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**The Influence of Individualism-Collectivism
On the Career Development of
Ethnic Minorities in the United States**

by

Maria Rosa Carrero

**A dissertation submitted to the Graduate Faculty in Psychology in partial
fulfillment of the requirements for the degree of Doctor of Philosophy, The
City University of New York**

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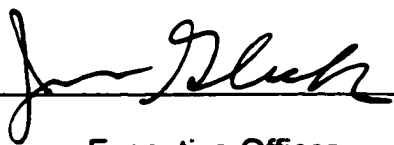
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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract**The Influence of Individualism-Collectivism on the Career Development of Ethnic Minorities in The United States**

by

Maria Rosa Carrero**Adviser: Dr. Walter Reichman**

The career development literature frequently mentions that individualism-collectivism may influence the career behavior of the major ethnic minority groups in the United States. Career researchers have assumed that ethnic minorities are more collectivist than the White majority and, subsequently, their collectivist orientation would influence the way that they make career decisions and their career development strategies. This study tested these assumptions found in the literature. It was hypothesized that ethnic minorities would be more collectivist than Whites. Furthermore, it was hypothesized that individualism-collectivism would influence various aspects of career behavior. Participants were 231 college students from diverse ethnic backgrounds: Whites ($N = 54$), Blacks ($N = 51$), Asian Americans ($N = 85$), and Hispanics ($N = 38$). Contrary to the general belief in the literature, ethnic minorities were not found to be more collectivist than Whites. In fact, collectivism levels were very similar between the different ethnic groups.

Results did support the general hypothesis that individualism-collectivism has an effect on career behavior. This effect was targeted to specific areas of career development: collectivists were less independent in terms of career maturity and more dependent on others, such as family and friends, to guide them in their career decision making. Collectivists tended to have a rationale for making career decisions and they made them deliberately and thinking about their future consequences. Collectivists also indicated that their families were more involved in their careers. However, individualism-collectivism did not have an effect on other areas of career behavior, such as the extent to which an individual is decisive and involved in their career decision making, the extent to which the individual is task-or pleasure oriented towards work and the extent to which the individual can compromise between needs and reality. Individualism-collectivism did not have an effect either on the degree to which a person follows their present feelings when making career decisions. Individualism-collectivism had a mixed effect on approval of individualist and collectivist career situations: older and more collectivist participants approved of situations depicting characters behaving in a collectivist way, but younger and more collectivist participants did not. Implications for career practitioners and researchers are discussed.

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Introduction

For many years, researchers ignored ethnic minorities in their career behavior and development research. Career behavior refers to behaviors involved “in choosing, entering, and adjusting to one’s occupational role” (Osipow and Fitzgerald, 1996). The major theories of career behavior were researched on samples of White, middle-class males (Smith, 1983; Brown, 1995; Arbona, 1995). In the last few years, however, studies comparing the career development of ethnic minorities to the White majority have started to appear in journals (Betz & Fitzgerald, 1995). These studies assess ethnic differences in terms of career interests, career aspirations, career expectations, etc. This small surge in research underlines the importance of considering and understanding cultural variations in career development (Dillard & Perrin, 1980; Leung, 1995). Still, there is much that researchers do not understand regarding the career development of ethnic minorities.

Researchers complain that insufficient research has been conducted on certain minorities, such as Asians and Hispanics (Leung, 1995). Leong (1991) stated that a “review of the career development literature will indicate that only fragmentary knowledge of Asian Americans is evident” (p. 221). Regarding Hispanics, Arbona (1990) concluded that, “very little is known regarding their career decision-making process” (p. 313). There are many research gaps regarding African Americans, as well. After reviewing the literature on African American career development, Brown (1995) determined that, “the career decision-making processes of African Americans is

essentially virgin research territory" (p. 28). Fitzgerald and Betz (1994) found that although the percentage of minorities in the labor force is about 20%, only a very small fraction of research published in career development journals has included ethnic minorities or addressed ethnic minority issues.

Additionally, many researchers simply compare results between Whites and ethnic minorities, mostly Blacks, on career development measures without using a framework for understanding the results. After reviewing the literature published between 1970 and 1989, Arbona (1990) concluded that the career development literature regarding Hispanics is "fragmentary and lacks a theoretical foundation" (p. 301). Leong and Serafica (1995) reached a similar conclusion regarding the research on Asian Americans, that it is "sparse," "fragmented," and lacks a framework (p. 83). The state of the literature indicates that there is ample need for studies that address the career development of ethnic minorities, especially studies that explain research findings and which follow appropriate theoretical frameworks.

Leong and Leung (1994) explained that most research on ethnic minorities uses an etic approach, in which culture is not incorporated in the study. He suggested that a way to improve career assessment of Asian Americans is to undertake an emic approach, in which "culture-specific variables that may influence the vocational behavior" of Asian Americans, or various ethnic minorities, are studied (p. 252). One of the examples of

culture-specific variables that Leong suggests could influence the career behavior of ethnic minorities is individualism-collectivism.

Collectivism is one of the factors that career researchers frequently mention in the literature as having an influence on the career development of ethnic minorities (Bowman, 1993; Betz, 1993; Leong, 1993; Swanson & Bowman, 1994; Leong & Leung, 1994; Fouad, 1995; Leong & Gim-Chung, 1995). Collectivism emphasizes social integration and regard for the norms of the ingroup (e.g., the family, the community, the clan, etc.). Collectivism contrasts with individualism, which emphasizes independence from others (Triandis, McCusker, & Hui, 1990). Triandis, Bontempo, Villareal, Asai, and Lucca (1983) defined collectivism as the extent to which a person subjugates their goals to their ingroup's goals. For collectivists the ingroup is more important than the individual and thus, the ingroup's goals are more important than the individual's goals. These definitions suggest that collectivism can influence career behavior by making ingroup goals more important than individual goals and by influencing the decision-making process that drive career search. In individualist cultures, behavior is determined by the individual, while in collectivist cultures, behavior is regulated by the ingroups. This means that the career decision-making process would be a much more interpersonal process for collectivists than for individualists. For individualists, career behavior would be self-determined.

Researchers (e.g., Leong and colleagues, Bowman and colleagues) have implied that collectivists would base their occupational plans and career

choices on the goals, norms, and expectations of their ingroup. In most cases this in-group is the family. However, while these career development researchers mention in their articles that collectivism is a cultural variable that can influence the vocational behavior of ethnic minorities, no empirical study has actually tested this possible relationship. The lack of empirical research on the relationship between collectivism and the career development of ethnic minorities is particularly troubling because researchers have even called for incorporating the measurement of individualism-collectivism into the career assessment of non-White individuals (Hartung, Vandiver, Leong, Pope, Niles, & Farrow, 1998). Indeed, if empirical support is found for an effect of collectivism on the career development and decision-making of ethnic minorities, then it would be of utmost importance to assess ethnic minorities on this dimension and to adjust the career development theories, career assessment and career counseling to incorporate individualism-collectivism. The relationship between individualism-collectivism and career development remains untested and it is the subject of this study.

Individualism-Collectivism

People hold different cultural values, attitudes and norms depending in their ethnic background. These cultural values, attitudes and norms drive behavior. About twenty years ago, Geert Hofstede (1980) published his landmark study on how cultural factors affect work attitudes and work values. The variable that accounted for the highest percent of variance between cultures was individualism-collectivism. These findings indicated that individualism-collectivism is a variable that can have a profound impact on behavior.

Definition and Description of the Individualism-Collectivism Construct

Individualism-collectivism describes the relationship between the individual and the collectivity in his/her society (Hofstede, 1980). A collectivist sees him/herself as part of one or more collectives, such as the family, the clan, or the work group (Triandis, 1995). Collectivists are primarily motivated by the norms and the duties established by those collectives, and they give priority to the goals of those collectives over their individual goals.

Individualists, on the other hand, view themselves as independent from those collectives, and are primarily motivated by their own preferences, needs, and rights. Their goals have priority over the goals of others.

Individualism-collectivism has been defined in different ways, but all definitions emphasize the relationship between the individual and the collectivity. For Erez and Early (1993), individualism-collectivism is the degree

of social connectedness between the individual and his/her social memberships, clans, or collectives. For Hofstede (1984) individualism-collectivism reflects the values relating the individual to his/her society. In an individualistic society the self-concept is defined in individual terms, whereas in a collectivist society the individual is defined as part of a societal context. Hofstede (1980) observes that individualism-collectivism is best seen in the way that people live together. In collectivist cultures people live with their extended families, which may include grandparents, uncles, cousins, even tribal units or clans, whereas in individualist cultures people live in nuclear families, composed of husband, wife and children.

For Triandis et al. (1983) the construct of collectivism is the extent to which the individual subordinates his/her goals to some stable, collective "ingroup" (e.g. the extended family, the clan or the tribe). Individualism is defined as the extent to which a person subordinates the group's goals to their own goals (Triandis et al., 1988; Triandis, Brislin & Hui, 1988).

Collectivists will pay primary attention to the needs of their ingroup.

Collectivists are more sensitive to the views of others and are emotionally dependent on their ingroup (Erez & Early, 1993). They share a concern for the well-being of their ingroup and will direct their energies towards providing for their ingroup. Collectivists do not distinguish between their group goals and their personal goals. Conversely, individualist cultures allow their members to "do their own thing." Individualist cultures assume the individuals look "primarily after their own interests and the interests of the immediate

family (husband, wife, children)" (Hofstede, 1984, p. 390). In addition, a member of an individualistic culture may be a member of many groups, and the people that are not part of the ingroup are not necessarily the out-group. However, the relationships with the members of those ingroups are less enduring and less intimate than the relationships that the collectivists have with their in-group. For the collectivists it is precisely those social relationships that provide social support, resources, and security.

Hui and Triandis (1986) argued that collectivism is manifested through seven categories of behaviors related to interpersonal concern: 1) consideration of implications of one's own decisions and/or actions for other people, 2) sharing of material resources, 3) sharing of non-material resources (e.g., time and effort); 4) susceptibility to social influence, 5) self-presentation, 6) sharing of outcomes, 7) feeling of involvement in others' lives. They gathered evidence for this definition of collectivism by polling social scientists from different parts of the world. The 46 social scientists agreed on this definition of the collectivism construct.

After an extensive review of the literature, Triandis (1995) identified a variety of attributes that indicate whether a person is more individualistic or more collectivist. In terms of self-perception, collectivists use groups as the basic unit of social perception, while individualists use the individual as the basic unit. Triandis refers to a lecture given by Kitayama in 1993 in which he suggested that a person in America is considered "distinguished" when they have had great accomplishments, while a distinguished person in Japan is

one that has a large number of successful relationships with others. In terms of identity, collectivists define theirs in terms of their relationships and group membership. Individualists base their identity on what they own and their personal experiences.

In terms of needs and cognitions, collectivists think often about the needs of their ingroup. They are motivated by adjustment to the needs of others. Individualists tend to focus, and be motivated by their personal needs and rights. Collectivists favor attitudes that reflect sociability (e.g., "I like to live close to my good friends"), interdependence (e.g., "I can depend on my relatives for financial support if I need it"), and family integrity (e.g., "Old parents should live with their children until they die") (p.73). Individualists believe in self-reliance (e.g., "When a group is slowing me down, I do the job alone"), hedonism (e.g., "I value the good life"), competition (e.g., "I want to be the best"), and emotional detachment from in-groups (e.g., "If my brother fails at school, it is not my concern") (Triandis, 1995, p.73). The difference between interdependence and self-reliance means that collectivists will value relationships even if its costs outweigh the benefits. Among individualists, when the costs outweigh the benefits, the relationship is often dropped (Kim, Triandis, Kagitcibasi, & Yoon, 1994).

