ABSTRACT

Title of Thesis: CAREER SELF-EFFICACY OF VIETNAMESE ADOLESCENTS: THE ROLE OF INDIVIDUAL, MICROSYSTEM, EXOSYSTEM, AND MACROSYSTEM VARIABLES

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Individual (gender and acculturation), microsystem (social support), exosystem (social class), and macrosystem (racism) variables were examined as predictors of career decision-making self-efficacy, career planning and exploration efficacy, and education and vocational development efficacy in a sample of 80 Vietnamese middle school students in the Washington D.C. area. These students experienced high levels of career decision-making self-efficacy, career planning and exploration efficacy, and education and vocational development efficacy. English language acculturation accounted for unique variance in the prediction of career decision-making self-efficacy and career planning and exploration efficacy, whereas English language acculturation and peer support accounted for unique variance in the prediction of education and vocational development efficacy. Suggestions for future research and interventions are provided.
CAREER SELF-EFFICACY OF VIETNAMESE ADOLESCENTS: THE ROLE OF INDIVIDUAL, MICROSYSTEM, EXOSYSTEM, AND MACROSYSTEM VARIABLES

by

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INTRODUCTION

Career self-efficacy plays an important role in adolescents’ career aspirations and choices (Bandura, Barbaranelli, Vittorio Caprara, & Pastorelli, 2001; Rotberg, Brown, & Ware, 1987; Turner & Lapan, 2002). Enhancing career self-efficacy might assist adolescents who are at-risk for academic or vocational problems (O’Brien, Dukstein, Jackson, Tomlinson, & Kamatuka, 2000). Vietnamese youth may be at risk for vocational underachievement as Vietnamese labor force participation often is characterized by low level service and manufacturing jobs, which are low paying, unstable, often part-time, and consist of limited benefits, with no room for upward mobility (Gold & Kibria, 1998). Research has yet to assess the role of career self-efficacy among Asian Americans and specifically among Vietnamese adolescents, focusing instead on career development, values, personality, needs, and career interests (Leong & Gim-Chung, 1995). The present study applied Bronfenbrenner’s (1977) ecological theory to the vocational development of Vietnamese adolescents. Specifically, this study examined the contributions of individual (i.e., gender and acculturation), microsystem (i.e., social support), exosystem (i.e., social class), and macrosystem (i.e., racism) variables in predicting career-self efficacy among Vietnamese adolescents.

Career-related self-efficacy, first introduced by Hackett and Betz (1981) as important to individual career development, was an extension of Bandura’s (1977) theory of self-efficacy. Lent and Hackett (1987) defined career self-efficacy as the confidence an individual has with regard to performing actions related to choosing and adjusting to a career. Career related self-efficacy was important to study because self-efficacy had been found to predict career interests (Turner & Lapan, 2002) and career aspirations (Bandura
et al., 2001), as well as relate to perceived range of career options (Rotberg et al., 1987).

In addition, career self-efficacy had been found to relate to a number of psychosocial variables, such as self-esteem, anxiety, internal locus of control, and identity differentiation and integration (Miranda & Umhoefer, 1998).

Career variables, including career self-efficacy, were especially important to study among Vietnamese Americans because of the important role that career and work has played within this community. Within the Vietnamese community, an individual’s work has defined her or his identity. Moreover, impoverished Vietnamese families tended to see their children’s careers as one way of escaping poverty (Gold & Kibria, 1998).

Vietnamese Immigrants and work

Recent research largely has ignored the current status of Vietnamese workers in the United States. Most of the available information is from the 1980’s, which is summarized briefly here. In 1988, 29.3% of Vietnamese occupied operator/laborer positions, while 17.1% of White Americans and 14.2% of Asian Americans were in operator/laborer occupations (Leong, 1998). Vietnamese refugees were characterized by low participation in the labor force and high unemployment. In 1985, only 39% of Vietnamese immigrants participated in the labor force as compared to 66% of the total U.S. population. Regarding unemployment rates in 1988, 17% of Southeast Asian refugees were unemployed as compared to 7% of the general US population (Gold & Kibria, 1998). Despite rising labor force participation and longer residence in the United States, there is evidence that the majority of Vietnamese are living near poverty (Gold & Kibria, 1998). Many Vietnamese refugees are concentrated in urban areas, and become trapped in chronic and long term poverty. Among all American subgroups in the United
States, Southeast Asian refugees have one of the lowest income levels (Lee, 1998). This is significantly lower than that of Chinese and Japanese Americans, who earn within the highest income brackets of all ethnic groups (Young & Takeuchi, 1998). However, the poverty and work-related issues of Southeast Asians tend to be overlooked due to the tendency to consider Asian Americans a homogenous group.

Theoretical Basis

Bronfenbrenner’s (1977) ecological model of human development was used in this study to understand the contributions of the individual’s environment to her or his career self-efficacy and career aspirations. Individuals were understood in relation to their immediate settings (e.g., family, school, peers), as well as to the larger social setting (e.g., prevailing stereotypes) within which the individual existed.

Each context, including the individual, was conceptualized as being contained and existing within a larger system. The systems were classified to understand the individual within a microsystem, mesosystem, exosystem, and a macrosystem. Within an ecological framework, individual level variables characterize the person’s internal experiences. These include her or his emotions, beliefs, personality, genetics, gender, race, ethnicity, acculturation, and other such variables.

The individual’s immediate environment, including family, school, and peers, compose her or his microsystem. Support and social networks might be especially important for Vietnamese immigrant adolescents because of the instability that might have been in their lives due to violence and migration. The mesosystem describes the relationships between the microsystems. An example of a mesosystem level variable important to immigrant children is intergenerational conflict. The exosystem contains
concrete, but broader, social influences that influence the individual’s life. For a Vietnamese adolescent, these structures may include her or his social class, neighborhood, immigration laws, and social services. The macrosystem consists of the individual and her or his relationship to the perceptions carried by her or his society and culture about the individual. For a Vietnamese adolescent, perceptions are influenced by xenophobia and racism, as well as the model minority myth.

There were three purposes of the proposed study. The first purpose was to learn more about Vietnamese immigrant adolescents, as these students rarely are studied in psychology. The hope was to contribute to the literature to enhance understanding of the lives and experiences of this population. The second purpose of this study was to examine the relationships among individual, microsystem, exosystem, and macrosystem influences in the lives of Vietnamese immigrant adolescents. Finally, the contributions of these variables to career self-efficacy were investigated. Career self-efficacy was selected because previous research indicated that this variable was predictive of future vocational experiences (Bandura et al., 2001; Rotberg et al., 1987; Turner & Lapan, 2002). The results of this study are intended to inform the development of services to facilitate the vocational development of Vietnamese immigrant adolescents.

*Individual factors*

This study included three individual variables. Specifically, gender and acculturation were examined for their contribution to the career related self-efficacy of Vietnamese adolescents. The relationship of these variables to other constructs in the individual’s microsystem, exosystem, and macrosystem also were studied.
No research was found that specifically examined gender differences in career-related self-efficacy in Asian American populations. However, gender differences have been found among other groups. High career related self-efficacy was found to be related to non-traditional career choice among women, whereas this relationship has not been found among men (Bergeron & Romano, 1994; Flores & O’Brien, 2002; Mathieu, Sowa, & Niles, 1993; Nevill & Schlecker, 1988). Low-income women also tended to feel less efficacious in male-dominated occupations (Hannah & Kahn, 1989).

Acculturation has been defined as the adaptation that takes place when a cultural group, or an individual from a cultural group, comes in contact with a dominant cultural group (Birman & Trickett, 2001). Recent definitions of acculturation have been conceptualized in a variety of ways. Some researchers have examined only language use, while others examine multiple dimensions of adaptation (see Nguyen, Messe, & Stollak, 1999, for a review). Research has suggested a relationship between acculturation and career self-efficacy, where acculturation toward the United States and English language significantly contributed to higher levels of career self-efficacy (Miranda & Umhoefer, 1998). Another study found acculturation to relate negatively to job strain and satisfaction (Leong, 2001), to predict vocational identity (Shih & Brown, 2000) and educational aspirations (Ramos & Sanchez, 1995), and to influence traditionality and prestige of career choice (Flores & O’Brien, 2002). Gomez and Fassinger (1994) found highly successful women to identify themselves as bicultural, and able to function successfully in both their native and the dominant culture.
In this study, the amount and sources of social support were assessed for their influence on the individual’s career related self-efficacy. Social support was defined as the financial and personal support provided by members of the individuals’ immediate and extended families, peers, school officials, and community members. This study examined the relationships of Vietnamese adolescents that are occurring within their immediate environment, such as with family, school, and peers.

Research suggested that social support plays a role in career decision-making (Lucas, Skokowski, & Ancis, 2000; Schultheiss, Kress, Manzi, & Glasscock, 2001; Whiston, 1996). Leong (1998) suggested that, among Asian American adolescents, parents play a critical role in career choice. Students may chose a career not related to their career interests because of parental pressure or guidance. Other research has suggested that the support that children perceive their parents having for their career interests influences their confidence in pursuing that career (Turner & Lapan, 2002). Researchers also found that peer support and involvement facilitated adolescents’ career exploration and planning behaviors (Azmitia & Cooper, 2001; Kracke, 2002). Future research should investigate the relationship between specific types of social support (e.g., parental, peer) and career decision-making self-efficacy.

Mesosystem variables

The mesosystem describes the relationships between microsystem level variables. For example, conflict between the adolescent’s generation and the generation of her or his parents might be an important mesosystem influence in the lives of Vietnamese adolescents. Other mesosystem variables could include the relationship between parents
and school and school and Vietnamese peers. In this study, the influence of the mesosystem on the career self-efficacy of these students was taken into consideration when interpreting and discussing the results, but not assessed directly.

*Exosystem variables*

The exosystem consists of broad and concrete social structures influencing an adolescent’s life. For Vietnamese adolescents, these influences may be their social class, neighborhood, social and educational services, and current immigration laws. The role of social class in the career-related self-efficacy of Vietnamese adolescents was examined in this study.

Liu et al. (2004) noted that there are inconsistencies within counseling psychology research as to how social class has been conceptualized and operationalized. They combined several different definitions and suggested that “for social class, a person may be positioned in an economic hierarchy based on objective indices of income, education, and occupation…concepts such as prestige, control of resources, and power are inferred from one's perceived social class group” (Liu et al., 2004, p. 9). It has been noted that social class strongly influenced occupational aspirations and attainment, and that by middle school, students’ occupational choices already were limited by their socioeconomic status (Young, 1983). Little research examined the role of social class in the career literature on Asian Americans (Leong & Gim-Chung, 1995), although social class has been found to relate to career choice among Asian American students (Tang, Fouad, & Smith, 1999). In addition, social class was found to be related to career self-efficacy among ethnic minorities and White students (Hannah & Kahn, 1989; Lauver & Jones, 1991).
Macrosystem variables

The macrosystem describes “broader social/cultural blueprints organizing life (e.g., patterns of racial or gender discrimination, societal stereotypes of class status)” (Cook, O’Brien, & Heppner, in press, p. 2). This study investigated the role of racism as a macrosystem variable in the career decision-making self-efficacy of Vietnamese adolescents.

Racism has been defined as “the prejudicial attitudes and discriminatory behavior toward people of a given race, or…institutional practices (even if not motivated by prejudice) that subordinate people of a given race” (Myers, 1990, p.44). Asian Americans have experienced a long history of racism in the United States including discriminatory immigration laws, hate crimes, and stereotyping (Liang, Li, & Kim, 2004). Asian American adolescents reported experiencing discrimination from their peers and educational institutions (Fischer, Wallace, & Fenton, 2000; Tan, 1994), and have been stereotyped as lacking in English and social skills (Fiske, Xu, Cuddy, & Glick, 1999). Consequently, Leong and Hayes (1990) found that Asian Americans tend to be stereotyped as performing well in technical fields and poorly in occupations requiring English language proficiency, or in social skills. The proposed study assessed the level of racism perceived by Vietnamese adolescents and how their perceptions of racism relate to their career decision-making self-efficacy.

Dependent variables

The dependent variable examined in this study was career self-efficacy. Career self-efficacy was chosen because it is thought to be influenced by many environmental variables, such as cultural values (Brown, 2002), ethnicity (Lauver & Jones, 1991), social
class (Hannah & Kahn, 1989; Lauver & Jones, 1991), and influential teachers (Scheye & Gilroy, 1994). Career self-efficacy was found to predict career interests (Turner & Lapan, 2002), shape career aspirations (Bandura et al., 2001), and relate to perceived range of career options (Rotberg et al., 1987).

One form of career self efficacy is career decision-making self-efficacy, or confidence in pursuing the tasks related to selecting a career. The literature suggested that career decision-making self-efficacy is related to career commitment (Chung, 2002) and vocational/career decision (Bergeron & Romano, 1994; Betz & Voyten, 1997). Taiwanese students were found to have lower levels of career decision-making self-efficacy than American students (Mau, 2000), suggesting that there may be cultural differences in career decision-making self-efficacy.

Conclusion

In summary, the proposed study explored variables related to the career development of Vietnamese adolescents who were living in a large urban area. Because very little is known about the current status of these students with regard to their educational and vocational/career development, this study sought to add current information to a very limited body of literature. It is our hope that the findings of this study will be used to inform the development of educational and vocational interventions for this population. Bronfenbrenner’s (1977) ecological model was used to assess the effects of individual factors, as well as the microsystem, exosystem, and macrosystem level variables on the career related self-efficacy of Vietnamese adolescents. The independent variables were individual factors (i.e., gender and acculturation), microsystem level variable (i.e., social support), exosystem level variable (i.e., social
class) and macrosystem level variable (i.e., racism). Three dependent variables together composed career self-efficacy. These variables were career decision-making self-efficacy, career exploration and planning efficacy, and educational and vocational development efficacy.
LITERATURE REVIEW

This review will focus on the relations between individual, microsystem, exosystem, and macrosystem variables and career self-efficacy. Whenever possible, specific attention will be given to these variables in the lives of Vietnamese adolescents. However, because limited research has investigated these variables in the lives of people of Vietnamese origin, this review also will cover the relationships found among these variables in people of other ethnic/racial groups.

A summary of the literature on Vietnamese Americans specific to work status and career experiences will be presented, followed by a review of the Bronfenbrenner’s (1977) ecological theory. A theoretical discussion of the individual variables (i.e., demographics, emotional well-being, and acculturation), the microsystem variable (i.e., social support), the exosystem variable (i.e., racism), and the macrosystem variable (i.e., social class) will be offered, each followed by an empirical review of studies utilizing the variable and how it has been found to relate to career self-efficacy. Lastly, a discussion and review of literature on career self-efficacy as an important construct in an individual’s vocational development will be presented.

Economic and Vocational Status of Vietnamese Americans

The majority of Vietnamese immigrants in the United States are living in poverty. This is true despite their increased participation in the labor force, and remains true even when length of residence in the U.S. is considered. Most Vietnamese immigrant adults work in low level service and manufacturing jobs (Gold & Kibria, 1998). Vietnamese refugees face a number of obstacles in the labor force. Educational degrees and vocational training and skills often are not recognized by host countries. Vietnamese
refugees also face a lack of information about the labor market, as well as regulations that exclude refugees from training opportunities (Leong, 1998). These refugees also tended to be overrepresented in certain occupations and underrepresented in others. Little information was available specifically about Vietnamese refugees because most research focused on Asian Americans as a whole and ignored ethnic differences. The research that did exist about the experiences of Vietnamese refugees suggested that their experiences were quite different from that of other Asian ethnic groups (i.e., Chinese, Japanese, and Korean), however the research produced conflicting findings. The conditions surrounding the settlement of Vietnamese refugees have made it difficult to live up to the Asian model minority myth. While earlier Vietnamese refugees had skills that were transferable to the American labor market and allowed them to move to middle class status, more recent refugees tend to lack English language skills as well as job skills and training, making it difficult to succeed economically. One reason for the poorer English language skills is that Vietnamese individuals tend to live in ethnic enclaves where English is minimally spoken. Limited English skills and living in these ethnic enclaves contribute to limiting the work options available to many Vietnamese refugees. Thus, many recent refugees are limited to low wage, unstable jobs which may not be legal and in which they are not protected from exploitation (Gold & Kibria, 1998). Little research focused on how the work status and experiences of these refugees and adults has affected the adaptation and career experiences of their children.

