructors		
Lack of support from ASPs		
(academic support programs)		

8. During your education at CVTC, did you participate in any academic or peer support programs? Examples of academic or peer support programs—Diversity Student Organization, Academic Services, contact with Diversity Services Specialist, Peer Tutoring, etc)

Yes

No

9. Please mark all academic or peer support program you participated in:

Diversity Student Organization

Academic Services

Direct contact with Diversity Services Specialist

Peer Tutoring

Other

Direction: Please indicate how supportive you viewed each of the following programs to be by marking the statement which most closely represents your experience.

10. Which factors prevented you from participating in any academic or peer support programs? Please check all that apply.

I was not aware of the programs

Did not have time to participate in programs

Programs available did not meet my needs

Not interested in participating

11. Which statement best describes your family's academic expectations of you?

No educational expectations

Less than high school graduation

Graduate from high school

Graduate from career or technical program

Graduate from a four year college

Graduate from a Masters or Doctorate program

Expectations were different within my family

12. Which statement most closely describes the overall level of support you received from your family while attending CVTC?

Unknown

Not supportive

Somewhat supportive

Supportive

Very supportive

13. In which way(s) did your family provide support for you while pursing your education at CVTC:

	Yes	No
Assisted in filling out		
paperwork to enroll in school		
Childcare during scheduled		
classes or while doing		
homework		
Emotional support		
Financial support		
Food, housing or other		
material support		
Spiritual support		
Verbal encouragement		

Select the statement which most accurately describes how often your family members ask you about the following items during your time as a student at CVTC:

14. The subject or material of courses you are taking

Not at all

Once or twice a semester

Three or more times a semester

15. Your grades or progress in courses

Not at all

Once or twice a semester

Three or more times a semester

16. Future educational plans

Not at all

Once or twice a year

Three or more times a year

17. Future career goals

Not at all

Once or twice a year

Three or more times a years

18. Select the statement which is most accurate. Reflecting back on your experiences in childhood, how did your family members discuss education?

As if it was not important for success in adulthood.

As if it somewhat important for success in adulthood.

Family did not discuss education

As if it was important for success in adulthood.

As if it was necessary for success in adulthood.

Family was not consistent with their messages; some members expressed the importance of education for success while others did not.

19. Select the statement which is most accurate. Reflecting back on your experiences in childhood, how did your friends discuss education?

As if it was not important for success in adulthood.

As if it somewhat important for success in adulthood.

Friends did not discuss education

As if it was important for success in adulthood.

As if it was necessary for success in adulthood.

Friends were not consistent with their messages; some members expressed the importance of education for success while others did not

20. Select the statement which is most accurate. Reflecting back on your time in elementary, middle and high school, how would you describe your experiences with teachers?

Most of my teachers did not encourage me to attend college.

Most of my teachers did not discuss education with me.

Most of my teachers encouraged me to stay focused on completing high school.

Most of my teacher encouraged me to pursue education beyond high school.

The messages I received from teachers was not consistent; some teachers expressed encouragement towards completing and continue my educations while others did not.

21. Select the statement which is most accurate. Thinking about discussions you have had in the last year, how have your friends discussed education?

As if it was not important for success in adulthood.

As if it was somewhat important for success in adulthood.

My friends and I did not discuss education

As if it was important for success in adulthood.

As if it was necessary for success in adulthood.

My friends are not consistent with their messages; some members expressed the importance of education for success while others did not.

22. Select the statement which is most accurate. Thinking about discussions you have had in the last year, how have your family members discussed education?

As if it was not important for success in adulthood.

As if it was somewhat important for success in adulthood.

My family did not discuss education

As if it was important for success in adulthood.

As if it was necessary for success in adulthood.

My family was not consistent with their messages; some members expressed the importance of education for success while others did not.

23. Select the statement which is most accurate. How well do you feel your childhood experiences have prepared you for educational success at CVTC?

Undecided

Not at all

Not very well

Somewhat well

Very well

24. What was your reason for pursing your post-secondary education? Mark in all of that apply.

To feel better about myself

To make my family proud

To get a good job

To challenge myself

It is what was excepted of me

Using the scale, please rate the importance of each factor in influencing your views on education.

25. Family

Extremely Important

Very Important

Somewhat Important

Neither Important nor Unimportant

Somewhat Unimportant

Very Unimportant

Not at all Important

26. Friends

Extremely Important

Very Important

Somewhat Important

Neither Important nor Unimportant

Somewhat Unimportant

Very Unimportant

Not at all Important

27. Media (television, movies, magazines, etc)

Extremely Important

Very Important

Somewhat Important

Neither Important nor Unimportant

Somewhat Unimportant

Very Unimportant

Not at all Important

28. Teachers

Extremely Important

Very Important

Somewhat Important

Neither Important nor Unimportant

Somewhat Unimportant

Very Unimportant

Not at all Important

29. Religious Leaders

Extremely Important

Very Important

Somewhat Important

Neither Important nor Unimportant

Somewhat Unimportant

Very Unimportant

Not at all Important

30. Select the statement which most accurately describes your financial situation while attending CVTC

I supported myself financially My family largely supported me I was supported by another benefactor (third-party) I was given a full scholarship Other

Thank you for taking time out of your busy schedule to complete this survey. If you would like to be entered into the drawing for \$50 gift cards please enter your email address. Please click on the "Submit" button below to record your responses