In terms of social behavior, collectivists try to maintain social situations as pleasant, agreeable and harmonious (Triandis, 1995) and it is best predicted from perceived duties and obligations. For individualists, social behavior is best predicted from attitudes and other such internal processes.

Finally, in terms of values, collectivists espouse security, good social relationships, and personalized relationships (Triandis, 1995; Triandis et al., 1990). To summarize, collectivists are characterized by an interdependence with other group members, by their sharing of resources with other group members, by their identity being based on their group membership, by feelings of involvement in each other's lives, and by the subordination of their personal goals for in-group goals. Individualists are characterized by their valuing of self-reliance, the supremacy of personal goals over group goals, autonomy, and individual freedom.

Individualism-Collectivism: Cross-Cultural Research

Hofstede's Research

A pioneering study of differences in cultural values, conducted by Hofstede (1980), supports the distinctions between individualism and collectivism. He gathered data between 1967 and 1973 in the 66 worldwide branches of IBM using a work values survey. The survey asked employees to indicate the importance of various work goals. Factor analysis of the data yielded four dimensions, and the one that accounted for the highest percent of variance between cultures was individualism-collectivism. The three work goals that distinguished individualism the best, were high importance scores on personal time, freedom to determine how work is done, and challenge. The loadings for these three items on the Individualism factor were high and positive (.46 to .86). The three goals that distinguished collectivism the best,

were high importance scores on use of skills, physical conditions, and training. The loadings for these three items on the Individualism factor were high and negative (-.63 to -.82).

According to Hofstede (1984) these goals distinguished sharply the individualist from the collectivist cultures, with the distinction being between cultures that emphasize values that support an individual sense of accomplishment and those that support work conditions/enhancements that can be shared and emphasize what the organization should do for the individual. For example, having the freedom to determine how work is approached is considered an individualist work goal because it supports an individual sense of accomplishment. The individualist countries considered freedom and challenge as more important than training or working conditions. Training opportunities is considered a collectivist work goal because it can be shared among all workers and it is something that the organization should do for its employees. Conversely, the collectivist countries rated training opportunities and working conditions as more important than challenge or freedom.

Erez and Early (1993) criticized Hofstede's empirical definitions of individualism-collectivism for being "confusing" (p. 83), but they offer some clarification. Hofstede's individualism-collectivism study presents collectivism as the individual worker's dependence on the organization, whereas individualism reflects more independence from the organization (Erez and Early, 1993). Thus, having the freedom to determine how to do your job

(often referred to as latitude) emphasizes the independence of the worker from the organization, whereas good physical conditions emphasizes the organization providing for its employees. This conceptualization of individualism-collectivism is supported by evidence of Asian organizations that provide, not only a salary and medical benefits to their employees, but also housing, childcare, education and even personal counseling and political endorsement suggestions (Erez and Early, 1993). In a collectivist culture the organization, as one of the collectives in an individual's life, takes care of the individual and his/her family (Hofstede, 1980). In an individualist culture, the organization and other groups are not expected to take care of the individual to the extent that it is done in collectivist cultures.

Other items in the survey also distinguished between individualism and collectivism. For example, individualists tended to endorse more frequently that "Staying with one company is not desirable", "A larger company is generally not more desirable a place to work than a small company", "A corporation is not responsible for its employees" and "Decisions made by individuals are usually of higher quality than those made by groups" (Hofstede, 1980. p. 224). These items show the lesser level of the individual's dependency on the company in more individualistic cultures and the view in individualistic cultures that group decisions are not as good as individual decisions.

According to Hofstede's (1980) cross-cultural study, the most individualistic cultures were found in North America (e.g., United States &

Canada), Northern Europe (e.g., Great Britain, Netherlands, Denmark) and Australia. The most collectivist cultures were found in Africa, Asia, and Latin America (e.g., Venezuela, Colombia, Pakistan, Peru, Taiwan, Thailand, and Singapore, West African nations). Collectivist cultures tend to be the ones that are agrarian-based, whereas industrialist societies tend to be more individualistic. In an agrarian society, the survival of its members traditionally depends on the extended family working together in the fields to grow the crops and tend to the animals. In the industrialist society, each person goes to the factory or workplace and earns his/her individual wages. The agrarian versus industrialized distinction can be seen as one of the antecedents of the collectivism versus individualism distinction.

Hofstede's (1980) study was a landmark study in demonstrating differences between cultures, specifically that people from different cultures hold different notions regarding the relationship between the self and others. However, it is only one study, and its work values items, which differentiated individualism from collectivism, can be considered confusing. Hofstede's results invited other researchers to conduct studies evaluating the possible differences between cultures. Indeed, further research has also supported Hofstede's findings.

Other Cross-Cultural Research

Further evidence has continued to support the notion that different cultures do differ in the individualism-collectivism dimension (Marcus and

Kitayama, 1991; Singelis, Triandis, Bhawuk, & Gelfland, 1995; Triandis, 1995; Oyserman, Coon, & Kemmelmeier, 2002). Recently, Engel (1988) and Merritt (2000) have supported Hofstede's findings. Engel contrasted responses on a work values survey between Americans and Japanese. He found that Americans place the highest value on individualism, independence, and self-sufficiency, while the Japanese placed more value on group involvement and loyalty to their employer. These findings are consistent with Hofstede's findings that Japan is more collectivist than the United States.

Merritt (2000) utilized items from the Works Value Inventory that Hofstede (1980) previously used in his 1960's research, and additional cross-cultural items, to determine whether Hofstede's results held after 30 years. The participants were 9,400 airline pilots from 19 countries. Using Hofstede's methodology, he successfully replicated Hofstede's findings, showing that despite the changes in the workplace due to globalization, cultures still differ on individualism-collectivism. The collectivism items were based on four work goal items: importance of living in an area desirable to self and family, to have sufficient time left for personal or family life, to work with people who cooperate, and to have good physical working conditions. The most individualistic countries according to Merritt's (2000) results were United States, British Hong Kong, Australia, New Zealand, Italy, Ireland, and Switzerland. The most collectivist countries were: Taiwan, Korea, Morocco, Malaysia, Mexico, Philippines, Greek Cyprus, and Brazil.

Very recently, Oyserman et al. (2002) conducted a meta-analysis of studies comparing the United States with other cultures, and they found that indeed (European) Americans do differ in individualism-collectivism from other cultures, in particular from those in Africa, the Middle East, and East Asia.

Finally, Bochner and Hesketh (1994) also supported Hofstede's findings. They gathered their data at a diverse Australian bank that hired employees from different parts of the world (28 countries were represented). They divided the survey participants into two categories, individualists and collectivists, based on the results from Hofstede's study. Their results were consistent with what would be expected, based on the conceptualization of individualism-collectivism. Collectivists had more informal contact with coworkers, knew the other staff better and tended to work in a team or a pair rather than alone. In conclusion, recent research comparing questionnaire responses between cultures that were found to be collectivist and cultures found to be individualist, according to Hofstede's study, have supported Hofstede's original findings that cultures differ in terms of the relationship between individuals and their collectives.

Research and Measurement on Individualism-Collectivism as an Individual Difference

The research presented so far has compared responses on surveys between different cultures and/or countries. This cross-cultural approach

highlights differences in mean responses between countries. However, within each country or culture there is wide variability in terms of how individualistic or collectivistic an individual is. For example, the most collectivist people in the United States, an individualistic country, will be more collectivist than some of the people in China. Conversely, the most individualistic people in China, a collectivist country, will be more individualistic than some of the people in the United States. However, when the individualism mean between China and the United States is compared, China is far less individualistic than the United States. This variability means that while individualism is associated with the United States, it is inaccurate to assume that everyone in the United States espouses individualist values, beliefs and norms.

Some researchers have developed surveys to be able to measure the degree that an individual person is individualist or collectivist. This type of research treats individualism-collectivism as an individual difference. For example, Wagner & Moch (1986) developed a survey aimed at measuring the degree to which a person espouses collectivist beliefs, values, and norms in the workplace. Examples of their items are: "My work group is more productive when its members follow their own interests and concerns", "I prefer to work with others in my work group rather than to work alone" and, "People should be made aware that if they are going to be part of the work group, they are sometimes going to have to do things they don't want to do" (p. 292). All the participants in the validation of the survey were from the United States, which is an individualist country. An interesting finding of this

study is that participants who performed disjunctive tasks reported greater individualism, whereas participants who performed more conjunctive, or interdependent, tasks reported greater collectivism. For example, janitors perform more disjunctive tasks, they tend to work alone until work is completed. Employees in the craft shops – plumbers, electricians, painters, etc., perform tasks that are more conjunctive. The study found that janitors responded to the survey more individualistically than craftsmen.

This study shows that even in an individualistic culture, there may be contextual factors that can influence the extent that a person may espouse individualism at work (or at home or at school for that matter). More importantly, this study underlines how individualism-collectivism can be measured at the person-level. In fact, individualism-collectivism can be conceptualized and measured as both a cultural difference and an individual difference, and the two levels of measurement are highly correlated (Triandis, 1995). Triandis and his colleagues distinguish between individualism-collectivism at the person-level and at the culture level by using different terminology. In their terminology, collectivism refers to the culture-level, whereas allocentrism refers to the person or psychological level. They utilize the term individualism to refer to the culture-level, and the term idiocentrism to refer to the person or psychological level¹. Based on this distinction, you

¹ The word collectivism is used throughout the paper to refer to both the culture level and the person level, not only for the sake of simplicity and consistency, but also because more researchers have used this term.

could find allocentric individuals in individualist cultures and idiocentric individuals in collectivist cultures.

Hui (1988) and Triandis et al. (1983) have also constructed surveys to measure individual differences in individualism-collectivism. Hui (1988) built items based on definitions and descriptions of individualism-collectivism from a previous study. His INDCOL (Individualism-Collectivism) scale emphasizes the multidimensionality of the individualism-collectivism construct.

Specifically, Hui (1988) argues that a person can be collectivist towards their family, but not necessarily towards their friends, or co-workers or neighbor. He developed items that measure the degree of collectivism towards different groups: spouse, parent, kin, neighbor, friend, or co-worker. He validated the items by comparing the responses between participants from a collectivist culture (Chinese participants from Hong Kong) and an individualist culture (Americans). The scale was also validated by assessing its relationships with other constructs, such as obligation, responsibility-sharing, and social-interest. For example, American women were given the INDCOL scale and an obligation scenario. The scenario asked them to imagine they went to lunch with another person, first a friend, then a classmate that they recently met, and that the other person had left a \$1.50 tip. Then, they were asked how much of that amount they felt obligated to pay back to the other person. When the other person was a friend, both individualists and collectivists displayed strong obligation intentions. When the other person was a classmate, the collectivists demonstrated strong obligation intentions, but not

the individualists. The results suggest that collectivists would treat a classmate as an ingroup member and would make sure that they shared the cost with them. The individualists, on the other hand, would feel no obligation towards someone that they had recently met.

Triandis et al. (1983) used some items from Hui (1988)'s scale and created additional items to tap new individualism dimensions, such as self-reliance. After selecting the items that discriminated the best by comparing responses from sample from the United States, Japan, and Puerto Rico, they administered the new scale to another sample from The United States and Puerto Rico. Their factor analysis yielded three main dimensions: self-reliance with competition, concern for ingroup, and distance from ingroups. The results showed that the most important factor for the United States sample was self-reliance with competition, which accounted for 45% of the variance. In contrast, the most important factor for the Puerto Rico sample was affiliation, which accounted for 42% of the variance. Additionally, while the competition items had a high loading in the US sample, they did not have a high loading on the Puerto Rico sample. These results are consistent with the idea that the Puerto Rico sample would be more collectivist than the United States sample. Because of the interdependent nature of collectivists, it makes sense that affiliation would be the most important factor for the Puerto Rico sample. Also, the results confirm that individualists are characterized by reliance on themselves instead of on their ingroups.