Vietnamese children growing up in families belonging to a lower social class may hold low career ambitions, believing that it will not be possible to strive for higher-level careers. Also, in poorer and recently emigrated Vietnamese families, the parents may not
be able to afford to pay for higher education for their children. They may not have the resources, and/or may need the child to provide immediate income for the family. These conditions may affect the children’s confidence in exploring different career paths. How a Vietnamese adolescent acculturates to the United States may affect her or his career self-efficacy. Ima and Nidorff (1998) suggested that some Vietnamese adolescents living in urban areas may assimilate into the street culture, where they become vulnerable to high school delinquency and gang involvement. Possible consequences of this included limiting their career options by a lack of exposure to different careers and role models and lack of belief that they can be successful in a variety of careers. Another important factor that might account for poor career self-efficacy is the Model Minority Myth, which suggests that Asian Americans perform poorly in careers requiring communication, human interaction, and expression (Leong, 1982; Sue & Frank, 1973). Hune and Chan (1997) asserted that there have been many adverse affects of this stereotype on the career development of Asian American students, with students evidencing poor self-concept and little efficacy in pursuing diverse career paths, particularly those requiring leadership and communication skills. For children of Vietnamese immigrants, their eventual career choice may have implications for their status within their community. Gold and Kibria (1998) found that for Vietnamese immigrants, their occupation often defines their identity within their community. Vietnamese immigrants who held jobs that offered a living wage, were stable, and had benefits, were referred to and regarded in their communities by their profession instead of their names. For example, family and friends will refer to an individual as “teacher,” instead of by their name. On the other hand, those individuals
who worked in less esteemed occupations were not called by their title at work, but rather by their name.

Finally, there is little research that has been conducted on the careers of Vietnamese Americans. In a metanalysis performed on research done on career variables, only 21% of the studies reported subjects’ race (Ryan, 1999). Among those studies, 90% of the participants were either White or African American. More research needed to examine how the conditions and realities experienced by particular ethnic/racial minorities affect their career self-efficacy.

Ecological Theory

The importance of person-environment interactions in shaping behavior and human development has widely been accepted in psychological research (Gelso & Fretz, 1992). However, environment can be defined in various ways. Bronfenbrenner (1977) defined the environment as a series of concentric systems surrounding the individual, and identified four levels within which the individual develops. The individual’s immediate environment, including her or his family and school, for example, compose the individual’s microsystem. The individual is in direct contact with the systems in her or his microsystem, which is influenced directly by her or him. Most research examined an individual’s environmental context focuses on elements of the microsystem. Bronfenbrenner highlighted the importance of recognizing the influence extended by broader environmental factors as well. For example, the interaction between microsystems can themselves be an important influence. Bronfenbrenner called this level of microsystem interactions, the mesosystem. Some examples of relationships composing
the mesosystem are the interaction between peers and family or between neighborhood and family.

The next level of influence identified by Bronfenbrenner is the exosystem. The exosystem refers to the social structures that shape an individual’s immediate environment, but do not directly interact with the individual. Such social structures include the economy, the media, and major institutions. The largest system proposed by Bronfenbrenner is called the macrosystem. The macrosystem consists of “the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal, and political systems, of which micro-, meso-, exosystems are the concrete manifestations.” (page 515). Racism, xenophobia, and the legal system are all examples of the exosystem. The individual develops and grows through dynamic interactions between her or himself and the systems. Additionally, each system interacts with the other systems, shaping and influencing the others.

Bronfenbrenner (1986) has elaborated on his ecological model by focusing more attention on the complex role of mesosystem (e.g., the amount of influence that a mother yields over her child is dependent on the amount of support received from family and friends) and exosystem on family functioning (e.g., the indirect effects of living in an urban environment may be negative for social/emotional development in young children, but may be beneficial for the intellectual development of older children).

Bronfenbrenner (1977) also proposed a new system, the chronosystem, to examine continuities and changes occurring in an individual’s development over time. For example, there are normative transitions (e.g., entering and progressing through different grade levels that affect development), and non-normative transitions (e.g.,
immigration to another country, death, and divorce). One researcher found that more
instable (e.g., number of family moves, changes in school arrangements, changes in
family structure or employment) family environments were associated with more
submissive, aggressive, and anxious children. In those families characterized by
instability, there were higher rates of children engaging in criminal acts in adulthood
(Bronfenbrenner, 1986).

Bronfenbrenner (1977) also expanded on the definition of the microsystem to
include “social, and symbolic features that invite, permit, or inhibit, engagement in
sustained, progressively more complex interaction with, and activity in, the immediate
environment” (Bronfenbrenner, 1993, p. 15). He suggested that there are characteristics
of the physical environment that are associated with a range of cognitive functioning.
More specifically, he proposed that objects and other features that invite exploration and
manipulation enhance the developmental process, whereas environments characterized by
little structure, unpredictability, and instability hinder the developmental process.
Bronfenbrenner (1993) also suggested that a process (e.g., parental influence or support)
may function differently in different environments depending on the physical
characteristics of that immediate setting.

The ecological model has been used to understand adolescent development.
Researchers that used Bronfenbrenner’s ecological model to guide their work on
adolescents examined anxiety and depression as an outcome of adaptation to a new
country (Chan et al., 2003), family functioning among pregnant teens (Corcoron, 2001),
and the role of schools in students’ emotional and behavioral outcomes (Farmer &
Farmer, 1999). Recently, counseling psychologists have written about the contributions
of Bronfenbrenner’s ecological approach to understanding the complex role of environment in individual’s career development (Young, 1983), and subsequently, in providing career counseling services to women and ethnic minorities (Cook, Heppner, & O’Brien, 2002a; Cook, Heppner, & O’Brien, 2002b; Cook et al., in press; Davidson & Huenefeld, 2002; Flores, Byars, & Torres, 2002; Spanierman, 2002).

Bronfenbrenner’s ecological model is a useful framework to understand to career development of Vietnamese adolescents because of the complex, environmental influences on their lives. Literature has suggested that racism influences the career experiences of Asian Americans, and that many Vietnamese are living in poverty. These experiences may have a less direct influence on the lives of Vietnamese adolescents, while their relationships with their families and community may have a more direct influence on their development. Finally, acculturation, or adjustment occurring when one culture interacts with a dominant, host culture, is an experience relevant to the lives of Vietnamese adolescents. The ecological model accounts for the complex roles that these factors play out in an individual’s life.

Individual variables

Bronfenbrenner (1977) proposed that individual development occurs through a process where an individual’s demographics (e.g., race, gender) as well as their personal variables (e.g., emotional well being and cultural adaptation strategies) interact with multiple levels of their environment. The relations of the individual variables gender and acculturation are discussed as they relate to career self-efficacy. A theoretical discussion will be presented first, followed by an empirical review of these variables.
Gender

Gender differences were given little attention in vocational research literature on Asian Americans (Leong & Gim-Chung, 1995). Research suggested that Asian American immigrant women tend to hold high educational expectations and these expectations are supported by their parents. However, the goals of education might be different for men and women. This might be partly due to the fact that a dual income is now a necessity for survival in the United States.

For Vietnamese families, women may find that, upon migration to the United States, their access to work outside the home has increased. Their economic contribution to the family has increased, challenging gender roles and dynamics within the family. Vietnamese women reported negotiating these changes by taking on an “American” role in work, and a traditional role within the family (Hall, 2002; Root, 1998). Within the family, this has often meant prioritizing children and family responsibilities over work (Root, 1998). Thus, in dual career marriages, a Vietnamese woman’s career was suggested to be valued as secondary to her husband’s (Kibria, 1993). To maintain her gender role and to accommodate her husband’s career, women may limit their career opportunities. Women’s job satisfaction also may be limited due to the fact that their career is secondary to their family lives. Although these gender norms exist across many cultures, they might be more salient for Asian Americans due to great polarity between Asian and American cultural values and expectations (Leong & Gim-Chung, 1995).

In the United States, occupations are segregated by gender, with children learning early on the stereotypic expectations regarding work (Hyde, 1996). For Asian American women, cultural stereotypes of being passive, subservient, exotic, and hardworking
(Okazaki, 1998) might affect their career options. Leong and Gim-Chung (1995) suggested that these stereotypes might help Asian American women obtain entry level jobs; however, they also might create a glass ceiling effect, preventing these women from obtaining higher level positions. Little research, however, specifically examined gender differences in Vietnamese American students’ confidence to explore and decide on a diversity of careers.

*Empirical research on gender and career experiences.*

Mathieu, Sowa, and Niles (1993) conducted a study to examine the differences in career self-efficacy among 101 female students in at a Southeastern University. Women were grouped according to the gendered traditionality of their career preference (i.e., traditional, non traditional, gender-neutral, and undecided about a career). An ANOVA was computed to compare the women’s scores on career decision-making self-efficacy. Significant differences were found among the groups. Those who were undecided reported lower levels of career self-efficacy than women who chose non-traditional or gender-neutral careers. The undecided group of women reported similar levels of career self-efficacy as those who chose traditional careers. The results of this study supported the literature on a relationship between career self-efficacy and career decidedness for women. No ethnicity or racial information was provided, thus making it difficult to know to which groups of women these results can be generalized.

In another study, gender differences were examined in the relationships between career decision-making self-efficacy, educational indecision, and vocational indecision (Bergeron & Romano, 1994). Participants were 46 male and 78 female undergraduate students in a Midwestern university. While no gender differences were found on the three
decision variables, the researchers found other gender differences. Females were likely to consider entry into a traditionally male occupation and those with high career decision-making self-efficacy were even more likely to choose a male dominated career. The study also suggested that men, more often than women, felt that choosing a major was as important as choosing a career.

Gianakos (2001) also examined the predictors of career decision-making self-efficacy. Participants included 152 women and 50 men from a Midwestern University. Of these participants, 185 were White, 10 were African American, and 12 were unknown. Career decision-making self-efficacy was related to gender, with women reporting higher levels of self-efficacy in career planning and collecting career information.

Another study investigated the factors associated with perceived career options in American Indian, White, and Hispanic rural high school students (Lauver & Jones, 1991). Participants included 43 American Indian girls and 43 American Indian boys; 311 White girls and 276 White boys; and 113 Hispanic girls and 107 Hispanic boys in Arizona. For all ethnic groups, gender was related to gender traditional occupation. Females were more likely to consider predominantly female occupations over predominantly male occupations, while the inverse also was found for males. Gender did not predict whether one would be efficacious in male occupations, but being female predicted self-efficacy in predominantly female occupations. Hispanic and Native American women considered a wider range of male and female occupations than White women, while White women felt more efficacious in more occupations than Hispanic and Native American women.

In an intervention study designed to increase the career decision-making self-efficacy of women, 61 women who were undecided about pursuing a career were
recruited (Sullivan & Mahalik, 2000). The participants were mostly European American students from three New England universities. Students were divided into a treatment group and a control group. Eighty one percent of the treatment group was European American, 13% were Asian American and 6% were international students from European or Asian countries. The control group was composed of 87% European American women, 7% African American, 3% Asian American and 3% Latin American. Three female facilitators each conducted a six-session treatment group designed to increase career related self-efficacy according to Betz’ (1992) guidelines. The results indicate that those in the treatment group scored higher than the control group on career decision-making self-efficacy after completing the program, and that the control group’s career decision-making self-efficacy did not increase over time. A six-week follow up with the treatment group indicated that career decision-making self-efficacy gains persisted. Thus, this study provided support for the effectiveness of career interventions in increasing self-efficacy among women.

Another study examined the career decision-making self-efficacy among 22 female undergraduates in a large Southeastern University (Nevill & Schlecker, 1988). The researchers found that women’s willingness to pursue traditionally feminine careers did not differ by their level of self-esteem; however their willingness to pursue nontraditional careers did. In other words, women who were high on self-efficacy were no more likely than women who were low on career decision making self-efficacy to pursue traditionally feminine careers; however women who were high on self-efficacy were more willing to pursue nontraditional careers than were women with low self-
efficacy. The results of this study suggested that high levels of self-efficacy might broaden career opportunities for women.

Another study examined the career development process of highly achieving African American-Black and White women (Richie, Fassinger, & Linn, 1997). Participants were nine African American-Black women and nine White women. Interviews were conducted and the data were analyzed through a grounded theory method. Women reported the importance of social support in aiding in their career pursuits and dealing with stress. Another emergent theme was a connectedness to other women, and improving the conditions for women. Participants articulated persistence in overcoming sexism and racism in their own lives and the lives of others. Women also reported high levels of self-efficacy.

In summary, a relationship between career-related self efficacy and career choice has been found, with some studies suggesting that women who consider non-traditionally female careers and are high achieving have high levels of career-related self efficacy. Career-related self-efficacy also was found to be modifiable in one study. Little research examined the role of race or ethnicity in these gender differences, with none disaggregating the data to look at ethnic group differences (i.e., Vietnamese). Some results have suggested that Native American and Hispanic women are more likely than White women to consider a wider range of male and female occupations, while White women are more likely to feel efficacious in a wider range of occupations. Social class was also largely ignored in these studies. The findings from this study implied that future studies need to examine ethnicity and race, as well as social class, when studying gender differences in career.
Acculturation

A proliferation of research examined the role of acculturation in the lives of immigrant and minority individuals. Acculturation can be defined as a minority group’s or minority individual’s process of adaptation to a majority culture. However, no consensus exists on how to operationalize and measure the construct. Nguyen, Messe, and Stollak (1999) reviewed the multiple ways in which acculturation has been measured. Briefly, the authors stated that acculturation has been assessed as a single index, a continuum, or as a multidimensional construct.

Single index measures, such as length of residence in the United States, do not adequately measure acculturation. Acculturation is a complex process and no single index can account for the myriad of processes involved in adaptation to a new environment. Also, length of residence in the United States does not measure acculturation directly, but rather assumes that the longer a person has lived in the United States, the more she or he will have acculturated. This is a false assumption because people acculturate at different rates and in different ways.

Continuum approaches conceptualized acculturation as linear, with one end representing adhering to ones’ home culture and the other end representing assimilating to the dominant culture. This is also a limited view of acculturation because it does not account for the possibility of feeling equally attached to both the dominant culture and one’s home culture. It also does not account for feeling equally marginalized from both cultures. Conceptualizing acculturation as a continuum from high to low presented problems in interpreting correlations. For example, if a study finds that high acculturation
is related to academic achievement, then it is assumed that low acculturation will be related to low academic achievement. However, this is not necessarily true.

Multidimensional models of acculturation account for more complexity. They measure an individual’s involvement in her or his home culture and host culture independently. Thus, it is possible to be simultaneously highly acculturated and strongly adhering to one’s culture of origin. An example of such a measure is Birman and Trickett’s (2001) measure of acculturation. This measure assesses one’s involvement in both their home culture and their host culture independently on three different subscales. The subscales assess language proficiency, ethnic identity and behavior.

Acculturation was found to mediate the relationship between career self-efficacy and career choice, and to be related to self-efficacy, interest, and career choices (Tang et al., 1999). Leong and Chou (1994) hypothesized that acculturation status may affect the career and workplace problems individuals encounter. For example, a less acculturated individual might face racial discrimination in the workplace as well as have more difficulty negotiating her or his work environment. Young people who are considering careers might observe the difficulties the adults they know face, and through vicarious learning, their career self-efficacy might be affected. Another example is that of an Asian American with a separationist identity. This person might experience less career self-efficacy in fields that her or his families disapprove of because their traditional Asian values might emphasize collectivism and respect for authority (Leong & Chou, 1994). Acculturation has not been extensively studied in relation to career variables, however, it was found to relate to many other life decisions and experiences. The present study examined whether a relationship existed between acculturation and career self-efficacy.
Empirical review of acculturation and career experiences

Miranda and Umhoefer (1998) studied the relationship between acculturation, language use, demographics, and career self-efficacy among 85 Latino participants. All the participants voluntarily sought career counseling services at a social services agency serving a Latino community in a large southeastern area. Participants included 50 men and 35 women with a mean age of 30.5 and mean level of education of 12th grade. Almost all participants were immigrants and represented 15 different countries of origin. The results suggested that acculturation toward U.S. culture and the English language significantly predicted career self-efficacy. Acculturation and language use better predicted career self-efficacy than the length of residence in the United States, age, or education level. The authors did not provide specific information about how acculturation relates to self-efficacy (i.e., are more highly acculturated individuals more likely to experience higher self-efficacy or vice versa?), but the results of their study supported the general importance of acculturation in the career self-efficacy of immigrants.

Leong (2001) studied the role of acculturation in the career adjustment of Asian Americans. Leong conducted two separate studies. The first study sought to understand if Asian Americans with low acculturation are more likely to experience work related stress and less job satisfaction. The study included 39 Asian Americans from a high tech government engineering contracting company and a Fortune 500 household product company. Most participants were ethnically Korean, Chinese, or Japanese American and approximately half the participants were female. The results indicated a positive relationship between acculturation and job satisfaction among these workers. The relationship between acculturation and job stress was mixed. In the government
engineering company, high acculturation was associated with high job stress and strain, whereas in the Fortune 500 company, high acculturation was associated with low levels of job stress and job strain. Leong attributed this difference to sample variance because the two work environments were quite different.

Leong (2001) conducted a second study examining the relationship between acculturation and occupational stereotyping and discrimination among 17 Asian American and 10 Hispanic workers in a computer information division of a Fortune 500 company. The results indicated that Asian Americans and Hispanics who were highly acculturated received higher performance ratings. This relationship was stronger for Hispanics than for Asian Americans.

Shih and Brown (2000) assessed the relationship among acculturation, background variables, and vocational identity among 67 male and 45 female Taiwanese international graduate and undergraduate students enrolled at two Midwestern universities. The results indicated that age and acculturation predicted vocational identity. Thus, older students who were more Asian-identified had a clearer sense of their career interests, abilities, and aspirations.

Ramos and Sanchez (1995) studied what factors predicted the educational aspirations of 71 Mexican American high school students. Perceived parental expectations and acculturation were found to significantly predict whether a student planned or desired to continue with post secondary education.

Flores and O’Brien (2002) studied the career development of Mexican American adolescent women. Three hundred and sixty-four Mexican American high school students in Texas were sampled. Results suggested that career self-efficacy in non-
traditional careers was related to interests in nontraditional careers. Subsequently, choosing a traditional career was related negatively to nontraditional career self-efficacy. Career aspirations also were found to relate significantly to nontraditional career self-efficacy. Those individuals who were more acculturated toward American culture also chose more traditional careers and had higher career aspirations. Acculturation also was related negatively to career choice prestige. Higher levels of acculturation toward Anglo culture predicted orientation toward traditional and less prestigious careers. Nontraditional career self-efficacy predicted nontraditional career interests, the prestige of the career, and the traditionality of the career.

To summarize, some studies investigated and found a relationship between acculturation and career self-efficacy, interest, abilities, and choice. The findings showed ethnic group differences regarding the relationship between acculturation and career experiences. Acculturation towards Anglo culture was related to interest in traditional and less prestigious careers and higher career self-efficacy among Hispanics and Latinos. In one study on Taiwanese students, though, acculturation toward Asian culture predicted a clearer sense of career interests, abilities, and aspirations. Since there were ethnic group differences, future research should study these variables within ethnic groups, rather than assuming the relationship holds across racial and ethnic groups. Another limitation to the existing research on acculturation was that acculturation often has not been defined clearly within studies. Since no common definition of acculturation was used, future researchers should clearly define acculturation and explain how they are operationalizing the construct.
Microsystem variables

An individual’s microsystem is the part of the environment with which they have direct contact. In this study, the microsystem variable that will be examined is social support.

Social Support

The research suggested that parents played a unique and significant role in their children’s career development and career choice. This relationship has emerged repeatedly in the literature (Leung, Wright, & Foster, 1987; McNair & Brown, 1983; Palmer & Cochran, 1988). During adolescence, youth are found to begin developing a sense of identity, which also tends to include the type of work they wanted to do in their lives. They often begin considering career choices more seriously than before, which can be a frightening time for them (Middleton & Laughead, 1993). Adolescents are more likely to obtain career related information from their parents than from others. However, family environment and siblings can interact with parental influence to shape an adolescent’s career path. For Asian Americans, and especially for recent immigrants, extended family including aunts, uncles, and grandparents might play a large role in shaping the individual’s career trajectory. Parental influence can be positive and supportive; however, parental influence also can come in the form of pressure to be successful in a given field (Middleton & Loughead, 1993).

Gim (1992) reported that among major racial and ethnic groups, Asian Americans were the only group to rank parental pressure as one of the top five factors influencing career choice. Asian Americans may differ from some other students in that their motivation for career success may be driven by a fear of the negative consequences of
failure rather than a belief in the payoff of educational success. Although parents are the most important influence in shaping career choice, peers exert the most influence in the individual’s day-to-day behaviors. How peer influence interacts with parental influence to affect career choice has yet to be explained. However, Steinberg, Dornbusch, and Brown (1992) suggested that the influence of Asian American peers might sometimes offset the influence of their parents. Due to social ethnic segregation, Asian American students tend to befriend a limited peer group. Generally, this Asian American peer group values academic and career related success. However, in cases when this peer group does not share these values, the peer group pressure may offset parental pressure. An example of this is a student living in a refugee ethnic enclave, where poverty and delinquency are common. Adolescents in these peer groups might underperform academically and have more restricted vocational options. Carter and Cook (1992) claimed that, while family support is acknowledged to be critical to the lives of ethnic and racial minorities, research only has recently begun to attend to the importance of social support in the career development process of ethnic and racial minorities. In need of further investigation are the relationships between various sources of social support and career related variables. Thus, the current study investigated the relationship between social support and career self-efficacy.

**Empirical review of social support and career experiences**

Kenny, Blustein, Chaves, Grossman, and Gallagher (2003) investigated the influence of kinship support and perceived barriers on academic and career experiences of urban youth. Two studies were conducted, with the latter being a more in-depth examination. Study one consisted of ninth graders, 51% male and 49% female, attending
2 public high schools in a Northeastern city. Participant ages ranged from 13 to 17, including 34% Black Caribbean, 24% African American, 21% Hispanic/Latino, 12% White, 6% Asian, American Indian, or Pacific Islander. Results indicated that kinship support was predictive of career aspirations, such that higher levels of support predicted higher future career aspirations. In the second study, 181 ninth graders from the same two schools were sampled, with 55% male and 45% female. Participants were 27% Hispanic, 22% African American, 21% Black Caribbean, 8% White, and 4% Asian, Asian American. The remaining 18% were Cape Verdean, Middle Eastern or unidentified. Those who reported social support also indicated that work was important to their lives, that they aspired to leadership in the workforce, and believed that career planning would lead to success and satisfaction. The researchers found that support was very important to urban youths’ feeling engaged in their educational and vocational lives.

Lucas et al. (2000) studied career decision-making among 18 women with depressive symptoms. These women were students at a large mid-Atlantic university and voluntarily sought career-related counseling. The clients had received varied numbers of counseling sessions and all had terminated counseling at the time of the study. The researchers examined counselor notes about the clients, from which several themes emerged. The central theme for these women was their decision-making process. It seemed that most of these women grappled with career decisions in the context of their relationships, with their families as significant others. Furthermore, their career counseling process involved focusing on both career and life issues simultaneously.

Schultheiss et al. (2001) investigated the role of relationships in influencing the career development process. Eight women and six men from a Midwestern University
were interviewed. Seven were European American, five were African American, one was Asian American and one was Middle Eastern. The interviews were analyzed according to a consensual qualitative research methodology. Interviewees identified either their mother or “others” as most influential in their career decision-making. The category “others” included family, most important sibling, children, a niece, teacher, friend, and fiancé. These results highlighted the importance of multiple forms of support in influencing an individual’s career decision-making self-efficacy. The results also implied that if interviewees felt that one individual was influential, the person was their mother.

Whiston (1996) examined the relationship among family interaction, career indecision, and career decision-making self-efficacy. Participants included 91 female and 107 male undergraduates from a Southwestern University. Seventy nine percent were White, 6.1 percent were Asian, 4.2 percent were African-American, and 2.8 percent were Hispanic. A modest correlation was found between career decision making self-efficacy and the personal growth dimensions of the family environment. The Personal Growth Dimension consists of Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, and Moral-Religious Emphasis.

One study investigated the relationship between parental support and career self-efficacy among 139 7th and 8th grade students from a mid-sized Midwestern community (Turner & Lapan, 2002). The participants included 79 boys and 60 girls. The ethnic composition of the sample was as follows: 84 European Americans, 21 African Americans, 18 foreign nations (1st generation students from Asia, Africa and the Middle East), 12 Asian Americans, 3 Hispanic Americans, and 2 Native Americans. The results showed that parental support directly predicted adolescent career self-efficacy.
Additionally, career self-efficacy and career planning/exploration efficacy predicted career interests. Thus, this study provided support for the importance of career self-efficacy in the development of career interests as well as the crucial role parents play in the development of career self-efficacy and the career development process.

Kracke (2002) investigated the effect of peer support on adolescent career exploration behaviors. Participants included 192 German adolescents. Results supported a significant relationship between peer support and career exploration behaviors. Interactions with peers about career related to intensity of information seeking behaviors. Peer support also was found to predict career exploration behaviors.

Peterson (2001) investigated what factors contribute to underachievement by studying underachievers who later became adults. Twenty-one females and 10 males ranging in age from 30 to 53 participated in this study. Participants identified themselves as “high-ability academic underachievers as adolescents and professionally successful as adults.” Emergent themes suggested that there was one parent that encouraged achievement and perceived the child to be intelligent while the other parent was uninvolved and non-encouraging. There was a lack of attention to achievement by the family as a whole, which was interpreted by the student as indifference. A role model was found outside of the home. Achievement occurred later in college, and coincided with a change in the student life.

Azmitia and Cooper (2001) investigated peer influences on Latino adolescents career planning. Participants included 76 girls and 40 boys who entered a community college outreach program aimed to increase the participation in college of students from lower socioeconomic status. Participants entered the program between the sixth and
seventh grade. In the context of career assistance, students listed peers as both challenges and resources. Challenges included partners, peer pressure, gangs, and friends dropping out. High school students reported peers to be challenges more than middle school students. Resources listed included friends, partners, older students and families. These findings suggested that while peers facilitate career planning during middle school, they may become more of a challenge to career planning during high school.

Palmer and Cochran (1988) studied the role of parents as influencers of the career development of their children. Participants were forty families with children in grades 10 or 11 in Canada. Race and ethnicity information was not provided. Participants were either assigned to an experimental group, where they participated in a program intending to strengthen the parent-child relationship in the area of career development, or a control group. In the experimental group, significant pre-post differences were found in family cohesion and career orientation total (career planning, career exploration, decision making, and occupational information).

Harris, Moritzen, Robitschek, Imhoff, and Lynch (2001) investigated the contribution of social support job satisfaction. Sixty-four women and 40 men employed in the Northeastern United States participated in this study. One hundred and forty-one participants were Caucasian, one was African American, one was Asian American, and one was Hispanic American. Social support was positively related to job satisfaction, and women exhibited a stronger correlation between job satisfaction and social support than men. The researchers also found that social support predicted job satisfaction. It would be interesting to see if these results were generalizable to Asian Americans, and if so, what kinds of social support were significant predictors.
A multiethnic sample of middle school adolescents (139 7th and 8th graders) participated in a study on the role of perceived parental support on vocational self-efficacy. Participants included 79 boys and 60 girls, 84 Whites, 21 African Americans, 17 Foreign Nationals, 12 Asian Americans, 3 Hispanics, and 2 Native Americans. Perceived parental support accounted for 29% to 43% of the total unique variance in vocational self-efficacy for all Holland-themed careers (Turner, & Lapan, 2002).

In summary, these studies suggested that the amount and type of support an individual receives played an important role in her or his career development process. One study found women to report that their career decision-making process often occurs within the context of their relationships. Among adolescents, one study found that peer relationships play a facilitative and a harmful role in their career development, depending on the grade level. These findings suggested that the relations between social support and career self-efficacy are influenced by gender and age. One limitation to the research was that information on race and ethnic groups were aggregated, masking the unique experiences of specific ethnic groups (e.g., Vietnamese). Future studies should investigate social support, and its relations to other variables that are salient to the lives of specific ethnic groups, when studying career self-efficacy.

Exosystem variable

The exosystem refers to the concrete, broader aspects of the environment that have an indirect effect on an individual’s development. For example, these can include type of neighborhood, social class, and education system. The exosystem level variable investigated in this study was social class. The relations between social class and career self-efficacy of Vietnamese adolescents were examined.
Social Class

Social class has been minimally studied in the Asian American vocational literature (Leong & Gim-Chung, 1995). In one study, low socioeconomic status was related to low career ambitions (Brown, 2002). Brown (2002) suggested that this relationship might be explained by a tendency for economically disadvantaged individuals to believe they have little control over their lives and that exerting effort for higher level careers would be futile. This belief may be based on real obstacles which these individual encounter in their daily lives.

Social class and immigrant status mediate access to education among Asian American families. Although these families may value education, they may be unable to afford higher education or to wait for the income that would be delayed as a result of their child’s attending school rather than working. Recent immigrants who face economic difficulties also might sacrifice the education of female children in favor of male children because they cannot afford to educate both. Leong and Gim-Chung (1995) suggested that, in lower social class families, the roles of females have been limited to providing for males. Although many Asian Americans live in poverty, this issue often is ignored due to the cultural myth that Asian American families tend to be of middle class status. This is one way that ethnicity is important in considering the educational and vocational experiences of Southeast Asians, specifically due to their lower economic status as compared to other Asian American groups. Thirty-four percent of Vietnamese are living in poverty, as opposed to 14% of Asian Americans, and 10% of the general United States population. Eighty-three percent of Vietnamese do not hold a Bachelor’s degree at the age of 25. The mean wage and salary of Vietnamese is $17,590, which is substantially
lower than Asian Americans as a whole, which is $22,579 (Southeast Asian Resource Action Center).

**Empirical review of social class and career experiences**

Lauver and Jones (1991) investigated the factors associated with perceived career options in American Indian, White, and Hispanic rural high school students. Participants included 43 American Indian girls and 43 American Indian boys, 311 White girls and 276 White boys, and 113 Hispanic girls and 107 Hispanic boys in Arizona. Socioeconomic status was related to and predicted self-efficacy for predominantly-female occupations for Hispanics and Whites; it was related to self-efficacy for predominantly-male occupations for all ethnic groups. Socioeconomic status predicted self-efficacy for predominantly-male occupations for Hispanics.