Bontempo, Lobel, and Triandis (1990) also conducted a study that treated individualism-collectivism as an individual difference and as a group difference. Their participants were college students from Illinois (United States) and Brazil. All participants were given an INDCOL scale to fill out, and scenarios which described a situation that would have a high cost for them (e.g., spending a lot of time in the hospital or lending a week's wages to a family member, a friend, a co-worker or a neighbor). They were asked to indicate how obligated they felt to help and level of intention to help the person in the scenario. Half of the subjects were assigned to a "public condition" in which they were asked to provide their name, phone, address, and they were told they might be contacted regarding their responses. Half of the subjects were assigned to a "private condition" in which none of the personal information was gathered.

The results indicate that the collectivist Brazilians were the most likely to respond that they intended to help the other persons in the scenario. They were far more likely to respond their intent to help than the Brazilian individualists. The pattern is similar with the United States sample, but the difference was not large enough to be statistically significant. What was the most interesting finding, however, was that neither the Brazilian collectivists nor the Brazilian individualists changed their responses depending on whether they were assigned to the public or the private condition. The Illinois individualists and collectivists were both more likely to express intent to help in the public condition than in the private condition. The authors suggest that

the Brazilians had internalized the collective norms, whereas the United States' participants were demonstrating compliance due to social desirability. It can be argued that Brazil is a collectivist society, and even the individualists in Brazil understand collectivist norms. This study lends support to both individual differences and cultural differences in individualism-collectivism.

Oyserman et al. (2002) have taken a different approach from major individualism-collectivism researchers (e.g., Hofstede, Hui, Triandis, Erez & Early) in their conceptualization of individualism-collectivism as both an individual and a cultural variable. They have put forth that individualism-collectivism are orthogonal constructs. This allows for the possibility that some cultures may be both highly individualistic and highly collectivistic. This view of individualism-collectivism diverts from the mainstream. For example, they themselves indicate that "(u)sually, researchers conceptualize individualism as the opposite of collectivism" (p. 3). They also indicated that the current individualism-collectivism measures (they reviewed 27 of them) tap different dimensions of both individualism and collectivism. They proposed that certain dimensions are central to the concept of individualism and collectivism, but some are not essential and should be excluded from individualism-collectivism measures. For example, they believe that valuing freedom, self-sufficiency and uniqueness are essential to the conceptualization and measurement of individualism and duty or obligation to the ingroup is essential to the conceptualization and measurement of

collectivism. Unfortunately, no published empirical research could be found defining the possible dimensions suggested by Oyserman et al. (2002).

Individualism-Collectivism and Human Behavior

Research has also shown that individualism-collectivism influences human behavior. As such, it has become an important area of psychological research. For example, Oyserman et al. (2002) 's review of the literature on the relationship between individualism-collectivism and psychological processes, concluded that individualism-collectivism has a moderate effect on self-concept and relationality and a large effect on attribution and cognitive styles. The next section discusses research indicating that individualism-collectivism can have an effect on many areas of human behavior, from team and organizational behaviors, to individual perceptions, motivations, and actions.

Individualism-Collectivism and Organizational Behavior

It has been shown that collectivism is related to team and organizational behaviors such as proneness to perform organizational citizenship behaviors (Moorman & Blakely, 1995; Dyne, Vandervalle, Kostova, Latham & Cummings, 2000). For example, Moorman & Blakely (1995) studied whether proneness to perform organizational citizenship behaviors is related to individual differences in individualism-collectivism, as opposed to situational variation. Organizational citizenship behaviors are

additional behaviors, such as being cooperative or volunteering to carry out activities, which are not part of the employees' job description, that enhance the general well being of the work area. Their self-report measure of organizational citizenship behavior included items that tapped interpersonal helping (e.g., "Goes out of his/her way to help co-workers with work-related problems"), individual initiative (e.g., "Often motivates others to express their ideas and opinions"), personal industry (e.g., "Performs his/her duties with unusually few errors"), and loyal boosterism (e.g., "Shows pride when representing the organization in public"). They indeed found that individuals who scored high on collectivism, on Wagner & Moch's (1986) individualism-collectivism scale, self-reported doing more organizational citizenship behaviors.

Individualism-Collectivism and Group Behavior

Collectivists are also better able than individualists to derive satisfaction from group success according to a laboratory study conducted by McFarland & Buehler (1995) on the "frog-pond effect." The frog-pond effect means that individuals who perform successfully in an unsuccessful group have more favorable reactions than individuals who perform unsuccessfully in a successful group. Individuals whose cultural background is collectivist, according to Hofstede's findings, (in this case, college students from Asian, Indian, and African backgrounds) were not susceptible to the frog-pond effect. That is, students from collectivist backgrounds did not show an unfavorable

reaction to being unsuccessful if they were part of a successful group. The individualists (those whose cultural background was from North America and Europe) were very susceptible to the frog-pond effect. The authors concluded that the traditional saying "better to be a big fish in a little pond" should be changed to "although everyone feels good about being a big fish in a little pond, not everyone feels bad about being a little fish in a big pond" (p. 1062). This information is consistent with the idea that collective goals and outcomes are valued by collectivist individuals, but individual goals and outcomes are valued by individualist persons.

Group training has also been found to be more effective for collectivists than for individualists (Early, 1994). Early (1994) found that for individuals from collectivist backgrounds (from China and Hong Kong) group-focused management training increased self-efficacy beliefs more than individually-focused training. The opposite was true for individuals from an individualist background (the United States). For the participants from the United States individually-focused training was more effective in raising their self-efficacy beliefs than group-focused training. Additionally, he found that group-based training was more effective for individuals who are collectivists, according to their score on an 8-item collectivism questionnaire, regardless of their cultural background. Individually-focused training was more effective in raising self-efficacy beliefs for individualistic managers than for the collectivist managers (based on their score on the questionnaire). These findings indicate that individualists appear to be more comfortable and efficient learning and

working individually, whereas collectivists appear to be more comfortable and efficient learning and working in groups. Methodologically, the study was very well constructed because the analyses presented the relationship between individualism-collectivism and training at both the individual and the culture level.

In addition to the effect of collectivism on group training, collectivists also demonstrate a higher commitment to the workgroup than individualists (Clugston, Howell, & Dorfman, 2000). Clugston, Howell, & Dorfman (2000) found that American public agency employees who were collectivist according to a paper-and-pencil measure, also demonstrated higher affective, continuance, and normative commitment than individualists. However, collectivism has also been associated with showing more group polarization during group decision-making and taking riskier consensual decisions in a laboratory-setting (Saha & Ghosh, 1999). The participants in this study were from India and Bangladesh. Individualism-collectivism was assessed using a questionnaire that measured self versus group orientation.

On the other hand, individualists are prone to social loafing in groups, but not collectivists (Gabrenya, Wang, & Latane, 1985; Early, 1989). For example, a meta-analysis by Karau and Williams (1993) found that social loafing was greatly reduced for participants from Eastern cultures, which are typically collectivist cultures. Furthermore, Early (1989) was able to demonstrate that social loafing is determined by individualism-collectivism as a psychological variable (individual difference), regardless of the cultural

background of the participants. In this study, American and Chinese participants were given an individualism-collectivism questionnaire and asked to complete a job simulation task consisting of activities undertaken by managers in both countries. He found that individualists performed the worst when they had shared responsibility and low accountability, in which case there was evidence of social loafing. On the other hand, collectivists performed *better* when they shared responsibility. Accountability had no effect on the performance of the collectivists, indicating that they were equally productive when they were held accountable as when they were not. Early's (1989) findings are consistent with the previous results by Gabrenya et al. (1985). They found that participants from the United States engaged in social loafing during an auditory listening group task. Participants from China did not engage in social loafing. The fact that collectivists, or persons from collectivist cultures, have not been found to be prone to social loafing in groups suggests that collectivists view group goals as more important than individual goals. They truly adopt group goals because they view that the success of the group represents their success.

Individualism-collectivism has also been associated with allocation of group rewards. Leung and Bond (1984) used a laboratory task of copying words to test whether Chinese participants from Hong Kong would allocate rewards differently from American participants. They did not measure individualism-collectivism at the person-level, because they felt that sufficient research had demonstrated that the Chinese are collectivist. Their results

indicate that individualists prefer rewards to be allocated within a group of friends or strangers according to individual contributions. On the other hand, collectivists prefer equal allocation of rewards within friends, but between strangers they prefer rewards to be allocated according to individual contributions. This study suggests that indeed collectivists are willing to share their earned resources with their ingroups, but not with outgroups. It also demonstrates that individualists are less willing to share their earned resources, and that they distinguish less between the ingroups and outgroups.

Individualism-collectivism can also influence job satisfaction. A positive and agreeable workgroup led to job satisfaction only for collectivists, not individualists (Hui & Yee, 1999). In fact, the opposite was true for individualists, under positive workgroup conditions they experience work dissatisfaction. The participants in Hui & Yee's (1999) study were all from Hong Kong, but the researchers measured individualism-collectivism at the person-level, using the INDCOL scale developed by Hui (1988). It appears that collectivists may derive social support from their workgroups. This is consistent with a study previously mentioned in which collectivists had more informal contact with fellow co-workers, knew the staff better and were more likely to work in teams (Bochner & Hesketh, 1994).

Individualism-Collectivism and Individual Behavior

Individualism-collectivism has also been associated with differences in individual behavior such as individual needs and differences in sources of motivation. Participants from an individualist background (the United States) demonstrated a higher need for uniqueness, whereas participants from a collectivist background (Korea and Japan) demonstrate a higher need for affiliation and much more sensitivity to rejection (Yamagushi, Kuhlman, & Sugimori, 1995). Need for uniqueness is a sign of value placed on autonomy and independence by the individualist participants. Need for affiliation is a sign of value placed on collectives and relationships by the collectivist participants.

Additionally, a traditionally collectivist culture (Nigeria) was found to be more motivated by job context factors or extrinsic factors such as pay, good working conditions, and good family condition according to their responses to a questionnaire. In contrast, a traditional individualistic sample (Great Britain) was motivated by intrinsic factors such as the work itself, responsibility, urgent work, and recognition (Adigun & Stephenson, 1992). These differences could not be attributed to SES or location differences, because the Nigerian sample was from a high social class and both samples were living in Great Britain at the time. Collectivists appear to be more motivated by factors showing the organization taking care of its employees. This is consistent with the results from Hofstede (1980) and they analysis by Erez

and Early (1993) that suggests that collectivists view the organization as one of the ingroups and that they are more dependent on the organization than individualists. Individualists, on the other hand, are motivated by factors which highlight individual work and individual recognition.

To summarize, a wide range of studies demonstrate the influence of individualism-collectivism on a variety of individual, group, and organizational behavior, such as likelihood of performing organizational citizenship behaviors, proneness to social loafing, effectiveness of group versus individual training, need for affiliation versus need for uniqueness, and motivation. Surprisingly, there has been a paucity of research on the influence of individualism-collectivism on career behavior.

Individualism-Collectivism Research on Ethnic Minorities in the USA

As previously mentioned, career development researchers have repeatedly suggested that collectivism might be a factor that influences career behavior for ethnic minorities. Conceptually, it makes sense that ethnic minorities in the United States would be collectivist because the roots of the three largest ethnic minorities in the United States, the Blacks, the Hispanics, and the Asian Americans are grounded in the most collectivist areas of the world, according to Hofstede's research, Africa, Asia, Central America and South America. In fact, researchers have found evidence for the collective orientation of these ethnic minorities in the United States (Triandis et al., 1990; Triandis, Marin, Hui, Lisansky, & Ottati, 1984; Marin & Triandis, 1985;

Carpenter & Radnakishan, 2000). Furthermore, the cultural and occupational values held by African Americans, Hispanics, and Asian Americans reflect an orientation towards the collective. This collectivist orientation contrasts with White mainstream values that are characterized by a focus on the individual: self-reliance and self-realization (Leong, 1993).

Triandis et al. (1990) found that Black minorities in the United States exhibit collectivist tendencies. They hypothesized that collectivists will perceive their ingroups as more homogeneous than their outgroups and that individualists will perceive their ingroups as more heterogeneous than the outgroups. This is because individualists do their own thing, seek to differentiate themselves from those close to them, and are very self-reliant, while collectivists follow the goals and norms of their ingroups. Triandis et al. (1990) indeed found that Blacks tended to see the outgroup as more homogeneous than the ingroup, while Whites rated the outgroup as more homogeneous than the ingroup. This supports the view that African Americans are indeed more collectivist than Whites.

Another study also found that Blacks and Mexican Americans in the United States show collectivist tendencies. Ramirez and Price-Williams (1976) tested the achievement motivation of Mexican-American, Black and White samples and found that while the White children scored higher than the Mexican-American or the Blacks on the individualist, conventional tests of achievement motivation, the Mexican American and Black children scored higher on a collectivist test of achievement motivation than the White children.

The participants had been asked to tell a story for each of a series of drawings depicting a person in an education setting (for example, the student with a teacher or the student with their mother). The regular scale was scored high on themes relating to achievement, goal-related achievement, descriptions of the activity leading to achievement, having a plot relating to achievement, etc. The collectivist test was scored high on themes relating to family-oriented achievement, that is, achievements that would benefit or get recognition from family members, such as references to achievement that would benefit a family member, activities that would help the character achieve for the family, etc.

Hispanic minorities also have shown collectivist tendencies (Triandis et al., 1984; Carpenter & Radnakishan, 2000). In Triandis et al.'s (1984) study, participants looked at scenarios and made judgments about how likely were certain behaviors to occur. For example, in a particular scenario a mother and her son might be talking and participants had to indicate how likely it is for the son to tell a secret to the mother. The Hispanic participants were Navy recruits in the United States who self-identified as Hispanic and who had Spanish surnames. The rest of the sample was composed of other recruits, which may include Blacks and Hispanics who did not identify themselves as Hispanic. The results indicate that the Hispanic sample regarded family relationships as involving more love, intimacy, and nurturance than the mainstream. The results also show that the Hispanic sample see more pull towards the family, while the mainstream sample sees a certain amount of

pull, but also a high amount of push away from the family. The authors conclude that the results show that Hispanics appears to be high on parent, kin, and friend collectivism, as the results indicate closeness, not only with their nuclear family, but also with their extended family.

Asian Americans have also been shown to be collectivist. Rhee, Uleman, Lee, and Roman (1995) found support for the idea that most Asian Americans are more collectivist than Whites in the United States. They asked White American, Asian American, and Korean students to fill out the Twenty Statements Test (TST). The TST asks the question "who are you?" and follows it with twenty blank lines that start with the phrase "I am..." Subjects are requested to fill out the twenty spaces. Responses which are related to traits are coded as individualist or autonomous responses, while responses that reflect social identities are coded as collectivist or social responses. This coding is consistent with descriptions by previous researchers that show that collectivists define themselves by their group memberships and individualists define themselves by their unique attributes. Of the Asian American students who responded to the TST, thirty-three percent did not identify themselves by ethnicity (Asian, Asian American), or of a particular nationality (Chinese, Japanese, Indian, or Korean). Fifty-four percent identified themselves either by ethnicity or nationality, while thirteen percent identified themselves as both, Asian or Asian American, and by nationality.

Results indicate that the double-identified Asian Americans had very similar self-concept ratings to the Koreans, including very similar proportions

of items rated as social (collectivist) vs. autonomous (individualist). The single-identified Asian Americans scored in-between the double-identified and the unidentified. These single-identified Asian Americans did not have as many collectivist items as the double-identified or the Koreans, but they had significantly more than the White students and the unidentified Asian Americans. The unidentified Asian Americans wrote much less collectivist items and their ratings were similar to the White students. Thus, 67% of the Asian Americans in the study identified or double-identified themselves as having an Asian background, and these participants responded the TST more collectivistic and less individualistic than the White participants. Besides showing that a majority of these Asian American college students appear to be collectivist, this study shows that not every Asian American will be collectivist. This study underlines the importance of actually measuring individualism-collectivism at the person-level, instead of assuming that everyone who is from an Asian, African or Latin American background will be collectivist.

Another laboratory-setting study conducted by Cox, Lobel, & McLeod (1991) suggests that American minorities exhibit cooperative/collectivist tendencies, while American Whites exhibit individualistic tendencies. The researchers used the Prisoner's Dilemma task for this experiment, a task that allows the participants to choose whether they want to compete or cooperate with another group and depending on the combination of what they choose and the other group chooses, each group gets a certain payoff. Each group

is composed of four students, and each student was given time to decide how to act, then they would discuss it with their group, reach consensus, and record their choice. Each group is given a matrix of the payoffs. The possibilities are the following: a cooperative choice by both groups results in moderate payoffs for both groups. In the case where one group chooses a competitive response and the other group chooses a cooperative response, the competitive group has the highest gains and the cooperative group has the highest losses. If both groups choose the competitive response then both groups suffer moderate losses. The researchers gave feedback that led the groups of participants to believe that the other group (a fictitious group manipulated by the experimenters) would act cooperatively. After the feedback, the diverse groups of participants composed of Blacks, Asians, and Hispanics chose to act cooperatively, which yields moderate gains for both groups. The group composed of Whites chose to act individualistically, which yields the highest gains for their group and the highest losses for the opposing group. This study suggests that there are indeed differences between American ethnic minorities and Whites in terms of their individualistic behavior.

However, not all studies have concluded that ethnic minorities in the United States are collectivist. Oyserman et al. (2002) compiled effect sizes contrasting the difference in individualism and collectivism between White Americans and ethnic minorities in the United States. As mentioned earlier, they conceptualized individualism to be orthogonal to collectivism and as

such, they performed separate analyses for scales that they coded as individualism scales, from those that they coded as collectivism scales. Contrary to what other research has indicated, their meta-analysis showed that Blacks were more individualistic than Whites and were not different from Whites in terms of collectivism. The results also showed that Hispanics were both, more individualistic and more collectivistic than Whites. On the other hand, Asian Americans were more collectivistic and less individualistic than Whites.

Conversely, as the next section will explain, researchers have noted that the cultural values espoused by many ethnic minorities reflect a collectivist orientation.

African American Cultural Values

African American cultural values are characterized by interdependence, particularly with the extended family and collective survival (Phinney, 1996). Researchers have pointed out that Blacks possess collectivist cultural values (Cox, 1993; Carnevale & Stone, 1995). Carnevale & Stone (1995) state that Black culture has a focus on personal relations, and that Blacks value relationships for their own sake. Baldwin & Hopkins (1990) reviewed the literature on differences between European and African cultural values. They describe that the European-American worldview is characterized by a set of values including control over nature, survival of the fittest, achieving, competition, individual rights, separateness and

independence, individualism, uniqueness, and differences. The African worldview is characterized by harmony with nature, survival of the group, cooperation and collective, collective responsibility, interdependence, commonality and an emphasis on groupness. This review of African cultural values emphasizes the collective and interdependent values. The authors then built a scale that would tap these values. The scale consisted of nine dimensions, three of which highlight the individualism-collectivism construct: interdependence versus separateness, inclusion versus exclusions, and individualism versus collectivism. The scale was administered to Black and White college students. The results indicated that Black students were significantly more Afrocentric, while the White students were significantly more Eurocentric.

Hispanic Cultural Values

Marin and Marin (1991) concluded that Hispanics' cultural values are centered on allocentrism, familialism, and simpatia. Allocentrism or collectivism means that there are high levels of interdependence among members of the ingroup, mutual empathy, conformity, trust of the ingroup members, and willingness to sacrifice for the welfare of the ingroup members (Marin and Triandis, 1985). Familialism refers to the strong attachment and loyalty to the nuclear and extended family. It is characterized by feelings of solidarity and reciprocity among family members. Familialism also includes the Hispanics' perceived obligations to provide material and emotional

support to extended family members. *Simpatia* refers to the importance of social affiliations. These social relationships must be positive and pleasant in order to maintain good interpersonal relationships.

Asian American Cultural Values

Asian American cultural values are also characterized by the collectivist orientation: the subordination of individual goals to the collective (Carnevale and Stone, 1995; Leong, 1993). The Asian collectivist cultural values stress subordination of the individual to group needs (Carnevale & Stone, 1995). Marcus & Kitayama (1991) emphasized that Asians possess an interdependent view of the self, in which the self is always connected to others. The extent of this connectedness is to the point that Asian Americans do not clearly distinguish between individual and family problems. Asian Americans also highly value cooperative behavior and harmonious relationships.

Individualist values such as self-actualization and independence are not typical Asian American values. One study on work values conducted with Asian American children found that only the highly acculturated ones valued self-realization (Leong & Tata, 1990). Self-realization is a highly individualistic value, so that the highly acculturated children had probably adopted American individualistic values.

Thus, there is some evidence to support the notion that ethnic minorities in the United States have, in general, a more collectivist

predisposition than the White majority and that they appear to share collectivist cultural values.

Summary and Critique

The research reviewed so far indicates that cultures differ according to the level of interdependence between individuals and their collectivities. Collectivists are characterized by high interdependence between persons and their extended families, friends, or clans. Collectivists feel obligations towards the groups in their lives. They share their ingroups' goals. Research also indicates that individualists are characterized by independence, self-reliance, competition, and autonomy. While individualism-collectivism is a cultural difference, it can also be an individual difference. There is much variability within cultures; even in collectivist cultures there are individuals who "do their own thing" and in individualist cultures there are people who are interdependent with their ingroups. Because of this variability some researchers have constructed questionnaires to measure the level of individualism-collectivism at the psychological or person-level.

Research has also indicated that individualism-collectivism has an effect on organizational (e.g., likelihood of performing organizational citizenship behaviors), team (e.g., proneness to social loafing) and individual behavior (e.g., factors which affect individual motivation). This research sometimes defines collectivists as anyone whose cultural background is from an area found to be collectivist by Hofstede, and sometimes defines

collectivists by their score on one of multiple questionnaires, which measure individualism-collectivism. Some researchers (e.g., Early, 1994) have looked at them separately and have found similar results. However, researchers that continue equating cultural background with individualism-collectivism (i.e., Americans are individualists and Chinese are collectivists) are sending the wrong message that everyone from a certain culture espouses certain values, and they are failing to research the natural within-culture variability.

A major gap in the current research literature is that there are no studies comparing how the collectivism of each of these ethnic groups compares to each other. It is possible that each group will express their collectivism in different behavioral terms. For example, Triandis et al.'s (1984) study did not find that Hispanics demonstrated collectivism towards their co-workers or towards their neighbors, but perhaps other ethnic minorities do show collectivism towards those groups. However, the lack of any study comparing the type of collectivism of the different ethnic minority groups prevents this author from drawing any further conclusions at this point.

Additionally, as Rhee et al.'s (1990) study demonstrated, ethnic minorities have great variability in their backgrounds and in the extent to which they might espouse collectivist, beliefs, values, and norms. Blacks may have lived many generations in the United States and many are descendants of slaves brought to America, but others may have come more recently from the Caribbean or Africa itself. Hispanics are a diverse group of individuals who share a history of Spanish colonialism in the Americas. Hispanics

include people whose national origin is from Mexico, Puerto Rico, Cuba, and Central American and South American countries. Asians are also a very diverse group. For example, some Chinese were the first Asians to migrate to America, but others have come in very recently (Leong and Gim-Chung, 1995). Also Asians can come from many different countries including Hong Kong, Japan, Malaysia, Singapore, Cambodia, the Philippines, and Vietnam. All of these groups may differ in terms of their generational status, their level of education, SES, and the degree to which they espouse different cultural values, including individualism/collectivism. Thus, it is important to measure individualism-collectivism at the individual level, and to treat this construct as an individual difference variable.