Hannah and Kahn (1989) studied the relationship of socioeconomic status and gender to occupational choices of 173 female and 166 male 12th grade students from two schools in Vancouver, British Columbia, Canada. The results indicated several differences between students of high and low socioeconomic statuses. Students selected occupations with prestige levels according to their family socioeconomic status. Furthermore, girls from high socioeconomic backgrounds were more likely than girls from lower socioeconomic backgrounds to choose traditionally male-dominated fields. Additionally, gender and socioeconomic status were related to career choice. Both males and females indicated higher levels of self-efficacy with regard to same gender-dominated jobs than other gender dominated jobs. Furthermore, students from low socioeconomic backgrounds exhibited lower self-efficacy than students with high socioeconomic backgrounds regardless of the prestige level of the job.
Tang et al. (1999) studied the factors that influence the career choices of 187 Asian American college students. Approximately half the sample was female. Forty-one percent of respondents were Chinese, 6.5% were Korean, 2.2% were Japanese, 26.1% were Vietnamese, 7.1% were Hmong, 1.6% were Laotian, 11.8% were Filipino, and 3.2% were of other ethnic backgrounds. Approximately half of the students were born in the United States. Results suggested that acculturation influenced students’ self-efficacy, interest, and career choices. Furthermore, family involvement was moderately related to career choice. Self-efficacy also was related to career choice and interests, which was consistent with literature on the career development of college students of other ethnicities. Some additional interesting findings were that no relationship emerged between career interest and career choice, socioeconomic status and self-efficacy, or family involvement and self-efficacy. The authors reported that results of their testing indicated that a better fitting model would result from removing the path between family socioeconomic status and career interest, and adding paths between family involvement and career choice as well as family socioeconomic status and career choice. The authors suggested that future research should examine these relationships.

To summarize, few studies have examined the relations between social class and career experiences. Some have suggested that there is a relationship between an individual’s social class and her and his level of career self-efficacy. The studies also have suggested that social class functions differently across ethnic groups. For Asian Americans, one study suggested that family socioeconomic status did not relate to career interest, but that family socioeconomic status did relate to career choice. Future research examining the relations between socioeconomic status and career experiences should
look at the experiences of specific groups separately, since some of the variables salient to life experience appear to be related to ethnic group membership.

Macrosystem variable

The macrosystem describes the relationship of an individual to the perception upheld by her or his social and culture about her or him. For the Vietnamese adolescents in the present study, perceptions of racism were assessed for the relationship of this variable to career-related self-efficacy.

Racism

Racism has been defined as “the prejudicial attitudes and discriminatory behavior toward people of a given race, or…institutional practices (even if not motivated by prejudice) that subordinate people of a given race” (Myers, 1990, p.44). Asian Americans have experienced a long history of racism in the United States such as discriminatory immigration laws, hate crimes, and stereotyping (Liang, Li, & Kim, 2004). One area that is influenced especially by experiences of racism is that of work and career. Lee and Zane (1998) asserted that a major area of discrimination toward Asian Americans in the work force is related the perception of low English language proficiency and accents that might be difficult for Americans to comprehend. The stereotype of Asian Americans as “perpetual foreigners” has contributed to limited work opportunities and upward mobility. Leong (1998) suggested that Asian American students might be strongly encouraged by parents to enter fields in which Asian Americans are represented and have succeeded in an effort to reduce possible discrimination.

Asian Americans tend to lack access to networking systems and are less likely to be promoted to higher positions than their White counterparts (Lee & Zane, 1998). In
fact, when compared to Whites with similar age and educational background, Asian Americans earned significantly less money (Lee & Zane, 1998). Carter and Cook (1992) found this discrepancy to hold true for all non-White people. Thus, “there is a ‘cost’ to being an Asian, or non-White, in the United States” (p. 415). In spite of the pervasiveness of racism against Asian Americans, a national poll in 1991 found that most American voters believed that Asian Americans do not encounter discrimination. One year following this poll, the U.S. commission on civil rights “documented a wide array of prejudice and discrimination against Asian Americans including barriers to equal opportunity in education and employment, unequal access to social services, and victimization by racially motivated violence” (Lee & Zane, 1992, p. 403). Asian Americans’ experiences with racism largely are ignored. Theorists attributed this lack of attention to the impact of the model minority myth as well as current conceptualizations of racial issues, which are believed only to relate to Black and White relations (Liang, Li, & Kim, 2004).

The model minority myth is a widely held assumption that Asian Americans are successfully adapted to and assimilated in American society. Researchers have argued that Asian Americans often internalize the model minority myth, which supports the notion of Asian American strengths related to technical abilities, and poor interpersonal and verbal abilities (Leong, 1998). Many studies found that Asian Americans tended to avoid occupations that involved written and oral communication, human interaction, and self-expression regardless of interest (Sue & Frank, 1973; Leong, 1982). More recently, literature on the Model Minority Myth suggested that this stereotype has had many detrimental effects on Asian Americans’ career development, such as poor self-concept
and limited career paths (Hune & Chan, 1997). First, those Asian American students who were not performing well in school or who needed assistance in English were overlooked. Secondly, those Asian Americans who worked in professional settings often experienced the glass ceiling effect due to the belief that their interpersonal and leadership skills were lacking. Finally, the many Asian Americans working in garment factories and sweatshops often were invisible. Many studies found that Asian Americans had limited mainstream occupational opportunities due to discrimination, low English proficiency, and other barriers. Thus, many opted to self-employ. Kenney et al. (2003) suggested that these perceived barriers to career success may lead Asian American students to see school as irrelevant and cause them to disengage from career development tasks.

**Empirical review of racism and career experiences**

Leong and Hayes (1990) studied occupational stereotyping of Asian Americans among 262 White college students. All were under 30 years old, with 54% females and 46% males. The researchers found that White students believed that Asian Americans were less likely to succeed in insurance sales, and more likely to succeed in engineering, computer science, and mathematics than Whites. This study supported the idea that Asian Americans are stereotyped as performing well in technical fields and poorly in occupations requiring English language proficiency.

Tan (1994) examined factors related to Asian American participation in higher education, academic performance and their unique experiences as college students. Seventy-eight Asian Americans and 66 African Americans attending a large, public, predominantly White University in the Southwest participated in the study. Average age was 21, and 47% were male and 51% were female. Forty-five percent of the Asian
American sample was Vietnamese. Sixty-one percent of the Asian American students reported experiencing racism or prejudice on campus. A quarter of the students said that the racism was usually blatant, and racism was reported as occurring quite often. Most of the racism was said to come from students, though it often occurred with faculty too. Finally, the Asian American students felt like they had not learned to cope well with racist incidents.

Fischer et al. (2000) studied discrimination experienced by adolescents. One hundred and seventy-seven adolescents (78 males, 98 females, 1 unknown) participated in the study, with 21% reporting to be African American, 23% Hispanic, 25% East Asian (Chinese/Korean), 8% South Asian, and 23% White. Participants reported being from a wide range of socioeconomic backgrounds. Encounters with peer discrimination were reported most frequently by Asian American youth. Reports of racial bias were associated with distress in response to institutional and educational discrimination. Self-esteem was negatively related to distress caused by educational and peer discrimination. Finally, Hispanic and Asian youth felt that ethnic bias was the reason why others assumed that their English was poor.

Chung, Baskin, and Case (1999) examined the career development of Black males in a qualitative study. Six Black males reflecting diversity in demographics and career paths participated in an unstructured interview, where inquiries were made about their family background, demographics, academic/nonacademic experiences, numerous career variables (e.g., path, aspirations, factorings influencing decisions), support and role models. Racism was among the five themes that emerged. Specifically, participants identified racism continually to be a barrier for Blacks. They cited racism as affecting
their perception of work opportunity and career choices, and expressed a wish for career independence as a way to cope.

Fiske et al. (1999) conducted a study examining students’ perceptions of commonly stereotyped social groups (e.g. Asians, feminists, welfare recipients). University students were given a list of 17 social groups and a list of adjectives. Participants were asked to answer two questions: “How competent is this group, as viewed by society” and “How likeable is this group, as viewed by society” by using the list of traits provided. The results for Asian Americans suggested that Asian Americans were viewed as competent due to perceived educational and financial well-being. They also were perceived to “lack social skills, not be fun, and not interact much with others.” Finally, students said that Asian Americans were respected, but disliked.

Kenney et al. (2003) investigated the influence of kinship support and perceived barriers on academic and career experiences of urban youth. Perceived barriers included racial/ethnic and gender discrimination students expected to experience in the workforce. Subjects were 174 ninth graders, 51% male and 49% female, attending 2 public high schools in a Northeastern city. Ages ranged from 13 to 17, including 34% Black Caribbean, 24% African American, 21% Hispanic/Latino, 12% White, 6% Asian, American Indian, or Pacific Islander. Students who perceived fewer barriers in their academic and career lives reported higher career aspirations.

To summarize, while these studies suggested an influence of racism on an individual’s academic and vocational experiences, ethnic group differences were found in the types and ways that racism has affected their vocational lives. Thus, when examining
Career self-efficacy

The dependent variable in this study was career self-efficacy. This construct was considered an individual level variable because it referred to a personal, career and psychological experience.

**Career self-efficacy**

Career self-efficacy was defined as a belief in one’s ability to have successful career experiences, such as choosing a career, performing well in one’s work, and persisting in her or his career (Brown, 2002). Bandura (1986) proposed four ways in which self-efficacy is shaped. These include performance attainments, including past accomplishments in an area; vicarious learning, such as learning through role models; verbal persuasion, such as encouragement from parents and teachers; and physiological states, such as levels of anxiety. Career self-efficacy also has been theorized to relate to three types of outcomes (Leong & Tang, 2003). These outcomes are choice, such as exerting effort as opposed to avoiding; performance, such as succeeding versus failing; and persistence, such as pursuance as opposed to cessation of effort. One study found that Asian Americans felt most efficacious in careers relating to social, conventional, or investigative Holland types.

Career decision-making self-efficacy is influenced by several environmental variables such as socioeconomic status, family influence, and discrimination by limiting career choices on these factors (Brown, 2002). Discrimination contributes to how successful people become or feel at work, thus, affecting an individual’s sense of self-
efficacy for that career path. Constantine, Erickson, Banks, and Timberlake (1998) articulated that “because many urban racial and ethnic minority youth experience high rates of stress associated with environmental factors such as poverty, unemployment, exposure to crime and violence, discrimination, and inadequate health care, these circumstances greatly affected their quality of life, including their abilities to develop and pursue a career plan” (p. 3). She furthermore stated that to cope with the stressors, youth may have employed maladaptive behavior (e.g., truancy, delinquency, dropping out of school) that may affect the career development process. Additionally, Constantine et al. (1998) asserted that urban and ethnic minority youth may perceive fewer career options and opportunities for career success than White students, and thus may limit their own career choices.

Ngo and Malz (1998) indicated that anticipated discrimination affects the educational and career choices of Asian American students. These students believed that technical careers were less subject to racial bias, and measured worth as a function of performance rather than verbal skills, degree of acculturation, or level of attractiveness. The researchers also found that Asian American students who felt more attractive were more likely to choose White-dominated careers such as social sciences, law, or government.

Career choice can be an especially difficult process for Asian American students. Asian American students’ education and careers often are viewed as economic and status enhancement opportunities for their families of origin. For this reason, Asian American students often are encouraged to pursue careers in the fields of business and science, which are valued by Asian cultures. Students whose interests conflict with these
professions could face the loss of emotional and financial support from their families, thus making the career decision-making process stressful and potentially reducing the career decision making self-efficacy these students experience (Wong & Mock, 1997).

Empirical review of career self-efficacy

One study examined how career decision-making efficacy and outcome expectations related to career indecision and exploration (Betz & Voyten, 1997). Two hundred and twenty women and 125 men, of whom 16% were minorities, participated in their study. The results implied that career decision making self-efficacy strongly predicted career indecision for both women and men. For women, career decision-making self-efficacy predicted their intentions to engage in career exploration. Thus, the results found a relationship between career self-efficacy and other career variables.

Bergeron and Romano (1994) examined the relationships among career decision-making self-efficacy, educational indecision, vocational indecision and gender in 46 male and 78 female undergraduate students in a Midwestern university. One hundred and two participants were White, 10 were Asian, 3 African American, 3 biracial, 1 Native American, 1 African, and 4 unknown. The results indicated that career decision-making self-efficacy differed according to students’ levels of vocational indecision and levels of college major indecision. Since there were few non-White participants in this study, these findings cannot be generalized to non-White populations.

Turner and Lapan (2002) examined the relationship between parental support and career self-efficacy among 139 7th and 8th grade students from a mid-sized Midwestern community. The participants included 79 boys and 60 girls. The ethnic composition of the sample was as follows: 84 European Americans, 21 African Americans, 18 foreign
nationals (1st generation students from Asia, Africa and the Middle East), 12 Asian Americans, 3 Hispanic Americans, and 2 Native Americans. The results showed that career self-efficacy and career planning/exploration efficacy predicted career interests. Thus, this study provided support for the importance of career self-efficacy in the development of career interests.

Luzzo and Funk (1996) studied the effectiveness of a career decision-making self-efficacy intervention among 60 undergraduate students from a small, liberal arts university in the Midwest. Fifty-three European American, 4 Hispanic, and 3 African American students participated. The intervention consisted of exposure to an 8-minute video in which a female and male college graduate described their career development from adolescence to adulthood, including failures that they overcame and eventually became successful. They emphasized that effort is personally controllable and that one must persist and exert effort to succeed. The results of the study indicate an interaction between locus of control and career decision-making self-efficacy. Specifically, career decision-making self-efficacy was significantly higher after the intervention for students in the treatment group with an external locus of control. However, students who had an internal locus of control demonstrated no changes in their career decision making self-efficacy after undergoing the training, where they were told that low career-related and career decision-making efficacy was related to a lack of personal effort. The authors suggested that a “blanket approach” to career interventions does not seem helpful for all students.

Bikos and Furry (1999) studied the effectiveness of a job search club for international students. Participants included 24 students from 7 countries and 17 graduate
programs. Sixty seven percent of the participants were women and 33% were men. Each job search club met for 90 minutes, and met between 5 and 7 times a semester. Results indicated that students made significant gains in career self-efficacy. However, no follow up data were collected, so no information was available about the persistence of these changes.

Chung (2002) studied the gender and ethnic differences in career decision-making self-efficacy among college students. Participants included 165 undergraduates, including 70% females, who were taking an introductory psychology course at a large southern university. Forty-two percent of the sample was European American, 37% African American, 12% Asian, 4% Hispanic, 2% mixed race, and 2% of other races. Results indicated a positive relationship between career decision-making self-efficacy and career commitment. This positive correlation existed within the aggregated group as well as each gender and African American and European American groups. Additionally, female students scored higher than male students on career commitment and African American students scored higher than European American students on career decision making self-efficacy and career commitment.

Lapan, Adams, Turner, and Hinkelman (2000) studied the vocational interests and efficacy of 111 7th grade students. Sixty-eight of these students were girls and 44 were boys. The students attended a middle school in an ethnically diverse, lower middle class neighborhood in the Midwest. The researchers reported that boys and girls exhibited greater interest and efficacy for occupations they believed to be dominated by their sex. Girls exhibited greater interest and efficacy for Artistic, Conventional, and Social careers,
while boys exhibited greater interest and confidence in Realistic careers. No gender differences were found in Investigative or Enterprising types.