In conclusion, individualism-collectivism may be an important variable in research in the United States because ethnic minorities in the United States have been found to espouse collectivist beliefs, values, and norms. Since individualism-collectivism has been found to have a profound impact on behavior, it is possible that it would also influence career behavior.

Career Development Constructs and Theories

Career or vocational behavior refers to all the activities “involved in choosing, entering, and adjusting to one’s occupational role” (Osipow & Fitzgerald, 1996, p. 51). Career development refers to these vocational activities, but the word development implies the added element of time. Thus, Osipow and Fitzgerald (1996) see career development as the evolving sequence of a person’s work experiences *over time*. A good career development theory will explain not only what choices people make, but *how* they make those choices. Biller (1987) has posed the question: “How do most people achieve...career outcomes?” (p. 5), and suggests that psychologists must look not only at how or what career choices a person makes, but also “what factors influence one’s career decisions over time” (p. 5). In other words, career development theories try to explain how people evolve and prepare themselves in order to make career decisions.

The career development field suffers from a lack of a unified, comprehensive theory, and instead there are a series of “segmental” theories (Arbona, 1995). The large number of theories concentrating on particular approaches may be confusing, but it is the state of affairs. Researchers have grouped similar career development theories in order to facilitate their study. Osipow (1990) has categorized theories into four distinct categories: Trait-Factor, Developmental, Personality, and Reinforcement/Behavioral Theories. Biller (1987) has grouped them into three main focuses: 1) the ones that imply that career decisions are a one-time matching event (equivalent to Osipow’s

Trait-Factor and Personality Theories), 2) the ones that assume that there are developmental stages over the course of a career (equivalent to the developmental perspective), and 3) the ones that suggest that people invoke specific strategies in making career decisions and that they are influenced by the environment in making those decisions (these are closest to Osipow's Reinforcement theories). A brief review of the three unique approaches identified by both of these researchers will follow.

1. Trait-Factor or Career Choice Theories

The first category in both Osipow's and Biller's categorization is trait-factor theories. Trait-factor theories are the oldest career development theories. Trait-factor theories assume that career development is essentially the matching of an individual's personality, interests and abilities with a career. Biller (1987) calls these theories "career choice theories," probably because they focus on explaining what the most appropriate career choice *should* be. Interest inventories, such as the Strong Interest Inventory and the Kuder Occupational Interest Survey are based on the trait-factor model. Aptitude tests, such as the Differential Aptitude Tests are also based on the trait-factor model (Osipow & Fitzgerald, 1996). The idea behind these tests is that they help clarify decision-makers' interests and aptitudes, in order to match them with a suitable career. Once this matching occurs, the employee will experience success and satisfaction in his/her job.

One of the original proponents of the Personality-Trait approach is Roe's theory (1957). Roe started studying artists and investigating the personality factors that led to their artistic creativity. She followed that study by investigating the traits and characteristics of scientists. She concluded that there were major personality differences between artists and scientists. She based the main tenet of her theory on those findings: that every individual has a predisposition to expend energies in a particular way, which combined with childhood rearing experiences, shape an individual's career behavior. The predisposition and the way the child was reared constitute the individual's personality, traits and characteristics, which will determine the needs that the individual will want to fulfill through a career.

Roe's theory has some major shortcomings. The main shortcoming is that it is difficult to predict events that will happen far away in the future. Roe suggests that a young child's rearing can affect their vocational choice, which would happen much later in life. Additionally, many events would occur in the middle, and these events may be more responsible for vocational choices. The importance of Roe's theory is that it was one of the first theories that attempted to explain what causes career choices and it emphasized that parents do have a role in their children's career development.

Another trait-based theory, which is much more sophisticated than Roe's is Lofquist and Dawis's (1969) Work Adjustment theory. Their theory postulates that people are motivated to fulfill work requirements and to have their personal requirements fulfilled by work. The effort of the individual to

maintain this correspondence is called work adjustment, and Lofquist and Dawis proposed that it is related to job tenure, job satisfaction, and job effectiveness. Abilities, vocational needs, and personality affect work adjustment. A person can have their personal requirements fulfilled by work and they include: social status, achievement, ability utilization, security, etc. Osipow and Fitzgerald (1996) conclude that while many studies have supported the theory, some of the concepts have not been sufficiently operationalized. On the other hand, the theory has practical applications, in terms of predicting job satisfaction, tenure and effectiveness.

The best-known example of a trait-based theory is Holland's hexagonal model of careers. According to Holland (1985), there are six personality and occupational environment types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. The Realistic personality, which is characterized by being practical and oriented towards the concrete, prefers ordered or systematic manipulation of objects and tools. The Investigative personality type, which can be characterized as abstract, logical, and scientific, prefers activities that involve the investigation of physical, cultural and biological phenomena. The Artistic type, which can be described as aesthetic and sensitive, prefers the manipulation of physical, verbal or human materials to create art. The Social type, which can be characterized as supportive and warm, prefers activities that involve others, such as informing, training, developing, curing, or enlightening others. The Enterprising personality type, which can be described as aggressive, prefers the

manipulation of others to reach organizational goals or economic gain. They tend to acquire leadership and persuasion skills. Finally, the Conventional personality is characterized by being systematic and detail-oriented. They prefer activities that involve systematic organization of data.

Personalities are attracted to a matching environment. This matching is called “congruence” by Holland. There is congruence when an individual chooses a career characterized by an environment that matches his/hers personality type. The six personality types are organized in a hexagon form, with environment and personalities which are more similar being next to each other and those that are more dissimilar being opposite in the hexagon. Holland suggests that if there is lack of congruence between an individual's personality and the environment types in which they work in, that there would be lack of occupational achievement and/or lack of satisfaction.

In terms its validity, Osipow and Fitzgerald (1996) concluded that Holland's theory has received mostly positive results, emerging from numerous studies, and that the theory has very broad applicability. They note the value of a theory that can explain individuals' dissatisfaction with their careers when there is a lack of congruence. Holland's theory helps explain job dissatisfaction, low performance, and could even explain job changes. However, trait theories, including Holland's are more prescriptive than descriptive. They state what field or career decision-makers should choose, but fails to explain how people actually make decisions. This kind of theories also fail to describe career development as an on-going process that start at a

young age and continues after the education is complete. Trait theories have been criticized for being static and for failing to incorporate antecedents and consequences of the choice (Crites, 1978). And while various studies have shown that Holland's theory has adequate validity for different cross-cultural populations, including Hispanics and Blacks (Fouad and Dancer, 1992; Swanson, 1992; Harrington & O'Shea, 1980), it is not suitable for understanding how people make career choices and how people develop. Because Holland's theory does not delve into factors that affect career development we would not expect collectivists to differ from individualists in terms of Holland's six personalities.

2. Developmental Theories

Contrary to trait-theories, which presuppose that career development is composed of a single decision or a person-job match, developmental theories view careers as an on-going process (Biller, 1986). The principal developmental theorist has been Donald Super.

Super's Developmental Theory

Donald Super, one of the most distinguished career development theorists put forth his theory in the 1950's. His theory is considered a developmental theory because it takes the perspective that there is a continuous process over people's lifespans by which they choose and adapt to their careers. Super (1963) viewed career as a developmental process in

which people strive to implement their self-concept through a series of life stages. There are three main tenets to Super's career development approach: the self-concept, the developmental career stages, and the concept of career maturity. A main criticism of Super is that the various aspects of his theory are not fully integrated (Biller, 1986). These elements will be defined and discussed in the following section.

Self-concept and Developmental Career Stages

In 1953, Donald Super first published his proposition that career development is an on-going process of self-concept implementation:

"The process of vocational development is essentially that of developing and implementing a self-concept: it is a compromise process in which the self-concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role-playing meet with the approval of superiors and fellows (p. 189).

Thus, Super's theory holds that individuals develop a self-concept, which they then compare to their images of the work world. Making a good career decision depends on the similarity between the self-concept and the career (Osipow & Fitzgerald, 1996). The self-concept is the vehicle for expressing individuality, uniqueness, and career interests and abilities. Super continued working on the self-concept construct and further tied it to vocational development when he proposed that vocational self-concept is the

“constellation of self-attributes considered by the individual to be vocationally relevant” (Super, 1963, p. 20). For Super, career development is the process of developing and implementing a series of occupational self-concepts over a series of vocational stages throughout a person’s life span.

To summarize, Osipow and Fitzgerald (1996) noted that Super’s theory is composed of three main tenets. First, individuals develop more clearly defined self-concepts as they grow older. Second, in making career decisions people develop images of the occupational world that they compare with their self-image. Third, their decision will be correct or not depending on the congruence between his/her self-concept and the career chosen. Finally, the self-concept is not an unchanging trait, but rather it evolves and develops as the individual is exposed to various experiences.

Literature reviews on self-concept implementation have concluded that self-concept theory has received empirical support (Betz, 1994, Osipow and Fitzgerald, 1996). Much of the research done on self-concept theory has assessed whether people implement their self-concept when they report occupational preferences and choices (Betz, 1994). This has been operationalized by investigating perceived and ideal selves and determining their relationship to occupational stereotypes. However, self-concept theory has also been criticized as being too broad (Betz, 1994). In fact, any researcher can claim that any construct or attribute could be part of the self-concept (i.e., personality, values, beliefs, norms). Gottfredson (1985) also criticized the self-concept construct for being difficult to measure. The

broadness of the self-concept construct and its lack of measures has resulted in limited utility for career development research.

Self-concept Theory and Collectivists

Osipow and Fitzgerald (1996) point that for “a variety of reasons, some individuals experience very little freedom to choose for themselves the course of their future plans...in such cases, the ability of theories to explain an individual's vocational life is attenuated” (p. 54). This may be the case with self-concept theory and collectivists. Researchers have cautioned that the self-concept construct may not help to explain career behavior for collectivists as it does with individualists. Leong and Serafica (1995) point out that the main tenet of the self-concept construct, that it drives career development, may be less applicable to those with a collectivist orientation. Leong & Serafica (1995) argue on conceptual grounds that other elements may drive career development for collectivists, such as obligations within the family. In other words, the self as a member of the ingroup, as a care-taking parent, child or sibling is what may be implemented instead of the self-attributes as described by Super. Instead of career development being seen as self-concept implementation driving towards career self-fulfillment, collectivists will probably view career as a way to achieve their collective's needs, and to satisfy obligations towards their ingroup. Leong & Serafica's (1995) propositions have not yet been researched.

Other researchers have pointed out that self-concept theory might have limited applicability to ethnic minorities in general because other general

sociological factors, such as discrimination and poverty, may be more responsible for career development than the self-concept (Brown, 1995). Also, the idea that the self-concept evolves throughout career development stages might be unrealistic for not only ethnic minorities but also poor people in general. They may have to take a series of unrelated jobs to support themselves, maybe even early on in life, which may thwart career exploration. It is safe to say that the current self-concept theory may not apply exactly as it is described to disadvantaged individuals.

On the other hand, other researchers have pointed out that the self-concept construct is sufficiently broad and flexible, that it could incorporate cultural variables (Fouad & Arbona, 1994). If indeed, collectivism affects career development, it would be important to incorporate collectivism as one of the factors that influence the self-concept, and shift the emphasis away from self-fulfillment and implementation of career interests and self-attributes.

Career Maturity

One of the most popular ways to conceptualize career development is to think of it in terms of the career maturity construct, a construct developed by Donald Super and later refined by John Crites. In 1955, Super first defined career maturity as “the place reached on the continuum of vocational development from exploration to decline” (p. 153). Career maturity refers to the degree to which a person is able to accomplish certain vocational tasks that are appropriate to that person's age or stage of career development.