Luzzo (1993) studied the relationship between career decision making self-efficacy and career decision-making attitudes and skills. Participants included 162 female and 71 male undergraduate students from a large Midwestern community college. Approximately 80% of the sample was European American, 7% were Asian American, 5% were Hispanic, 4% were African American, and 4% did not indicate their race or ethnic group. The results indicated that career decision-making self-efficacy was a predictor of career decision-making attitudes; however it was not a predictor of career decision-making skills. This was a surprising finding and was inconsistent with self-efficacy theory (Bandura, 1977). Further research should investigate this relationship to determine if these findings can be replicated.

Bandura et al. (2001) studied how self-efficacy might shape the career aspirations and trajectories of children. Participants included 272 children, ages 11 to 15. There were 142 male and 130 female children living near Rome, Italy. The results indicated that boys had higher self-efficacy in science, technology, military, and law enforcement careers than did girls. Girls were more efficacious when it came to health, social services, and office management work. Socioeconomic status had no direct link to any career variables in children; however its impact was mediated through its influence on how efficacious parents feel with regard to promoting their child’s academic success. Parents of higher socioeconomic statuses felt more efficacious about promoting their child’s education and had higher educational aspirations for their children. Children’s academic self-efficacy was related to their academic aspirations as well as career paths that were consistent with
their perceived strengths. The results of this study suggested that students’ self-efficacy shapes the type of career they pursue as well as the occupational level they pursue within a given field. Thus, it seems that self-efficacy may be crucial in broadening and heightening students’ career aspirations.

Mau (2000) studied cultural differences in self-efficacy among American and Taiwanese undergraduates. The American participants included 540 students from a large Midwestern university. Seventy four percent of these participants were European American, 7.4% African American, 4.5% Hispanic, 5.6% Asian, 1.1% Native American, 2.6% International, 2.8% mixed race, and 2% did not report their ethnicity. Also, 212 participants were men, 323 were women, and 5 did not report their sex. The Taiwanese sample consisted of 1026 undergraduates, 474 of whom were men, 549 women, and 3 did not report. The results indicated that Taiwanese students scored lower on career decision-making self-efficacy than American students. The author proposed that a collectivist culture might encourage reliance on group efforts rather than individual efforts, affecting the concept of self-efficacy. For example, Taiwanese students might attribute their success to their group effort while American students might attribute their success to their abilities. Due to this modest way of thinking, Taiwanese students might have given themselves lower ratings on the self-efficacy measure.

Rotberg et al. (1987) investigated the career self-efficacy expectations and perceived career options in 98 female and 53 male community college students. One hundred and twenty five were White and 33 were Black. The results indicated that career interests predicted both perceived career options and career self-efficacy expectations. Career self-efficacy was related to perceived career options. Sex role orientation
predicted career self-efficacy expectations in females. Socioeconomic status was found to negatively relate to female-career interests, meaning that the higher the socioeconomic status of an individual, the less interest they had in traditionally-female careers.

Potocky (1996) opined that Southeast Asian refugee children seem to be in transition. Potocky reported that these children were doing better than their parents when they grew up, but they were not at the same level as their American born peers. On the other hand, Cuban/Soviet/East European refugees were faring better than their parents as well as their American born peers, and Haitian and Nicaraguan children were doing poorly. Underlying factors include length of residence in U.S.; those that have been in residence longer are doing better. A second factor includes cultural and racial differences, because those children who are doing better are from more Westernized countries. Third, policy might play a role. People from communist countries are automatically qualified for asylum, whereas Haitans and Nicaraguans have been required to prove on a case-by-case basis that they have experienced persecution. Many Haitians and Nicaraguans have been denied legal status and thus are considered illegal aliens, preventing access to many benefits.

O’Brien et al. (1999) found increases in the career decision-making self-efficacy of students who participated in an intervention study. Fifty-seven students (65% girls and 33% boys) were placed in small groups and took daily classes on career exploration, for five weeks. Five percent were Asian American, as compared to 46% African American, 30% White, nine percent Hispanic, and two percent Native American. Students reported increases in career planning and exploration efficacy as well as the educational and
vocational development efficacy. Increases also were found in the number of careers considered, while the difference between career choice and interest lessened.

Conclusion

To summarize, career related self-efficacy was found to relate to a variety of important career variables, including career choice, decision-making, interest, and commitment. According to the research, career related self-efficacy also differed by gender and socioeconomic status. Specifically, women and men tended to feel more efficacious for careers that were traditionally dominated by their own gender. Similarly, people of low socioeconomic backgrounds tended to feel less efficacious to pursue “prestigious” careers. Acculturation, social support, social class, and racism, have been identified as salient to the lives of Vietnamese adolescents. Yet, there was little information on the academic and vocational experiences of this population, and more so, and how interactions with the environment influences these experiences.

Research Questions

1. How can Vietnamese adolescents be described with regard to gender, acculturation, social support, social class, and racism (independent variables in this study) and career self-efficacy (the dependent variable in this study)?

2. For Vietnamese adolescents, what are the relationships among the individual level (i.e., gender and acculturation), microsystem (i.e., social support), exosystem (i.e., social class) and macrosystem (e.g., racism) variables and the dependent variables (i.e., career decision-making self-efficacy, career planning and exploration self-efficacy, and educational and vocational development self-efficacy) in this study?
Hypotheses

1. Individual, microsystem, exosystem and macrosystem variables will account for significant shared and unique variance in the prediction of career decision-making self-efficacy.
   a. Individual variables (i.e., gender and acculturation) will account for significant unique variance in the prediction of career decision-making self-efficacy.
   b. Microsystem variables (i.e., social support) will account for significant unique variance in the prediction of career decision-making self-efficacy.
   c. Exosystem variables (i.e., social class) will account for significant unique variance in the prediction of career decision-making self-efficacy.
   d. Macrosystem variables (i.e., racism) will account for significant unique variance in the prediction of career decision-making self-efficacy.

2. Individual, microsystem, exosystem and macrosystem variables will account for significant shared and unique variance in the prediction of career planning and exploration self-efficacy.
   a. Individual variables (i.e., gender and acculturation) will account for significant unique variance in the prediction of career planning and exploration self-efficacy.
   b. Microsystem variables (i.e., social support) will account for significant unique variance in the prediction of career planning and exploration self-efficacy.
   c. Exosystem variables (i.e., social class) will account for significant unique variance in the prediction of career planning and exploration self-efficacy.
   d. Macrosystem variables (i.e., racism) will account for significant unique variance in the prediction of career planning and exploration self-efficacy.
3. Individual, microsystem, exosystem and macrosystem variables will account for significant shared and unique variance in the prediction of educational and vocational development self-efficacy.

a. Individual variables (i.e., gender and acculturation) will account for significant unique variance in the prediction of educational and vocational development self-efficacy.

b. Microsystem variables (i.e., social support) will account for significant unique variance in the prediction of educational and vocational development self-efficacy.

c. Exosystem variables (i.e., social class) will account for significant unique variance in the prediction of educational and vocational development self-efficacy.

d. Macrosystem variables (i.e., racism) will account for significant unique variance in the prediction of educational and vocational development self-efficacy.
METHOD

Procedure

The principal investigators for this study included one Pakistani-American female doctoral student and one Asian-Indian American female doctoral student in Counseling Psychology at the University of Maryland. We consulted with a doctoral student in Clinical Psychology at University of Maryland regarding identifying research assistants to help with data collection. Upon her suggestion, a student-run organization serving the interests of Vietnamese undergraduates was contacted, and an email flyer was sent asking for research assistants. Two female Vietnamese American college students (one bilingual) were recruited as research assistants for the present study and received academic credits for their assistance. These research assistants helped with creating a list of potential organizations, churches, and temples to contact for data collection. They also generated ideas for creative ways to collect data.

Prior to data collection, the research assistants were educated about the study and the data collection procedures. At the time of data collection, research assistants first requested parental permission by explaining the purpose of the study and answering any questions or concerns raised by parents. Second, the research assistants or the principal investigators administered the survey packets. All survey packets were available only in English. Only students who spoke and read English participated in this study. Participants were provided candy and free ice cream cone coupons at the time of survey administration, and were entered into a lottery to win one of two $50 gift certificates to a store of their choice.
Participants

Ninety-five adolescents were invited to participate in this study by in-person invitation at churches, temples, shopping centers, festivals, picnics, and other public places. Participants included 80 adolescent Vietnamese living in the Washington DC area (Maryland, Virginia, Washington DC). Four surveys were not included because of possible response bias or ineligibility due to age. This represents approximately an 84% response rate. Fifty-three percent of the participants were female and 47% were male. Sixty-five percent of the participants were born in the United States, whereas 34% came to the U.S. with their parents, and 1% reported “other” ways of arriving in the U.S., (e.g., with other family members, alone).

Measures

*Individual factors*

*Demographics*

Information regarding gender, age, grade level, previous English-As-Second Language course enrollment, year of immigration, grade point average and birthplace was collected by means of a demographic questionnaire (see Appendix A). Additionally, four open-ended questions about career aspirations developed by the researchers were asked. These questions were, “What type of job do you wish to have when you grow up?” “What type of job do you believe you will have when you grow up?” “List the top two or three influences on the kind of job you believe you will have (influences can be people, events, books, TV shows, etc...).”
Acculturation

Acculturation was measured using the Language, Identity and Behavioral Acculturation Scale (LIB; Birman & Trickett, 2001). The LIB was originally developed for use with Russian immigrant adolescents. The original measure consisted of 50 items and yielded a separate American Acculturation Index and Russian Acculturation Index. The reliabilities for these indices were reported as .90 and .94, respectively (Birman et al., 2001).

Tricket and Birman (manuscript in preparation) revised the LIB for use with Vietnamese immigrant adolescents (see Appendix B). This revision involved rewording all the items as well as adding five new items. Two focus groups of Vietnamese college students evaluated each item on the revised LIB to assess the appropriateness of the measure for a Vietnamese immigrant population. The focus groups agreed to the relevance of each item. This modified version of the LIB consisted of three subscales: language competence, identity acculturation, and behavioral acculturation.

The language competence scale included 18 items that assess the adolescent’s perception of her/his English speaking and comprehension skills, as well as her/his Vietnamese speaking and comprehension. An example of an item on this subscale read, “How well do you understand English (or Vietnamese) on the phone?” Participants were instructed to respond on a 4 point Likert scale, where 1 represents “not at all,” and 4 represents “very well, like a native.” The LIB was scored by computing the mean of the responses for the English language items separately from the Vietnamese language items. A mean closer 1 equaled lack of familiarity with the language, whereas a mean closer to 4 indicated high language proficiency. In the original measure, the Cronbach alpha
coefficients reported for this subscale were .95 for the Russian language subscale and .91 for the English language subscale (Birman et al., 2001). The reliability estimate for this measure with this sample was .94 for the Vietnamese language subscale and .92 for the English language subscale. Support for the content validity of the Vietnamese language acculturation subscale was found when the scale correlated negatively with verbal Scholastic Aptitude Test (SAT) scores.

The identity acculturation subscale was used to measure how strongly the adolescent identified as American and/or as Vietnamese as well as how positive or negative the adolescent felt about this identity. This subscale was based on Phinney and Devich-Navarro’s (1994) American Identity Questionnaire, and consisted of 14 parallel items for the assessment of Vietnamese and American identity. Students were asked to respond to a 4-point Likert scale, with 1 indicating “not at all” and 4 indicating “very much.” One example of an item assessing how strongly the adolescent identifies culturally is “I think of myself as American (or Vietnamese).” An example of how an adolescent feels about her/his cultural identity is, “I am proud of being American (or Vietnamese)” The mean of American cultural identity items and Vietnamese cultural identity items were computed. A mean of 1 indicated no identification with the culture, whereas a mean of 4 indicates high identification with the culture. The authors reported adequate reliability for the original subscale, with a Cronbach alpha coefficient of .92 for American identity and .93 for Russian identity (Birman et al., 2001). With this sample, the reliability estimate was .92 for the American identity subscale and .93 for the Vietnamese identity subscale. The authors reported that, as expected, the American identity component of this subscale was related positively to perceived social support.
from American peers and related negatively to perceived social support from Russian peers, thus lending support for the content validity of this subscale. They also found support for the content validity of the Russian identity component of this subscale, as it was related positively to perceived social support from Russian peers, and related negatively to perceived social support from American peers. There were no studies found that reported the reliability of this subscale with a sample of Vietnamese participants.

The behavioral acculturation subscale assessed how often the adolescent participated in activities associated with Vietnamese culture and/or American culture. This 22-item subscale is a short form of Birman and Tyler’s (1994) Behavioral Acculturation Scale. Four of the items on this subscale were created for the Trickett and Birman (manuscript in preparation) study and were not part of the original measure. The items asked the respondents to indicate how often they speak English or Vietnamese and how often they participate in activities that they consider part of either American or Vietnamese culture. An example item read, “How often do you listen to Vietnamese songs?” Participants responded to a 4-point Likert scale, with 1 indicating “not at all” and 4 indicating “very much.” The two means of the American behavior responses and the Vietnamese behavior responses were computed. A mean of 1 indicated no participation in that culture and a mean of 4 indicated high participation in American or Vietnamese cultural activities. The Cronbach alpha coefficient for the original subscale was .77 for the American behavior subscale and .84 for the Russian behavior subscale (Birman et al., 2001). Similarly, the reliability estimate for this measure with this sample was .77 for the American behavior subscale and .84 for the Vietnamese behavior subscale. The authors report that this subscale was related to other variables in the manner they hypothesized.
For example, the American behavioral component of the subscale was related negatively to perceived social support from Russian peers and related positively to perceived social support from American peers. Similarly, the Russian behavioral component of the subscale was related positively to perceived social support from Russian peers, and related negatively to perceived social support from American peers. Again, no data were available regarding the reliability of this scale with Vietnamese participants.

Finally, one multiple-choice item was added by Birman and Trickett (manuscript in preparation) to assess acculturation in this questionnaire. The participants indicated which statement best described their overall identification with Vietnamese and American cultures (more American than Vietnamese, more Vietnamese than American, both cultures about equally, or neither culture). The respondents also had the option writing in another answer to this question in the event that none of the options adequately captured their overall identification with Vietnamese and American cultures.

Microsystem factors

Social Support

The Social Support Microsystems Scale (Seidman, 1995) was used to measure social support from parents, Vietnamese peers, and American peers (see Appendix E). The scale consisted of 36 items, divided into 4 sections. The scale originally was created with a sample of low-income, urban, Black and Latino adolescent students. The scale was then modified by Trickett and Birman (manuscript in preparation) for use with Vietnamese immigrant adolescents. The first 11 items listed members of family, extended family, and friends (Vietnamese and American) and asked the respondent to rate how helpful each of these people are in dealing with personal problems. The participant rated
each person on a three point Likert scale, where 1 indicates “not at all,” and 3 indicates “a great deal.” For the purposes of this study, this question was modified to read, “How helpful are the following people when you have questions about your future career.” Additionally, the item “teacher” and “guidance counselor” were added to make 13 total items. The second 11 items were in the same format and listed the same people. However, this time the participant rated each person with regard to how helpful they are when the respondent, for example, needs “money and other things.” This question was modified to read “How helpful are the following people when you need help with schoolwork”, and two additional items were added (teacher and guidance counselor) for the purposes of the study. The third section of the scale was consistent in format; however, the question read “How much fun do you have with the following people?” This question was removed from the measure due to the lack of relevance to the study. Finally, the last three questions asked the adolescent to rate their teachers, guidance counselors, and principal/assistant principal with regard to how helpful they were at school. After moving the teacher and guidance counselor items into the other two questions, these three questions were removed.