Persons with higher levels of career maturity vis-à-vis their age will cope better with the career development tasks that they must do. For example, a career-mature fourteen-year high-school student old will be finding out information about different occupations, while a career-mature forty-year old executive will be developing new skills to cope with changes in the workplace and to be more effective. The element of age or career development stage again underlines the developmental nature of Super's theory.

Super developed his concept of career maturity through a longitudinal study called the Career Pattern Study (Super, Crites, Hummel, Moser, Overstreet, and Warnath, 1957). This study started in 1951 and its participants were eight and ninth grade boys and their parents. The boys were given tests, questionnaires and they and their parents were interviewed.

When the Career Pattern Study was completed, the dimensions that emerged were different than the ones originally proposed (Super & Overstreet, 1960). The first dimension that emerged was "Planning orientation", which refers to acceptance of responsibility for choice and planning, specificity of information and the extent to which the person is planning their career. The second dimension that emerged was "Independence of work experience." The third dimension is "Long view ahead," which refers to awareness of need for ultimate choices, specificity of information and planning. The fourth dimension was "Short view ahead," and the fifth dimension was "Intermediate view ahead." In Super & Overstreet's opinion, these five dimensions all seemed to share an underlying component

of planfulness and independence. Super & Overstreet (1960) defined career maturity as “acceptance of responsibility for choosing and planning, and a planning and information-getting approach to the orientation and choice process” (p. 150). Thus, Super’s definition of career maturity, based on his research, suggests that planning and individual responsibility are the main aspects that drive on-target career development.

Career Maturity Construct and Research by John O. Crites

While Super and his colleagues were further developing the career maturity theory, another researcher, John O. Crites, was working on his own theory and instrument of career maturity, also based on Super’s research. Crites had worked with Super on the Career Pattern Study, and he sought to further refine the career maturity construct and incorporate it into a general theory of career development. Crites (1978) developed a detailed career development model that incorporated career maturity. This model is depicted in Figure 1. He described career development as being composed of two major factors: career choice content and career choice processes. Career choice content refers to the “what” of career choice. It is comprised of consistency of career choices and realism of career choices. Consistency refers to how consistent the individual’s preferences are over time (e.g., from one month to the next) and across fields (e.g., psychology versus law). Realism refers to whether there is a match between the individuals’ characteristics and those of the work environment. Crites model suggests

that a mature career choice will be consistent across time and across fields, and it would be consistent with the individual's characteristics.

The second part of Crites' career development model is the career maturity aspect. He proposes that career maturity is the career process, the "how" behind career decision making, "the variables involved in arriving at a declaration of career choice content" (Crites, 1978, p. 4). Career choice process, or career maturity, is composed of career choice competencies and career choice attitudes. Crites (1978) developed an instrument to measure these variables, the Career Maturity Inventory (CMI). Career choice competencies and career choice attitudes are based on three of Super's conceptualization of career maturity.

Crites (1978) describes research that has shown that two of the major difficulties that all students (including disadvantaged students) find when making career decisions are indecision and lack of realism. The five career choice attitudes in Crites' career maturity model emphasize Crites' view that a career mature individual will minimize indecision and maximize realism. The five career choice attitudes that demonstrate career maturity are: decisiveness, involvement, independence, orientation, and compromise (Crites, 1978). In other words, a career mature individual will have greater decisiveness about making a career choice, will have a more active involvement in the decision-making process, will rely on the self when making career choices, will have a realistic attitude towards work (i.e., that work is not

always fun), and will be willing to compromise between their own needs and reality.

Career Maturity and Collectivists

The definition of career maturity proposes that the vocationally mature individual is one who is oriented towards planning, who accepts individual responsibility for choices, who is aware and utilizes various resources in planning, who has specific information about preferred occupations and who demonstrates competence in decision-making (Super & Overstreet, 1960). This definition suggests individual responsibility for career planning and career decision-making. In essence a career mature adolescent, according to Super, is one who accepts responsibility for his/her career decisions and engages in career planning to makes the best decision possible. Similarly, the Crites' definition of career maturity also emphasizes self-reliance, self-involvement and self-planning on career decision-making as well as acting decisively.

These definitions suggests that collectivists may be less career-mature than individualists because they may be less willing to take personal/individual responsibility for their career planning and their career decision-making. They may rely more on their ingroup to help them plan ahead for their future, rather than taking a more active role in planning and in the decision-making process, and they may limit their options to whatever career options their family suggests. For example, Bowman (1995a) argued

that for many Blacks "connections to extended family are most salient" and while the family may encourage education, they may not encourage moving far away from the family (p. 153).

Also, a career-mature person is one who actively seeks information about their interests, strengths and anything that would further their own personal self-fulfillment through a career. However, collectivists may view career development simply as a process for which to choose the career that would satisfy their ingroup's needs. Collectivists may be limited in the amount of planning and career exploration that they can conduct on their own. Their ingroups may have already chosen a career path for them, which would discourage their planning and career exploration.

Additionally, career maturity is associated with decisiveness. Collectivists may experience indecisiveness and conflict if their ingroup wants them to follow a career path that runs counter to a different career path that they may be interested in. For example, Leong and Gim-Chung (1995) state: "It is common to find in an educational environment Asian American students who experience great distress due to conflict with parents over major and career choice" (p. 214). Indecisiveness may be heightened for collectivists by conflicting advice between the family, that has laid out a career path for them, and their friends, teachers, and/or counselors who tell them "It's your life, do what you want to do..." (Leong and Gim-Chung, 1995, p. 214). Collectivist minorities might feel indecisive and in the middle, by conflicting advice and expectations from different people that they trust and respect.

Some research has shown that American ethnic minorities are less career mature than Whites (Westbrook, Cutts, Madison, and Arcia, 1980; Westbrook and Sanford, 1991; Leong, 1991), but other studies have found that ethnic minorities do not differ from Whites in terms of career maturity (Westbrook, Sanford, & Donnelly, 1990; LoCascio, Nesselroth, and Thomas, 1976). Career maturity could be related to their level of collectivism, and that would explain why some studies have found differences between ethnic minorities and Whites, and some studies have not. Maybe only the collectivist ethnic minorities have lower career maturity. Other factors besides collectivism, such as SES, could also influence their career maturity. Unfortunately, none of these studies gathered SES data, and thus, it is impossible to determine if any of these results is due to the confounding of SES and ethnicity. This discussion is speculative because no study has looked at both ethnicity and level of collectivism in determining career maturity. These studies only look at ethnicity as an independent variable, and the reader is left wondering if part of the reason why ethnic minorities have low career maturity is due to their collectivist orientation.

3. Career Decision Making Theories

A third approach to career development theories are the ones that view the decisions that individuals make as the result of the interaction between the person and the environment and that, in order to understand career behavior, one must understand the decision-making strategies that the

person engages in (Biller, 1987). Osipow (1990) believes that these theories are really a blend of various theories, but perhaps because they are influenced by various theories, they avoid the oversimplification of the trait theories and are able to provide a more detailed perspective on how individuals make career decisions. Unlike Trait-Factor theories which focus on predicting career choice, or Career Development theories which describe the process of careers over time, Career Decision-Making theories focus on what are the elements that influence career decision-making. The Social Learning Theory put forth by Krumboltz and the Career Decision Making Model conceived by Harren are examples of theories that show this approach (Biller, 1987; Osipow and Fitzgerald, 1996).

Social Learning Theory applied to careers attempts to identify and explain the personal and environmental events that shape an individual's career decisions. This theory postulates that the development of career preferences and skills are influenced by learning histories. This theory acknowledges that individuals have a set of inherited characteristics, that individuals are affected by their environment (e.g., social class, job market, individual experiences, etc.), that individuals have learning histories, and that individuals develop skills through experiences (Mitchell, Jones, & Krumboltz, 1979). Individuals will express preferences for performing certain tasks if they have been positively reinforced, and they have been successful in those tasks. Social Learning Theory, however, has been criticized for being

impossible to demonstrate. Mitchell and Krumboltz (1990) admitted that it would be difficult to measure the infinite number of reinforcement patterns.

Harren's Career Decision Making Theory

Harren (1979) proposed a career decision-making model for college students. The foundations for his theory were the Tiedman and O'Hara theory, which viewed career decision-making as a conscious problem-solving behavior that occurs through specific decision stages, and the research of Dinklage, who developed a classification of decision-making styles whereby judges were able to reliably categorize high school students, based on their discussions of their decision-making (Harren & Kass, 1977). Harren's basic tenet is that progress through the various stages of the career decision-making process (e.g. exploration, crystallization, choice, etc.) is influenced by the strategies adopted by the decision-maker. Harren (1979) posited that college students have different decision-making styles, and that some decision-making styles or strategies are more effective than others. These decision-making styles determine how students go about in making career decisions.

The three types of decision-making styles are Rational, Intuitive and Dependent. A college student with a Rational decision-making style "makes a realistic appraisal of self and the situation when making decisions ... (and) ... makes decisions deliberately and logically, based on the information available" (Buck and Daniels, 1985, p.1). It is characterized by the ability to

recognize the consequences of earlier decisions for later decisions (Harren & Kass, 1977). A rational student would be able to look ahead in the future and prepare for it by seeking information. Incidentally, Harren & Kass (1977) had originally called this decision-making style "Planning." The various elements of the Rational decision maker, including time perspective and information seeking, is reminiscent of a career mature person, according to Super's Planning dimension. In Harren & Kass's viewpoint, the Rational decision-making style is the most effective style for making appropriate and satisfying career decisions.

The second decision-making style is Intuitive. The intuitive student pays attention to "present feelings and emotional self-awareness in making decisions...(they) use fantasy, feelings, and imagination as the basis for decision-making rather than a logical evaluation of available information" (Buck and Daniels, 1985, p.1). Similarly to the Rational style, the Intuitive style accepts responsibility for decision making, but tends to rely on present feelings and what their "gut instinct" is telling them when making career decisions (Harren & Kass, 1977). They commit to a course of action without giving it much thought. They also tend to anticipate less how current decisions might affect later decisions. Harren & Kass (1977) indicate that this decision-making style is less likely to result in effective decision-making than the Rational style.

The third decision-making style, Dependent, is characterized by a lack of personal responsibility for career decision-making (Harren & Kass, 1977).

The dependent decision maker "is heavily influenced by the expectations and desires of authorities and peers" (Buck and Daniels, 1985, p.1). They look towards parents, peers, teachers and significant others to provide them with direction in their career search. Harren characterizes dependents as passive and compliant and points that while making decisions in this fashion may reduce the immediate anxiety, it is unlikely to result in career satisfaction.

Career Decision-Making and Collectivists

Almost no research has been conducted on the career decision-making strategies and career decision-making process of collectivists or ethnic minorities. The only study that addressed the career decision-making of ethnic minorities was conducted by Leong (1991) with Asian American participants. He utilized the Assessment of Career Decision Making to determine the decision-making styles of Asian Americans in comparison to that of Whites. He found that Asian Americans were significantly more likely to exhibit a Dependent decision-making style than Whites. Leong (1991) suggested that the results might be due to the collectivist orientation of Asians: "If Asian Americans have different decision-making styles, what is the nature of these differences? Do they tend to be more collectivistic than individualistic in their career decision-making process?" (p. 229). Leong's findings suggest that collectivism might be an important variable in determining whether a career decision-maker engages in Dependent decision-making, but it must be directly tested.

Career Development Research Confounds

Various researchers have reviewed the career development literature on ethnic minorities and have concluded that a main research shortcoming has been the confounding of ethnic variables with other demographic variables, primarily socioeconomic status (SES). In her review of the Hispanic career development literature, Arbona (1995) states that ethnicity and SES have been "widely confounded in the career-related research" (p. 40). Her appraisal has been echoed by Brown (1995): "Clarifying the picture concerning ethnic differences on career maturity and work values measures, perhaps by controlling for gender, SES, and geographic origin, is also a research need" (p. 28). Brooks (1990) concluded that lower-class African Americans have been consistently compared in the career development research with middle-class Whites. It is important to understand which demographic variables affect career development and how they influence career development in order to control for these variables in future research.

Career Development and SES

There is a lack of consensus regarding if and how SES affects career development. Career behavior researchers generally believe SES affects career behavior (Naidoo, 1998). Conceptually, it makes sense that SES would affect educational and career opportunities. As Super (1957, 1990) repeatedly proposed, SES influences the occupational level attained and the

duration and types of jobs. In fact, some studies have found a relationship between certain career development constructs, such as career expectations, and SES. Dillard and Perrin (1980) evaluated the career expectations, aspirations, and maturity of White, Black, and Puerto Rican high school students. He found that after controlling for ethnicity and sex, SES predicted career expectations. Lower-SES students chose lower-level careers than middle-class students. A previous study by Dillard (1976) also found that SES is related to the career maturity scores of junior-high Black students. Lee (1984) also found that SES helped predict career maturity for Black, White, and Native American high school students, but the effect was small. Parental influence, degree of certainty of parental expectations was a much better predictor of career maturity than SES in Lee's (1984) study. More recently, Tang, Fouad, & Smith (1999) found that SES was significantly correlated with family involvement in career decisions and career choice for Asian Americans, but SES did not correlate with career interests nor with self-efficacy. Interestingly, the authors found that high-SES Asian Americans were more likely to choose psychologist as an occupation than lower-SES participants. They suggest that this finding may be due to the fact that psychologist is not a well-known occupation in the Asian community and that it may be even lesser known to lower-SES individuals. This example illustrates the subtle ways in which SES can affect career choice.

However, many studies have failed to find a significant relationship between career maturity and SES. Crites (1978) found very low correlations

between the Attitude Scale of the CMI and SES for high school students. After evaluating the effects of SES on the career maturity of high school sophomores and college students, Super (1990) concluded that SES has a minimal effect on career maturity. He proposes though, that SES may impact the self-concept.

In terms of the impact of SES on the career maturity of Blacks, a study by Naidoo, Bowman, & Gerstein (1998) did not find a significant relationship either. Unfortunately, many studies that have found differences between ethnic minorities and Whites in other career development constructs, such as career maturity, have not measured SES (e.g. Westbrook & Sanford, 1991; Leong, 1991), leaving the reader to wonder if results could have been due to SES. The message to researchers is that while SES effects are not found across the board, and may be small, it should be measured in order to rule out possible confounds.

Career Development and Gender

Studies evaluating gender differences in career maturity can be divided into three categories: studies with high school participants that indicate that females are more career mature than males, studies that show that men are more career mature than women, and studies that have found no differences between men and women (Naidoo, 1998). After reviewing the literature published in the last 40 years on career maturity, Naidoo (1998) concluded that many "recent studies have failed to find any significant sex difference in

attitudinal career maturity" (p. 6). This overview suggests that there are no definite answers regarding whether gender differences exist in career maturity: some studies have found differences and some studies have not. As Naidoo's analysis shows, many recent studies have not found gender differences, but many previous studies have. For example, the same researcher may find that women are more career mature than men (Westbrook, Cutts, Madison & Arcia, 1980) or may not find any significant differences (Westbrook, Sanford & Donnely, 1990).

Recent studies involving ethnic minorities have found similar conflicting results. Leong (1991) did not find gender differences in either career maturity or career decision-making in a sample composed of Asian Americans and Whites. Lee (1984) did not find either gender differences either in career maturity for a sample composed of rural Black, White, and Native American high school students. In contrast with Leong (1991) and Lee (1984), Naidoo, Bowman, & Gerstein (1998)'s study with Black participants, found that women were more career mature than men.

In terms of career decision-making, studies with large amounts of participants have found that college females have a more Dependent decision-making style than college males (Buck and Daniels, 1985). No gender differences were found on either the Rational or Intuitive scales. In conclusion, there is a lack of consensus regarding whether gender differences can be found in career development measures, such as career maturity and career decision-making. It is possible that due to women's more

recent advances in careers and the workplace, some of the earlier findings regarding their lack of career maturity or their dependent decision-making style may be a thing of the past. However, the fact that some studies have found these differences suggest that future studies should view gender as a possible confounding factor and control for gender differences.

Career Development and Age/Grade Level

A main tenet of career development is that career behavior “develops” with age and life experiences, and that the development is tied to time frames (Super, 1955; Crites, 1978). Career maturity in particular increases with age and grade level (Super, 1955; Crites, 1978). In fact, the systematic increase of career maturity with grade is one of the evidence listed for the construct of career maturity (Crites, 1978; Betz, 1988). This positive relationship has also been established with ethnic minorities in the United States (Dillard & Perrin, 1980; Naidoo, 1998).

Career decision-making also varies according to educational level. Buck and Daniels (1985) report that college seniors tended to have a more Rational decision-making style than either freshmen or sophomores. Freshmen scored higher on the Intuitive decision-making scale than either juniors or seniors. Freshmen and sophomores scored higher on the Dependent decision-making scale than juniors, although the difference was small.

In conclusion, educational level and/or age has been found to be related to career behavior. This finding makes conceptual sense, as higher educational level and older age usually is associated with more opportunities for career development, career exploration and career experiences. It is therefore important to recognize that age and educational level are correlates of career maturity and career decision-making.

Career Development and Generation Level

Career researchers have also suggested that generation level is another factor that may influence career behavior (Leong and Serafica, 1995; Arbona, 1995). Referring to Hispanics, Arbona (1995) suggests distinguishing between immigrants who were born in Latin American countries, those who were born in the United States with one or more parents born elsewhere, and those who are from Hispanic descent but whose parents were born in the United States. She explains that immigrants born outside the United States may encounter problems that can affect career behavior, such as naturalization problems. Indeed, it is expected that someone who was born outside of the United States might encounter additional barriers not found by those born in the United States, such as difficulties in getting work permits. In Arbona's (1995) classification system, SES and Generation Level are the most important variables that may affect career development. Additionally, we would expect that differences in acculturation and the level to

which cultural values are espoused might be found between different generations.

Summary

To summarize, many career development theories have been proposed. Using Osipow's (1990) and Biller's (1987) classification system, the main theories have been categorized into 1) theories that assume that there is a one-time match of traits and careers, 2) theories that take a developmental perspective and 3) theories that describe how individuals make career decisions and what are the factors that influence those career decisions. The last two approaches will be the frameworks and/or guidance that this study will follow. These perspectives seems the most suitable for this type of research because many researchers have suggested that collectivism needs to be taken into consideration in the career development of ethnic minorities. This implies that collectivism is one of the factors that may influence career development and how career decisions are made. Future research should seek to avoid confounds of SES, gender, age, and generation level, in order to gain a clearer understanding of the career development of ethnic minorities.

Individualism-Collectivism and Career Development

Researchers (Leong, 1993; Fouad, 1995; Bowman, 1993; Betz, 1993; Swanson & Bowman, 1994; Leong & Leung, 1994; Leong & Gim-Chung, 1995) have implied that differences in the degree of collectivism can translate into differences in career behavior. Collectivism can influence career behavior by making ingroup goals more important than individual goals, such as by the collectivist family having more influence on its members' decisions than in an individualist family. While people with an individualistic orientation tend to look at career choice as their "own personal matter and an opportunity for self-expression and self-actualization", people from collectivist cultures tend to view career choice as an opportunity to provide for their ingroup or fulfill the obligations that they have toward their ingroup (Leong, 1993, p. 36). As was previously explained, collectivists are motivated by the needs of their ingroup and the ingroup's needs become their primordial needs. Thus, career decisions would be made to satisfy their ingroup needs. Collectivists have a strong sense of obligation towards their ingroup (Bontempo et al., 1990). One of the important aspects of collectivism according to Hui & Triandis (1986) is the consideration of the implications of one's own decisions and actions for other people and the sharing of outcomes. This again, suggests that a collectivist would not see career decisions as affecting only them, but rather they would weight the outcomes of their career decisions as they affect their ingroup. Also, the fact that collectivists share material and non-material resources imply that they would share the financial burden and gains. To

summarize, the ingroup has a stake in the career decision of a collectivist and we would expect this influence to show in the career development and decision-making process.

Career development researchers often have stories from their own counseling practice that suggest that ethnic minorities are often influenced by their ingroup in their career decisions. Leong & Chou (1994) explained that Asian Americans often choose careers that satisfy their families' needs: "Career choice and career advancement may be seen more as means of providing for one's family, helping one's siblings, and fulfilling one's responsibility to care for parents in their old age than as ways of implementing self attributes" (p. 47). Tang et al. (1999) conclude that when studying the career choices of Asian Americans "it is crucial to examine information about family background and expectations...these choices may not be their real preferences but rather may reflect their families' expectations" (p. 144-145). These statements by career development researchers suggest that many Asian Americans are subjugating their career goals to the goals of the family, which is what we would expect from the collectivist orientation of this ethnic group. It also suggests that collectivists may not explore the full range of career options available to them because they would follow the options raised by their family. In fact, the family may encourage and provide information on only their choice. For example, if the family wants the son to continue the flower shop business they may provide career information and opportunities solely relating to that business. They may provide the son with opportunities

to work at the shop and teach the son about flowers, keeping the books, etc., which would lead the son to become comfortable with that particular career choice. On the other hand, if he starts exploring other career options on his own, he may experience confusion, indecision or conflict.

Leong & Serafica (1995) have postulated that career choice and career advancement is regarded by Asian Americans as an opportunity to make their family proud, that is to give honor to the family. They propose that Asian Americans would be more inclined than Whites to continue the family business or to continue a family tradition (e.g., if the father is a physician, parents may encourage their children to be physicians and the children might be inclined to be physicians). And not only are Asian American sons' career choices highly influenced by the parents, Asian American females' careers are also influenced in great part by their family. Yang (1991) reported that Chinese-American women face cultural and social isolation if they demonstrate interest in non-traditional careers. Furthermore, Chinese-American women are pressured to maintain the current balance of family-work responsibilities. This means that it can be difficult for a Chinese-American woman who wants to maintain her social support circle to choose a career, such as management, that would require that she and her husband divide equally the home responsibilities. Leong and Gim-Chung (1995) believe that some parents will coerce their children through bribery and threat to disown them if they do not pursue the careers chosen by the parents.

Not only does Asian Americans' collectivism appears to influence career development and career decision-making, but also Hispanics' collectivistic orientation influences their career development and decision-making. Fouad (1995) provides a rich and detailed example of family influences in the career decision process of Hispanics that show the collectivist orientation in action. The researcher was counseling a Mexican-American high school student called Juana, who was a very bright and conscientious student. Juana was the oldest of six children, and was frequently the baby-sitter for the family. This caused her to miss school often. She wanted to continue her education, and was thinking of a vocational institution, but was very confused. Early career counseling revealed that Juana was not even comfortable about asking the question "what do I want to be when I grow up?" She had a boyfriend, and her family expected her to marry and start a family of her own. However, she felt that there may be more to life than being a housewife and she also wanted to make money to help the financial situation of her family. She had abilities in math, science, and perceptual skills, with interests in the Realistic, Investigative, and Conventional occupational fields. Juana, with the help of her counselor, explored options typical for a Mexican-American female, such as secretary, and non-traditional options such as electronics technician and engineering. Juana became excited about the possibility of pursuing engineering or electronics technician careers but she was hesitant, because she feared that she would not receive support from her family and her boyfriend. She said

that she did not want to continue her education without their support. As expected, Juana's family did not encourage her to continue her schooling. Her family thought that she should drop out of high school, get married, and take care of her siblings. Her boyfriend thought that she should finish high school, but not go into 'men's work.' The counselor helped Juana throughout the difficult decision-making process and encouraged her to pursue the non-traditional career options. The counselor and Juana's school teachers became very involved and convinced the family that it was better in the long run for everyone if Juana continued studying. The family only agreed to allow Juana to study electrical engineering because she continued taking care of her home responsibilities. She continued to live at home, she continued taking care of her siblings and she won a scholarship.