To score these scales, two means were computed. A mean close to three indicated high levels of parental and/or peer support. The reported reliabilities among a sample of Russian immigrant adolescents were .82 for parents, .90 for Russian peers, and .87 for American peers (Seidman et al., 1995). Seidman et al. found results consistent with their hypothesis, thus lending support to the content validity of this scale. For example, females perceived more peer support than their male counterparts, and Whites perceived more social support than Blacks. No reliability data were available for this scale when
used with a sample of Vietnamese respondents. The Cronbach alpha coefficients for this measure with this sample was .91 for family support, .83 for peer support, and .70 for school support.

**Exosystem factors**

**Social class**

Social class was assessed by asking students to report whether they received free lunch, reduced lunch or neither. This question has been used in previous studies to assess social class.

**Macrosystem variables**

**Racism**

Racism was assessed in this study using a modified version of the Asian American Racism-Related Stress Inventory (AARRSI; Liang, Li & Kim, 2004). The scale was composed of three subscales, including Socio-Historical Racism, General Racism, and Perpetual Foreigner Racism. The General Racism subscale measured individual encounters with stereotypes of Asian Americans as perpetrated through popular media. This scale included 8 items. Examples of items were, “A student you do not know asks you for help in math,” and “Someone assumes that they serve dog meat in Asian restaurants.” The authors reported alpha coefficients ranging from .75 to .87 for this subscale. The authors found support for the concurrent validity of this subscale in that it was related positively to several scales measuring stress related to being of minority status (Smedley, Myers, Harrell, 1993).

The second subscale measured an individual’s racist encounters with people, specifically reflecting the stereotype of Asian Americans as perpetual foreigners. This
The AARRSI is one of the only scales assessing the effects of racism as it is manifested specifically towards Asian Americans. However, this measure was created for use with adults. The general racism subscale was modified for use with adolescents in the present study. Specifically, two items from the general racism scale were excluded due to possible irrelevance for participants of the target age group. The excluded items were, “Someone tells you that your Asian American female friend looks like Connie Chung,” and “Someone you do not know asks you to help him/her fix his/her computer.” Furthermore, one item from this subscale was slightly modified to reflect the language and experiences of young people. Specifically, the original item read, “Someone tells you that they heard that there is a gene that makes Asians smart.” This item was changed to read, “Someone tells you that all Asians are smart.”

The measure was also modified so that when the term “Asian” or “Asian American” is used, the item would instead read “Asians or Vietnamese.” An example of this modification is “Someone tells you that Asians or Vietnamese are smart.” This subscale was tested by the author on fifteen 4th and 5th grade Asian Indian American students to ensure the age-appropriateness and comprehensibility of the items.

The entire modified version of the General Racism Scale plus the Perpetual Foreigner Scale yielded a total of 16 items that was administered to Vietnamese
adolescents. The third subscale, Socio-Historical Racism subscale, was eliminated from this study due to the inappropriateness of the items for middle-school and high school students.

Participants were asked to respond to each item on a five point Likert scale. A response of 1 indicates that “this event has never happened to me or someone I know.” Responses between 2 to 5 assumed that the event happened, with 2 indicating that “this event happened but did not bother me” and 5 indicating that “this event happened and I was extremely upset.” Individual scores were totaled, and means were calculated. Higher means indicated higher levels of racism-related stress. The reliability estimate for this measure with this sample was .89.

**Dependent variables**

**Career self-efficacy**

Three different measures were used to assess the career self-efficacy of Vietnamese adolescents. These scales examined career-related self efficacy by assessing confidence in making career-related decisions, planning and exploring careers, and in educational and vocational development.

**Career decision making self-efficacy.** The Middle School Self-Efficacy Scale (Fouad & Smith, 1997) was used to measure career decision-making self efficacy (see Appendix D). The original Middle School Self-Efficacy Scale assessed outcome expectations and goals as well as math and science related self efficacy; however, these subscales were not included in the current study, as they are not directly related to the purpose of the study. The Career Decision Making Self-Efficacy (CDMSE) subscale was used, and it consisted of 12 items. The CDMSE was based on Taylor and Betz’s (1983)
career decision-making self-efficacy scale. Participants were instructed to indicate how strongly they agreed or disagreed that they were capable of completing the tasks in each item. Example items from this scale included, “Determine what occupation would be best for me,” and “Talk with a person already employed in a field I’m interested in.” Participants responded on a 5-point Likert scale, with a response of 1 indicating “strongly disagree,” and a response of 5 indicating “strongly agree.” High scores indicated higher levels of career decision making self-efficacy. Fouad and Smith (1997) reported internal consistency reliability for this subscale as .79. Support for the total Career Decision-Making Self-Efficacy scale was found when a factor analysis confirmed the hypothesized factor structure for the scale. The reliability estimate for this measure with this sample was .89.

Confidence in career planning and exploration. Career planning and exploration efficacy was measured using the Career Planning and Exploration subscale of the Missouri Guidance Competency Evaluation Survey (MGCES; Lapan, Gysbers, Multon, & Pike, 1997). The subscale was composed of 10 items and assessed efficacy in three areas, including exploring and planning for careers, understanding how being male or female relates to classes and jobs, and learning how to use leisure time. An example of an item in the first category read, “I know how to explore careers in which I may be interested.” The reported internal consistency reliability for this category was .78. An example of an item from the second category was, “I know that all classes and jobs are acceptable for females and males.” The reported internal consistency for this scale was .80. An example of the last category is, “I know of leisure activities I can do when I’m older.”
The reported internal consistency of this scale was .88. Support for the validity of this subscale was found in a study conducted by Turner and Lapan (2002). The researchers found career planning and exploration self-efficacy to correlate with self-efficacy in Holland’s Realistic careers, Investigative careers, Artistic careers, Social careers, and Conventional careers. Originally, this was a 7-point Likert scale. For the purposes of this study, this scale was modified so all three career self-efficacy scales used a 5-point Likert scale. Participants responded to each item on a 5-point Likert scale, with a score of 1 indicating “very low level of confidence” and 5 indicating “very high level of confidence.” Items within each category were totaled, and means were calculated. Higher means indicated higher levels of confidence in career planning and exploration. The reliability estimate for this measure with this sample was .90.

Confidence in educational and vocational development. Educational and vocational efficacy in this study was measured using the Educational and Vocational development subscale of the Missouri Guidance Competency Evaluation Survey (MGCES; Lapan et al., 1997). This scale consisted of 21 items that measured (1) improving study and learning skills, (2) learning from friends and others about high school, (3) planning for school and beyond, and (4) preparation for finding jobs. Reliability estimates were reported for each of the four categories of this subscale. An example of an item from the first category was, “I know how to start and finish my assignments well.” The internal consistency estimate for this category was .86. An example of an item from the second category was, “I understand the challenges students have in high school.” The internal consistency estimate for this category was .75. An example of an item from the third category read, “I understand how completing high
school will better prepare me for the job market.” The internal consistency estimate for this category was .82. An example of an item from the last category is, “I know what employers expect of workers.” The internal consistency estimate for this category was .83. No reliability information for the whole subscale was provided. No support for the validity of this subscale was found.

This scale was modified from a 7-point scale to a 5-point Likert scale so that the three career self-efficacy scales are consistent. Responses were given on a 5-point Likert scale, with 1 indicating “very low level of confidence” and 5 indicating “very high level of confidence.” Responses within each category were totaled, and means were calculated. Higher scores indicated higher amounts of confidence in performing tasks related to their educational and vocational development. No validity information was provided for this measure. This measure was selected because of its use in a previous study examining changes in career decision-making self-efficacy in 6th graders who completed a career intervention program (O’Brien et al., 1999). Significant differences were found between the pre and post tests on the career decision-making self-efficacy construct. The reliability estimate for this measure with this sample was .94.

Analyses

Two multivariate analyses of variance (MANOVA) were conducted to test for significant differences across grade levels and gender in the dependent variables. No significant differences were found, thus the data were aggregated for the rest of the analyses. Descriptive data were collected for all variables (see Table 1). For all analyses, a .01 level of significance was chosen to lessen the probability of Type I error.
A correlation analysis was computed to assess the relationships between variables in the individual, microsystem, exosystem, and macrosystem levels (see Table 1). Next, three hierarchical multiple regression analyses were conducted (see Tables 2, 3, and 4). Individual (e.g., gender, acculturation), microsystem (e.g., social support), exosystem (e.g., social class), and macrosystem (e.g., racism) variables were entered in the three multiple regressions to predict the three dependent variables. In the first regression, career decision making self-efficacy was the predictor variable. The second regression had career planning and exploration efficacy as the dependent variable, while the third used educational and vocational efficacy as the dependent variable.

In all of the regressions, individual variables were entered in a block first, followed by the microsystem variables in a second block, the exosystem variable, and finally by the macrosystem variable. This is because individual variables are theorized to exert the most direct influence in the client’s life (and thereby on the dependent variables), while microsystem, exosystem, and macrosystem variables exert less direct influence in this order.
RESULTS

The results of the bivariate correlations between individual, microsystem, exosystem, and macrosystem level variables can be found in Table 1. Means, standard deviations, range, and reliabilities of all variables are also reported in Table 1.

Description of sample

*Individual variables*

Generally, these adolescents reported very strong identification with being Vietnamese. They reported moderate abilities in speaking and understanding Vietnamese, as well as partaking in Vietnamese activities, such as joining in community and religious events and talking on the phone with Vietnamese friends. When asked how they thought of themselves culturally with respect to both American and Vietnamese cultures, more than half of the students (53% percent) considered themselves Vietnamese and American equally.

These adolescents overall felt confidence in their ability to speak English in a variety of settings (e.g., over the phone, with strangers) and understand English. They also reported frequent participation in American activities, including spending time with American friends, going to American movies, and attending American events. These adolescents reported a strong identification with being American.

*Microsystem variables*

Overall, these students reported moderate levels of family social support, peer social support, and support from teachers and guidance counselors with regard to questions about future careers and schoolwork.
Career self-efficacy

Exosystem variable

Roughly one third of the sample was enrolled in a free or reduced lunch program at school, and received some financial assistance from the government. About two-thirds of the sample indicated that they were not enrolled in either program.

Macrosystem variable

This sample reported experiencing very little stress from racism-related experiences.

Dependent variables

These students reported high levels of confidence in engaging in career-related tasks. Overall, participants indicated strong levels of confidence in pursuing tasks that relate to career decision-making. Students also reported somewhat high confidence in engaging in tasks to facilitate their career planning and exploration, as well as their education and vocational development.

Correlational Analysis

Individual variables

American language acculturation demonstrated moderate positive associations with American behavior acculturation, career decision-making self-efficacy, career planning and exploration efficacy, and educational and vocational development efficacy. American identity acculturation was correlated moderately and positively with American behavior acculturation, career planning and exploration efficacy, and education and vocational development efficacy. American behavioral acculturation also demonstrated moderate and positive associations with Vietnamese identity acculturation, career decision making self-efficacy, career planning and exploration efficacy, and educational
and vocational development. Vietnamese language acculturation had moderate relations with Vietnamese identity acculturation, and a strong association with Vietnamese behavior acculturation. Vietnamese identity acculturation exhibited moderate positive associations with Vietnamese behavior acculturation, American behavior acculturation, peer social support, and career decision making self-efficacy. Vietnamese behavioral acculturation exhibited a moderate positive association with peer support.

Microsystem variables

Family support exhibited moderate and positive associations with peer support and school support. Peer support demonstrated moderate positive associations with career decision making self-efficacy, and education and vocational support efficacy.

Exosystem variable

The measure of racism was not correlated with any of the other variables in this study.

Macrosystem variable

Adolescents’ responses to whether they were enrolled in a free/reduced lunch program were not associated with any of the other variables in this study.

Dependent variables

The three dependent variables (career decision-making self-efficacy, career planning and exploration efficacy, and education and vocational development efficacy) assessing dimensions of career self-efficacy demonstrated strong, positive associations with each other. Career decision-making self-efficacy shares 50% variance with career planning and exploration efficacy and 39% variance with educational and vocational development efficacy. Career planning and exploration efficacy shares 74% variance
with educational and vocational development efficacy. The strong relationships bring into question whether the three measures used to assess these variables were assessing different constructs.

**Regression Analysis**

Three hierarchical multiple regression analyses were computed to assess the proportion of variance accounted for by individual, microsystem, exosystem, and macrosystem variables in the prediction of career decision making self-efficacy, career planning and exploration efficacy, and educational and vocational development efficacy.

*Prediction of career decision-making self-efficacy*

Individual, microsystem, exosystem, and macrosystem variables accounted for 42% of the variance in the prediction of career decision making self-efficacy (see Table 2). The individual variables as a group explained 39% of this variance. However the microsystem, exosystem, and macrosystem variables did not contribute unique variance over and above that accounted for by the individual level variables. When all the variables were entered together into the regression, only American language acculturation served as a unique predictor of career decision-making self-efficacy.

*Prediction of career planning and exploration efficacy*

Individual, microsystem, exosystem, and macrosystem variables together accounted for 48% of the variance in the prediction of career planning and exploration efficacy (see Table 3). Individual variables provided the only significant contribution towards the prediction of career planning and exploration efficacy, and accounted for 41% of the variance. After entering all of the variables into the regression equation, only American language acculturation contributed unique variance to the prediction of career
planning and exploration efficacy.

*Prediction of educational and vocational development efficacy*

Individual, microsystem, exosystem, and macrosystem variables together accounted for 44% of the variance in the prediction of educational and vocational development efficacy (see Table 4). Individual variables contributed 33% of the variance towards predicting educational and vocational development efficacy. Microsystem level variables collectively accounted for an additional 10% of variance. When entering all of the variables into the regression equation, American language acculturation and peer support contributed unique variance in the prediction of educational and vocational development efficacy.
DISCUSSION

The best predictor of Vietnamese adolescents’ career self-efficacy was American language acculturation, an individual level variable. Peer social support, a microsystem level variable, contributed to the prediction of education and vocational development efficacy. These results, if replicated, may inform future interventions for Vietnamese adolescents.

Career decision-making self-efficacy

Overall, the adolescents in this study reported high levels of career decision-making self-efficacy. The level of career decision-making self-efficacy reported by these students appeared to be somewhat higher than a sample of urban Hispanic, African American, Asian American, American Indian and White schoolchildren in the Midwest (Fouad & Smith, 1997). Environmental factors might have contributed to the strong feelings of decision-making self-efficacy in this sample of students. Most of these students lived in suburban, middle class neighborhoods, and attended fairly well-funded schools, which might have enhanced their career decision-making confidence. The participants in Fouad and Smith’s study were from urban, less financially secure neighborhoods, and struggled with academic achievement, which might have contributed to lower levels of career decision-making self-efficacy. These urban students might have experienced high stress related to their environmental experiences, such as poverty and discrimination, in turn negatively affecting the quality of life, including their career development process (Constantine et al., 1998). Interestingly, no gender differences were found for our sample, which was consistent with Fouad and Smith’s (1997) findings. It may be that adolescent Vietnamese women and men are both encouraged by their
families to have high educational expectations, as dual incomes may be necessary for
survival for many immigrant families. Within the work domain, immigration status may
therefore supercede cultural values about gender roles in ways that would influence
career decision-making self-efficacy (i.e., families may be supportive of women working
outside the home and achieving in her career). These findings are consistent with
literature on Caribbean immigrants (Baptiste, Hardy, & Lewis, 1997), which suggested
that while traditional gender roles may be suspended within the work sphere, they still
operate within the family. Therefore, gender differences may still be maintained in other
life domains, such as the family, such as taking care of children.

Individual variables accounted for variance in career decision-making self-
efficacy. Of the individual level variables, only American language acculturation
emerged as a unique predictor of career decision making self-efficacy. Specifically,
higher abilities and understanding English were predictive of feeling more confident in
engaging in career decision-making tasks. Miranda and Umhoefer (1998) found a similar
relationship between English language ability and career self-efficacy among Hispanic
students. Perhaps English proficient students are better able to make use of libraries,
career centers, internet, and other resources to learn about careers, thus these students
might feel better able to make decisions related to their careers. Alternatively, perhaps
those students who were confident in making career decisions also felt confident in
pursuing mastery over the English language.

There were positive associations with career decision-making self-efficacy and
three acculturation variables: American language acculturation, American behavior
acculturation and Vietnamese identity acculturation. While the relationship between
American language acculturation variable and career decision-making self-efficacy has been discussed, there may be a second explanation for that relationship. Perhaps students whom strongly identify as being Vietnamese, and are also acculturated toward American culture, may experience many educational and vocational benefits from being bicultural. A result of being bicultural may be that students are better able to communicate with and receive vocational help from their parents, as well as feel more accepted in American school system. Furthermore, adolescents may experience low amounts of acculturative stress, which theoretically would impact their career development. There also may be other mental health and adjustment benefits that could have a positive impact on the career development process. Future studies could extend this research by examining psychological variables such as acculturative stress.

The relationship that emerged between career decision-making self-efficacy and peer support (although not reflected as significant in the regression equation) suggested that peers might play a role in the development of career decision-making self-efficacy among the students in this study. Steinberg, Dornbusch, and Brown (1992) suggested that peers play a greater role than families in shaping the career and education development process, potentially having a positive or negative impact. Adolescents’ confidence in describing what they value in an occupation or differentiating between which careers their parents would like for them to follow and the ones that they would like to pursue may come from having ongoing conversations with others about their values, families, and futures. Since a large part of a students’ day is spent with their peers, the activities that influence the development of their career decision-making confidence may occur in the context of their friendships.
Furthermore, since these adolescents come from immigrant families, they may perceive their parents to be less familiar and knowledgeable about the American education system and world of work than their peers. Therefore, they may seek guidance and support for their education and vocational development from their peers. Azmitia and Cooper (2001) found that among a sample of Latina/o adolescents, peers played a helpful role for middle school students’ career development, and posed a challenge for high school students’ career development.

Gender, peer social support, family social support, school social support, racism, and social class did not make any unique contributions towards the career decision-making self-efficacy of this sample of Vietnamese adolescents. We had hypothesized that gender would predict career decision-making self-efficacy, however this expectation was not supported by the data. It may be that financial necessity related to their immigration status requires that both parents work. Therefore, parents may not transmit traditional gender roles regarding work to their children. Previous research has found gender to predict career decision-making self-efficacy (Gianakos, 2001). Alternatively, it may be that gender predicts other career variables, such as career choice.

Surprisingly, peer social support, family social support, and school social support were not predictive of career decision-making self-efficacy, contrary to our hypotheses. Social support may not be important in career decision-making self-efficacy with this sample of students. However, this would be inconsistent with other findings. Previous research indicated that social support contributed to career decision-making self-efficacy (Schultheiss, Kress, Manzi, & Glasscock, 2001; Lucas, Skokowski, & Ancis, 2000; Whiston, 1996). In this study, a specific form of social support was measured (assistance
with homework and career-related questions), and did not assess the general feelings of support, or other forms of support experienced by adolescents. Thus, there may have been methodological problems that contributed to this inconsistent finding. Another explanation for this finding is that perhaps during the immigration process, availability of support lessens, as families alter their social networks and ties. Todd and Worell (2000) found that social support may only influence well-being in times of crisis. Many of the students in this study were either born in the United States, or immigrated to the U.S. at an early age. Perhaps these students and families are not facing the same crises that early immigrants and refugees encounter, and therefore are less impacted by social support.

We had hypothesized that social class would predict career decision-making self-efficacy. This was not supported by the data. It may be that social class is not important to the lives of Vietnamese adolescents. Yet, this is inconsistent with previous research suggesting that social class is important in adolescents’ lives (Hannah & Kahn, 1989. It may be that social class may impact adolescent’s emotional well-being and other health variables. Methodological limitations may have contributed to this finding, i.e., very little variance in social class was found among this sample.

Although racism was hypothesized to predict career decision-making self-efficacy, our data suggested that racism was not predictive of career decision-making self-efficacy. Previous research suggested otherwise (Tan, 1994). Racism may be related to other variables, such as self-esteem. Again, little variance was found in the responses to racism-related experiences, which may also explain this finding. Moreover, the measure used to assess racism may have been inadequate for this sample.
Career planning and exploration efficacy

The adolescents in this study reported high levels of career planning and exploration efficacy. The level of career planning and exploration efficacy reported by these students appeared to be similar to, but slightly lower than the levels reported in a sample of mostly White, middle school students in the Midwest (Turner & Lapan, 2002). One reason for this discrepancy may be due to family expectations and anticipation of work-related discrimination. These students might be more likely to limit the range of careers they would consider, and feel less confident in engaging in career exploration tasks. Leong (1998) and Ngo and Maiz (1998) argued that Asian American families and students especially tend to limit their career choices to careers in which they expect to face less discrimination. Focusing children towards certain career paths often happens at a young age, thus, many Asian American students might not have been encouraged or taught to explore career options. These experiences may have contributed to lower career planning and exploration efficacy.

Consistent with our hypotheses, individual level variables contributed variance towards the prediction of the dependent variable. Similar to the previous findings for career decision-making self-efficacy, the only individual level variable that contributed unique variance was American language acculturation. Perhaps those students who are more proficient in English believe that they can be successful in a wider range of career options than those with limited English proficiency. It may be that these students believe that mastery over the English language is an important predictor of whether they will encounter discrimination in the workforce. Therefore, the more students perceive themselves to be proficient in English, the more likely they may feel confident in pursuing
different careers without encountering language-based barriers. Alternatively, it may be that those students who feel confident that they can successfully pursue the careers in which they are interested are also confident in their ability to communicate in English through different media (on the phone, in person) and with different individuals (strangers, at school).

The relationship that emerged between other acculturation variables and career planning and exploration efficacy (although not reflected as significant in the regression equation) suggested that Vietnamese adolescents who were strongly acculturated towards American language, identity, and behavior also felt confident in exploring and planning careers in which they were interested. In America, an individual’s career interests are valued, and often emphasized in the career development process (e.g., “what do you want to be when you get older?”). In this study, some of the items used to assess career planning and exploration efficacy asked students whether they are familiar with their interests, and understand how interests relate to different career-related tasks (e.g., preparing for careers they are interested in, understanding how interests and abilities impact their career choice). Perhaps students that identify as American also identify with an American value of pursuing a career in which they are interested. Students who watch American television shows and movies, and attend American social activities are more likely to be exposed to and partake in discussions around career paths and questions about career interests. Thus, it may be that students who are more acculturated towards American culture may be more likely to internalize a value of career interests, and thus be more report higher levels of career planning and exploration efficacy. Researchers have discussed that interests are not emphasized or valued as much in Asian Americans’ career
development process. The three Vietnamese acculturation variables were not found to be associated with career planning and exploration efficacy. Perhaps career interests are not as relevant in the career development of those students who are more acculturated towards Vietnamese culture. Leong (1998) suggested that parental guidance or pressure, and not career interests, may influence these students’ career choices.

We had hypothesized that gender would contribute variance towards these students’ career planning and exploration efficacy. This was not supported by the data, which may indicate that gender is not important in predicting career planning and exploration efficacy. As discussed previously, this is inconsistent with previous findings, and an alternative explanation maybe that gender may predict other career variables, such as career choice.

The lack of significant contributions from peer social support, family social support, and school social support toward career planning and exploration efficacy are surprising, and do not support our hypotheses. Moreover, these findings are inconsistent with previous research findings (Azmitia & Cooper, 2001; Kracke, 2002; Turner & Lapan, 2002). In this study, support was defined as assistance received with homework and career questions. Future research should examine whether different types of support (e.g., emotional) maybe predictive of career planning and exploration efficacy.

We had hypothesized that social class would predict career planning and exploration efficacy. Our findings suggested that social class may not be important to career planning and exploration efficacy. This result is inconsistent with other studies that suggested that by middle school, students’ social class may already limit the range of careers they feeling confident in considering (Young, 1983). Perhaps social class did not
emerge as an important predictor of career planning and exploration efficacy because of the lack of variation in social class among the participants. Also, the measure of social class was limited as we assessed whether or not students received free or reduced lunches at school.

We also hypothesized that racism would predict career planning and exploration efficacy. This hypothesis was not supported by our data. Previous findings suggested that racism influenced the career development of Asian Americans. Leong and Hayes (1990) found that Asian American students tended to be stereotyped as performing well in some occupations, and poor in others (e.g., those requiring social skills). Alternatively, methodological problems may have affected these results. The racism measure used in this study was not created for or validated on middle school students. Thus, our measure may have failed to assess racism-related experiences adequately with this sample.

Educational and Vocational Development Efficacy

The Vietnamese adolescents in this study reported high levels of education and vocational development efficacy. Only students who were proficient in English participated in this study. Previous research suggests that there is a subset of Vietnamese immigrants who live in ethnic enclaves where little English is spoken, and limited work options are available. The children of these adults may be less fluent in English, and have low levels of career self-efficacy because of perceptions of what career opportunities are available to them. Also, because their work is often characterized by low-wage jobs, there may be fewer financial resources to support their children’s education. These factors may contribute to low levels of confidence in performing tasks appropriate to their education and vocational development. Since this study only included students who mostly live in
middle class families and speak English fluently, these students may have many resources to support their educational and vocational development efficacy. The level of education and vocational development efficacy reported by these students was similar to, but somewhat lower than the level reported by a sample of low income, White, Black, and Hispanic sixth graders (O’Brien et al., 1999).

Individual and microsystem variables accounted for variance in the prediction of education and vocational development efficacy. As hypothesized, the individual level variables accounted for variance, followed by microsystem level variables. English language acculturation and peer support contributed unique variance towards the prediction of the dependent variable.

Perhaps those adolescents who perceived themselves to be less proficient in English also felt less confident in their ability to complete the tasks necessary for their education and vocational development. For example, maybe these students lacked confidence in being able to listen and ask questions in class, or taking good notes and doing well on exams. Alternatively, maybe those students who successfully perform tasks relevant to their educational and vocational development are more likely to feel confident in their abilities to learn English.

As discussed in the section on career decision-making self-efficacy, the support that adolescents receive from peers may be influential in their confidence to pursue tasks important for their educational and vocational development for a few reasons. First, students spend much of their days with their peers, and thus, when their peers are supportive of their academics, these students are likely to be influenced by their peers and feel more confident about their educational and vocational development. Also, since
these students come largely from immigrant families, they may find their peers to be
more familiar and resourceful about the American school systems than their parents and
many other adults in their lives (e.g., knowing about high school credits and graduation
requirements, challenges students have in high schools). Thus, these adolescents’
educational and vocational development efficacy may be influenced by discussions and
support received from peers.

Alternatively, those students who are invested in their education and vocational
development might seek out the assistance of their peers to help them with their
homework and discuss their future careers. As discussed above, these students may find
their peers to be more resourceful than their parents in answering questions on how to
succeed in the American educational system and the workforce. Also, those students who
are confident in their abilities may also surround themselves with peers who also are
similarly invested in their educational and vocational development, and rely on them for
support. This finding is consistent with previous literature that discusses the importance
of peer support in career self-efficacy (Azmitia & Cooper, 2001), and that peers may be
more influential than families (Steinberg, Dornbusch, & Brown, 1992).

In this study, gender did not contribute to the prediction of educational and
vocational development efficacy of Vietnamese adolescents. Possible explanations for
this finding were discussed earlier.

Surprisingly, family social support did not emerge as a predictor of educational and
vocational development efficacy, as we hypothesized. Family social support may not be
important to these students; however this would be inconsistent with previous research
that suggested that for Asian Americans, parental support played a crucial role in
deciding their children’s career choice (Leong, 1998).

Social support from the school environment was not predictive of educational and vocational development efficacy for the students in this sample. Alternatively, perhaps the lack of variation in students’ responses to school social support affected our ability to find significant relationships.

We hypothesized that social class would predict educational and vocational development self-efficacy. Previous research suggested that social class is important in adolescents’ confidence in performing career-related tasks (Hannah & Kahn, 1989). A number of possible reasons may explain the inability of our study to show a relationship between social class and educational and vocational development self-efficacy. Perhaps, our original hypothesis is wrong. Social class may only predict career self-efficacy in certain populations or subgroups. It may not be as important in Vietnamese adolescents. Alternatively, our study may have had methodological limitations which restricted our ability to detect a relationship. Future studies that incorporate a larger and more diverse sample of Vietnamese adolescents may arrive at a different result.

We also hypothesized that racism would predict educational and vocational development self-efficacy. Previous evidence supporting a relationship between racism and educational and vocational self-efficacy was not supported by our data (Tan, 1994). Little variance was found in the responses to racism-related experiences. This may explain our inability to detect a statistically significant relationship between racism and a number of variables. The measure used to assess racism, designed more for college students, may have been inadequate for this sample population.

Obviously, a similar pattern of findings occurred in the findings from the regression
analyses for the three dependent variables. This redundancy is likely to be due to multicollinearity among the measures of career self-efficacy. Overall, these variables shared 39% or more variance. It is possible that method variance contributed to this finding. The shared underlying construct of self-efficacy, along with the similar mechanisms used to measure their scales, may have made it difficult to differentiate among the various aspects of career self-efficacy.

Ideas for interventions

One purpose of this study was to understand better the contribution of individual, microsystem, exosystem, and macrosystem variables to the career self-efficacy of Vietnamese adolescents. The results of this study indicated that American language acculturation predicted career decision making self-efficacy, career planning and exploration self-efficacy, and educational and vocational self-efficacy. The results also suggested that peer support predicted educational and vocational development efficacy.

Interventions intended to broaden these students’ career interests could include practice in engaging in career-related tasks in English. Interventions with students learning English as a second language could include role-plays in which students practice interviewing adults about their careers, asking teachers for help with career-related tasks, and helping students make use of career centers, libraries and the internet for the purpose of increasing career-related knowledge.

Another way to increase career confidence in this population is by having vocational intervention programs in schools. Students could participate in discussion groups with both peers and professionals representing a non-traditional career (e.g., role play being a journalist).
Recent immigrant students could participate in English conversation groups with bilingual Vietnamese students. Topics for these groups would include life issues, adjustment, school work, career values, and other issues that are salient. These interventions would provide the opportunity to practice and strengthen English skills as well as build relationships between native English-speaking students and those learning English as a second language.

Limitations

Only those adolescents who were fluent in English were able to participate in the study because the materials were in English. Since this study examined the experiences of all Vietnamese adolescents in the Washington DC area, a subset of the population was not able to participate. Therefore, these findings cannot be generalized to non-English speaking Vietnamese adolescents. Future research should have measures in Vietnamese, as it helps build trust with adolescents and parents, and allows great accessibility to non-English speaking adolescents.

Another limitation to this study was that the data were collected through contacting community organizations serving Vietnamese adolescents (e.g., Girls Scouts, Boy Scouts, and tabling at a Vietnamese shopping center). Religious organizations connected to the research assistants also were contacted. Because the majority of the data came from the social networks of the undergraduate research assistants and community organizations that provide educational and other services to Vietnamese adolescents, this sample might over-represent education focused, privileged Vietnamese adolescents. Future studies may want to try to recruit data from adolescents in schools to minimize bias in the sample.
A third limitation of this study was that the survey packet may have been too long for this age group. Consequentially, there may have been a loss in the quality of responses due to the length of the survey. Since the outcome variables were highly correlated, future studies using the same outcome variables may want to use only one of the three variables.

Several measures used in this study could be improved. The career self-efficacy scales appeared to share method variance and were highly correlated. The racism-related experiences scale was originally created for college students. For the purposes of this study, the scale was modified. The measure may have been inappropriate for use with this population. However, the measure was used because of the lack of other relevant measures available.

Accessing consent from both parents and their children when collecting data was challenging. Only those students whose parents were available and interested in their students’ participation in a career-related study participated in this study. Students whose parents worked non-traditional hours or whose parents did not attend functions (e.g., festivals, scout meetings, after school program) with them were less represented in this study. Future researchers may want to collect data from students’ homes, or provide financial incentives (e.g., a small amount of cash for participation) to attract less-accessible students.

Finally, due to the challenges associated with data collection, the final data was four surveys short of the goal determined by a power analysis. As a result, some of the relationships that exist among the variables may not have been detected in our data set. For example, in the regression equation predicting career decision-making self-efficacy,
Vietnamese identity acculturation approached significance.

Conclusion

To conclude, the Vietnamese adolescents in this study experienced moderate levels of career self-efficacy, as measured by career decision-making self-efficacy, career planning and exploration efficacy, and educational and vocational development efficacy. For these adolescents, American language acculturation predicted all three dimensions of career self-efficacy. Also, peer social support contributed to education and vocational development efficacy. Further research is needed to advance our understanding of variables related to vocational success among Vietnamese adolescents. Counseling psychologists, with their expertise in career development and multiculturalism may be able to make significant contributions in designing interventions to facilitate the career development of this and other immigrant populations.
Figure 1. *Illustration of Bronfenbrenner’s (1977) Theory of the Individual in the Environment*
Figure 2. The role of psychosocial variables, support, social class, and racism in predicting career decision making self-efficacy, career planning and exploration efficacy, and education and vocation development efficacy.
Appendix A

The Language, Identity, and Behavioral Acculturation Scale (LIB; Birman & Trickett, 2001)

We are interested in learning how living in the U.S. has affected your language abilities. Please circle the response that corresponds with your language ability.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very well, like a native</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How would you rate your ability to speak *English*:  

1. at school.......................................................... 1 2 3 4  
2. with American friends .......................... 1 2 3 4  
3. on the phone ........................................... 1 2 3 4  
4. with strangers ........................................ 1 2 3 4  
5. overall.................................................. 1 2 3 4

How well do you understand *English*:  

6. on TV or at the movies................................. 1 2 3 4  
7. in newspapers or in magazines ..................... 1 2 3 4  
8. on the phone ........................................... 1 2 3 4  
9. overall ................................................ 1 2 3 4

How well can you write in *English*? ................. 1 2 3 4

How would you rate your ability to speak *Vietnamese*:  

10. with family ............................................... 1 2 3 4  
11. with Vietnamese friends ....................... 1 2 3 4  
12. on the phone ........................................... 1 2 3 4  
13. with strangers ........................................ 1 2 3 4  
14. overall ................................................ 1 2 3 4

How well do you understand *Vietnamese*:  

15. on TV or at the movies ................................ 1 2 3 4  
16. in the newspapers ....................................... 1 2 3 4  
17. on the phone ........................................... 1 2 3 4  
18. overall ................................................ 1 2 3 4

How well can you write in *Vietnamese* ............. 1 2 3 4
Appendix A – cont’d.

We are interested in learning about your identification with your ethnic background. We realize that some of you also have a background other than Vietnamese, such as Chinese or Hmong. Please answer the questions below concerning your ethnic identity.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think of myself as being American</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>2. I feel good about being American</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>3. Being American plays an important part in my life</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>4. I feel that I am part of American culture</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>5. If someone criticizes Americans, I feel they are criticizing me</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>6. I have a strong sense of being American</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>7. I am proud of being American</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>8. I think of myself as being Vietnamese</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>9. I feel good about being Vietnamese</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>10. Being Vietnamese plays an important part in my life</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>11. I feel that I am part of Vietnamese culture</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>12. If someone criticizes a Vietnamese, I feel they are criticizing me</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>13. I have a strong sense of being Vietnamese</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>14. I am proud that I am Vietnamese</td>
<td>1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>
Appendix A – cont’d.

We are interested in how much you take part in American and Vietnamese activities. Please circle the response that indicates to what extent the following statements are true about things that you do.

<table>
<thead>
<tr>
<th>How much do you speak English:</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. at home?</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>2. at school?</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>3. with friends?</td>
<td>1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>

How much do you:

4. read *American* books, newspapers, magazine? .......... 1 2 3 4
5. listen to *American* songs? ............................. 1 2 3 4
6. watch *American* movies (on TV, VCR, etc)? ............. 1 2 3 4
7. eat *American* food? .......................... 1 2 3 4
8. have *American* friends? .......................... 1 2 3 4
9. attend *American* clubs or parties? ........................ 1 2 3 4
10. participate in *American* community activities? ........ 1 2 3 4
11. participate in *American* religious services? ........... 1 2 3 4

How much do you speak Vietnamese:

12. at home? ......................................................... 1 2 3 4
13. at school? .......................................................... 1 2 3 4
14. with friends? .................................................... 1 2 3 4

How much do you:

15. read *Vietnamese* books, newspapers, or magazines? ...... 1 2 3 4
16. listen to *Vietnamese* songs? ................................... 1 2 3 4
17. watch *Vietnamese* movies (on TV, VCR, etc)? ............. 1 2 3 4
18. eat *Vietnamese* food? ........................................ 1 2 3 4
19. have *Vietnamese* friends? ................................... 1 2 3 4
Appendix A – cont’d.

How much do you: Not at all Very much

20. attend Vietnamese clubs or parties? 1 2 3 4
21. participate in Vietnamese community activities? 1 2 3 4
22. participate in Vietnamese religious services? 1 2 3 4

The following statements describe how you think of yourself culturally overall with respect to the Vietnamese and American cultures. Please choose the best description of yourself with respect to these two cultures. If none apply, please use option “e” and explain how you see yourself.

_____ a. I consider myself more Vietnamese than American overall.
_____ b. I consider myself more American than Vietnamese overall.
_____ c. I consider myself Vietnamese and American about equally.
_____ d. I don’t consider myself either Vietnamese or American.
_____ e. None of the above (Please explain)

________________________________________
Appendix B:

The Social Support Microsystems Scale (Seidman, 1995)

The following questions ask about your relationships with different people in your life. Please circle the number that corresponds to your answer for each question.

How helpful are each of the following people when you have *questions about your future career*?

<table>
<thead>
<tr>
<th>Person/Relationship</th>
<th>Not at all</th>
<th>Somewhat</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Group of close Vietnamese friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Vietnamese kids your age</td>
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<td>3</td>
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<tr>
<td>3. Group of non-Asian friends</td>
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<td>3</td>
</tr>
<tr>
<td>6. Mother</td>
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<td>3</td>
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<tr>
<td>7. Grandmother(s)</td>
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<td>8. Grandfather(s)</td>
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<tr>
<td>9. Aunt(s)</td>
<td>1</td>
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<tr>
<td>10. Uncle(s)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. Cousin(s)</td>
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</tr>
<tr>
<td>12. Teachers</td>
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<td>3</td>
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<tr>
<td>13. Guidance Counselors</td>
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How helpful are each of the following people when you *need help with schoolwork*?

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<th>A great deal</th>
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<td>2. Vietnamese kids your age</td>
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<td>4. Group of Asian friends</td>
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<td>Not at all</td>
<td>Somewhat</td>
<td>A great deal</td>
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<td>5. Father</td>
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<td>6. Mother</td>
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Appendix C:

Asian American Racism-Related Stress Inventory (AARRSI; Liang, Li, & Kim, 2004)

The following questions ask about your experiences. Please indicate your response to each item using the following scale:

NH = This event has never happened to me.
1 = This event happened but did not bother me
2 = This event happened and I was slightly bothered
3 = This event happened and I was upset
4 = This event happened and I was extremely upset

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<tr>
<th>Question</th>
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<tr>
<td>1. A non-Asian student you do not know asks you for help in math.</td>
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<tr>
<td>2. Someone who is non-Asian tells you that Asians or Vietnamese are smart.</td>
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<td>3. Someone who is non-Asian tells you that they serve dog meat in Asian or Vietnamese restaurants.</td>
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<td>4. Someone who is non-Asian asks you if you can teach her or him karate.</td>
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<td>5. Someone who is non-Asian asks you if you know his/her Asian or Vietnamese friend/classmate.</td>
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<td>6. Someone who is non-Asian tells you that the kitchens of Asian or Vietnamese families smell and are dirty.</td>
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<td>7. You are told that “you speak English so well.”</td>
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<td>8. You are asked where you are really from.</td>
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<tr>
<td>9. Someone who is non-Asian asks you if all your friends are Asian or Vietnamese.</td>
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<tr>
<td>10. Someone who is non-Asian tells you that all Asian or Vietnamese people look alike.</td>
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<td>11. Someone who is non-Asian asks you what your real name is.</td>
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<td>12. Someone non-Asian who you do not know speaks slow and loud at you.</td>
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<td>13. Someone who is non-Asian tells you that “you people are all the same.”</td>
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<tr>
<td>14. You feel that teachers judge you based on being Asian.</td>
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<td>15. Teachers or career counselors assume you should take a certain career path because you’re Asian.</td>
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<tr>
<td>16. You were put in an English as Second Language class even though you speak English well.</td>
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Appendix D:

The Middle School Self-Efficacy Scale: Career Decision Making Self-Efficacy  
(Fouad & Smith, 1997)

Please indicate the degree to which you agree or disagree that you could do each statement below by writing the appropriate letter code to the right of each statement.

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<tbody>
<tr>
<td>Find information in the library about five occupations I am interested in.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>Make a plan of my educational goals for the next three years.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Select one occupation from a list of possible occupations I am considering.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Determine what occupation would be best for me.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Decide what I value most in an occupation.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Resist attempts of parents or friends to push me into a career I believe is beyond my abilities or not for me.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Describe the job skills of a career I might like to enter.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>Choose a career in which most workers are the opposite sex</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose a career that will fit my interests.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Decide what kind of schooling I will need to achieve my career goal.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Find out the average salary of people in an occupation.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk with a person already employed in a field I am interested in.</td>
<td>1 2 3 4 5</td>
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</table>
Appendix E:

Missouri Guidance Competency Evaluation Survey: Career Planning and Exploration (MGCES; Gysbers, Lapan, Multon, & Lukin, 1997)

Please rate how confident you are that you could successfully perform the following career planning and exploration tasks. Blacken the circle that indicates the level of your confidence for each item.

VL=Very Low  SL=Somewhat Low  N=Neither Low nor High  SH=Somewhat High  VH=Very High

I AM CONFIDENT: LEVEL OF CONFIDENCE

1. that I understand my interests and abilities and how they help me make a career choice.  
   VL   SL   N   SH   VH

2. that I know how to handle adult disapproval if I have an interest in choosing a class usually taken or a job usually filled by the opposite sex.  
   VL   SL   N   SH   VH

3. that I know how to find out which leisure activities are best for me.  
   VL   SL   N   SH   VH

4. that I know how to explore careers in which I may be interested.  
   VL   SL   N   SH   VH

5. that I understand the importance of making plans for the future (jobs, vocational, technical education, employment and training programs, college, and military)  
   VL   SL   N   SH   VH

6. that I know about leisure activities I can do when I am older  
   VL   SL   N   SH   VH

7. that all classes and jobs are acceptable for both females and males  
   VL   SL   N   SH   VH

8. that I know about different hobbies, sports, and activities in which I could get involved.  
   VL   SL   N   SH   VH

9. that I understand how to prepare for careers in which I may be interested.  
   VL   SL   N   SH   VH

10. that I can handle “kidding” from other students if I have an interest in choosing a class usually taken, or a job usually filled by the opposite sex.  
    VL   SL   N   SH   VH
Appendix F:

Missouri Guidance Competency Evaluation Survey: Educational and Vocational Development (MGCES; Gysbers, Lapan, Multon, & Lukin, 1997)

Please rate how confident you are that you could successfully perform the following educational and vocational development tasks. Blacken the circle that indicates the level of your confidence for each item.

VL=Very Low   SL=Somewhat Low   N=Neither Low nor High
SH=Somewhat High   VH=Very High

I AM CONFIDENT:

1. that I know what employers expect of workers
2. that I know how academic skills such as math, reading, and science relate to my career goals.
3. that I know how to look for a part-time summer job.
4. that I know what jobs are available locally.
5. that I understand the challenges students have in high school.
6. that I know how to organize my class and homework materials.
7. that I know how to select high school courses that help meet my needs, interests, and career goals.
8. that I can take good notes.
9. that I understand how completing high school will better prepare me to continue my education (vocational technical education, military, and college).
10. that I understand how high school credits and graduation requirements.
11. that I know how to do well on tests.
12. that I know how to select middle school extra-curricular activities that will meet my interests and future goals.
Appendix F, con’t.

13. that I understand how completing high school will better prepare me for the job market.  
   VL  SL  N  SH  VH

14. that I know the classes offered by my area vocational technical school.  
   VL  SL  N  SH  VH

15. that I know how to organize my time.  
   VL  SL  N  SH  VH

16. that I know how to listen and ask questions in class.  
   VL  SL  N  SH  VH

17. that I know what will be expected of me in high school.  
   VL  SL  N  SH  VH

18. that I know job interview skills.  
   VL  SL  N  SH  VH

19. that I know where to go to get help when I have a problem, concerning high school.  
   VL  SL  N  SH  VH

20. that I know how to apply for job.  
   VL  SL  N  SH  VH

21. that I know how to start and finish my assignments well.  
   VL  SL  N  SH  VH
We would like to begin by asking some questions about you.

Please indicate:

1. The name of the school that you attend ____________________________
2. Your grade (circle one): 6th  7th  8th
4. Your birth date (month and year):  Month: _____ Year: 19__
5. Where are you from? _______________________
6. When did you arrive to the U.S.:  Month_____ Year: 19__
7. Are you currently enrolled in ESOL?  Yes  No
   If No, have you ever been enrolled in ESOL?  Yes  No
   If Yes, for how long were you enrolled in ESOL?  Years  Months
8. How did you arrive in the United States?
   1)  Was born here
   2)  With parents
   3)  Other (Please specify __________________________)
9. If you arrived with your parents, why did your parents arrive in the United States?
   (check all that apply)
   1)  Political reasons/war
   2)  Because they had family members here
   3)  Because she or he was Amerasian
   4)  Other (Please specify__________________________)
10. Are you a U.S. citizen?  Yes  No

11. Are your parents’ U.S. citizens?  Yes  No
12. For each parent/guardian below, indicate that person’s relationship to you (e.g., mother, aunt, grandfather), that person’s occupation, and that person’s highest education level.

a. Mother or person who fills that role for you: __________________________
   Occupation____________________________
   Education Level ________________________

b. Father or person who fills that role for you:__________________________
   Occupation____________________________
   Education Level ________________________

13. Do you participate in the free or reduced lunch program at school? (Circle one):
   YES                        NO
References


Ireland, J. (April 7, 2004). Personal communication.


Table 1

*Bivariate Correlations Among Scales and Internal Consistency Estimates, Means, Standard Deviations, Actual Scale Ranges and Possible Scale Ranges of the Measured Variables*

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