Besides, these fragmentary case studies, further evidence for expecting to find a relationship between collectivism and career development comes from studies that have shown the greater influence that the family has on the career behavior of ethnic minorities.

Family Influence

Referring to the higher influence that the family exerts on the career decision-making of its members in some cultures, Super (1985) wrote:

"In some countries the interests of the individual are subordinate to those of the parents and the parental family. The occupations to be pursued by the children are determined by family needs as seen by the

parents. This is often observed in African and Asian cultures. Even in France, whose culture was ...the born-free culture...it is the family that plays the principal role in the educational and vocational counseling..." (p, 15).

Super notes in this excerpt that the family has considerable control over their children's career decisions in some cultures, such as Africa and Asia, which are known to be collectivist. While in some cases and in some cultures, the family may be the one that actually determines their children's occupation, we would also be able to find that the role of the family might be less extreme. For example, the family can influence in various ways the choices of the children without deciding what career they go into. They can exult the values of certain careers or they can limit the career possibilities by emphasizing that they will need to care and/or provide for family members. They can influence their children's career behavior. They can limit their children's career exploration and career planning by choosing a career for them.

Family Influence on Career Expectations and Aspirations

Evidence for the possible impact of collectivism on ethnic minority career development comes from findings that suggest that ethnic minority families have a greater influence on their children than White families. Specifically, ethnic minority families have been shown to have a greater influence on their children's career aspirations and expectations. Researchers have pointed out that the more influential role of the extended

and nuclear family is a recurring theme in African American career development (Bingham & Ward, 1994). While there is some support for the finding that the family is more involved in the vocational choices of ethnic minorities, there is a lack of a unified theory for this view beyond "ethnic differences." A better framework for understanding these "differences" is that the collectivist cultural values and orientation of ethnic minorities is what drives these "differences."

Dillard & Campbell (1981) studied the influence of White, Black and Puerto Rican parents on their adolescent children's career expectations, aspirations and maturity. They studied whether the parent's work values and the career aspirations that they hold for their children, influence their child's career expectations, aspirations and maturity. What distinguishes this study from others is that they actually assessed the parents' career values and their aspirations for their children, instead of relying on the children to report about their parents' attitudes and aspirations for them. Parents' career values were assessed through the Survey of Work Values (SWV), a 54-item scale that measures intrinsic factors associated with work (pride in work, activity preference, job involvement), extrinsic factors (attitude towards earnings and social status of job), and factors which are both intrinsic and extrinsic (upward striving and responsibility to work). Parents' career aspirations for their adolescent child was assessed by this question: "If you had a choice, what occupation would you want your child to have after completing his or her schooling?" The student's career expectations were assessed by this

question: "What is the occupation that you really expect to get after completing your schooling?" The parents and student's career expectations and aspirations were rated from 1 to 7 using Hollingshead's Two-Factor Index of Social Position. Additionally, student's career maturity was assessed via the attitude scale of Crites' Career Maturity Inventory.

Their results indicate parents' career values and aspirations for their children were not related to their children's career maturity for any ethnic group. However, an important finding was that Black and Puerto Rican parents' career aspirations were significantly related to their children's career expectations. Such a relationship was not found for the White parents. The authors conclude that "such findings suggest that Anglo adolescents may have greater contact with nonparental factors related to their career development than with parental factors such as their parent's career behaviors" (Dillard & Campbell, 1981, p. 146). Another possible conclusion overlooked by these researchers is that Blacks and Puerto Ricans tend to be more collectivist than Whites, and the parents may overtly influence their children more than the White parents, and the children allow themselves to be influenced more by their parents than their White counterparts.

The findings that ethnic minority families influences the career aspirations of their children to a larger extent than White families has held even for high socioeconomic status (SES) families. Fields (1981) found that high-SES Mexican Americans and African Americans' career aspirations were

significantly influenced by their mother's perception of their future occupational opportunity.

Family Influences on Career Development

Other studies have also found that parents of ethnic minorities have a substantial influence on their children's career decisions. In his review, Brown (1995) cites interpersonal influences as one of the most important determinants of vocational choice for Blacks. He suggests that not only the family, but other people in the community, such as church leaders, could influence career decisions for Blacks, although influences other than the family have not been studied.

Lee (1984) found that parental influences on career development were greater for Blacks than for Whites. He asked high-school students to self-report the degree of influence their parents have on their future career plans. Parental influence was one of the independent variables that Lee used to predict career maturity. Career maturity was measured using the Attitude Scale of Crites' Career Maturity Inventory. Other variables that were hypothesized to predict career maturity were self-concept and SES. Lee found that all independent variables were significant in predicting career maturity. However, an important finding was that the beta weights for parental influence had a greater impact on the career maturity of Blacks and Native American students than on Whites. The authors concluded that

parents had more influence on the career maturity of Black and Native American students than on White students.

Family Influence and Career Decisions and Choice

A study investigating family influences on career decisions of high school and community college students found that Mexican-American students rated parental influence on academic and career decisions higher, than did other students (Clayton, Garcia, Underwood, McEndre, & Sheppard, 1993)

Tang et al. (1999) also set out to investigate which factors influence the career choices of Asian Americans using a path model. Their hypothesized factors were family involvement, family SES, level of acculturation, occupational interests, and career self-efficacy. Family involvement was assessed via the following 7-item survey developed by the authors: "How often have your parents or any family member discussed your career plans with you?"; "Have your parents asked you to carry on the family tradition?"; "How much do they listen to your opinion about career plans?"; "Have your parents pressured you to take a job that is financially secure?"; "Have your parents forced you to follow their choice of occupations for you?"; "Have your parents provided you only the information of the job that they want you to pursue?"; "Have they compared you with others who are successful in certain occupations?" The only variable that was not found to be related to career choice was occupational interests. SES was only found to be related

to career choice in a specific instance: when Asian Americans tended to choose non-traditional occupations, they tended to be from a higher SES. Family involvement was found to be significantly related to career choice (path coefficient = .31). The authors were not surprised to find a relationship between family involvement and career choices, but not for career interests. It supports the general findings that Asian Americans are not implementing their self-concept in their career choices, but rather following the goals set by their collective ingroup.

Family Influences and Career Progression or Hindrance

Some studies suggest that ethnic minority students are influenced by their families with regards to educational and career advancement. Two researchers, Gandara (1980) and Ybarra (1988) interviewed Mexican American professional women to find out which factors were the most influential in their educational achievement. Both researchers found that emotional support from their families was one of the factors, if not the most influential factor in their educational advancement. These studies suggest that the family can influence career outcomes indirectly for Mexican-American women, by being or not being supportive.

A study by McWhirter (1997) shows that the family can also be a barrier for career advancement. Her study sought to uncover the barriers to education and career for Mexican-American and White high school students. The author prepared a survey of 24 items that listed the following groups of

barriers: sex discrimination, ethnic discrimination, perceived barriers to attending college, and perceived barriers anticipated in college. In the survey, the nine possible barriers to attending college were: "Money problems," "Family problems," "Not being smart enough," "Family attitudes about college," "I wouldn't fit in," "I couldn't get into college," "Having a good job already," "Lack of interest," and "It wouldn't help my future." Ethnic differences regarding the perceived barriers to attending college appeared in areas five out of the nine areas, and two of those areas were the items referring to the family. Mexican-Americans were more likely than Whites to agree that if they do not go to college, it is due to family problems, or family attitudes about college. McWhirter (1997) also assessed which barriers participants expected to find during college. The five possible barrier choices during college were: "Money problems," "Family problems," "Not being smart enough," "Negative family attitudes," and "Not fitting in with others." Differences between Whites and Mexican-Americans emerged for two out of these five barriers, one of which is related to the family. Mexican-Americans were more likely to agree that if they went to college they would experience negative family attitudes.

Similarly, Hickey & Solis (1990) found that Hispanic students were more likely to attend two-year community colleges, rather than 4-year colleges. The factors that were related to this college selection were parental influences, proximity to family, economic situations in the family, and financial aid.

The results from Gandara (1980), Ybarra (1988), McWhirter (1997) and Hickey & Solis (1990) imply that minority students making career decisions (in this case Hispanics) pay considerable attention to their family's attitude and support for their career and educational advancement. Otherwise, they wouldn't think of family attitudes and support as one of the determining barriers or thrust behind their career advancement.

To summarize, there is some evidence supporting the idea that parents of ethnic minorities influence their children to a greater degree than parents of White children. The evidence is not overwhelmingly strong. Some studies are exploratory or anecdotal in nature and/or have small sample sizes (Fouad, 1995; Gandara, 1980; Ybarra, 1988). Additionally, many of these studies (e.g., Dillard & Campbell, 1981; Lee, 1984; McWhirter, 1997) focused on high-school-level students, signaling that there is also a lack of research on older students, for example college-level students, and adults. There is a lack of an explanation or a theory for these findings, as most researchers do not go beyond "ethnic differences" as an explanation. There is also a lack of an explanation regarding how this family influence is manifested, or the extent of this influence.

Empirical Study of Individualism-Collectivism and Career Behavior

A study conducted by Hartung, Speight, & Lewis (1996) is the only one that has addressed the relationship between individualism-collectivism and vocational behavior of "majority culture college students (p.46)". In their

review, the researchers noted that an “intuitive” difference between collectivists and individualists has been implied: that collectivists would base their occupational plans and career choices on the expectations of their in-groups (e.g., the family), while individualists would place a greater emphasis on their own personal attitudes. They hypothesized that students scoring higher on individualism would rate themselves higher on career-related variables, such as commitment and knowledge about their chosen occupation, fit and consistency between their chosen occupation and personal interests and values, their potential in their careers, and the significance of the occupational roles in their lives. Furthermore, the authors hypothesized that individualists would hold more individual-centered work values such as achievement, independence, and prestige, while students scoring higher on collectivism would hold more group-linked variables such as altruism and interpersonal relationships.

The authors assessed student’s occupational plans through a 23-item questionnaire, the *Occupational Plans Questionnaire*. This questionnaire assesses a) commitment to a stated occupational choice; b) knowledge of and experience in that occupation; c) consistency of the occupation with self-perceived abilities, values, and interests; d) anticipated potential in the occupation, alternative choices; and f) the significance of the occupational role in one’s life. They measured work values using the *Work Values Inventory*. Subjects responding to this instrument rate on a 5-point Likert-type scale the importance of 45 value statements (e.g. Achievement, Altruism,

Aesthetics, etc.). Finally, they measured collectivism through the "I am" Twenty-Statement Test. This method asks respondents to complete 20 sentences that begin with "I am...." The authors content-analyzed the responses for social-based answers (e.g., "I am a New Yorker") vs. more individual answers (e.g., "I am smart").

Their results indicate that level of collectivism did not correlate with either occupational plans nor with values. Several flaws in the conceptualization and experimental design does not allow us to conclude that collectivism does not influence career behavior. The main experimental flaw is the sample used. Three-quarters of the sample was composed of White Americans (the authors refer to them as "European-American"). Variance in the individualism-collectivism construct was probably severely restricted by lack of representation in the sample from more collectivist cultures, as the United States is the most individualistic country in the world. The authors do not even report the mean and standard deviation for their individualism-collectivism measure, which is a suspicious omission, and does not allow the reader to determine if there was sufficient variance in the independent variable.

It is also unclear how a collectivist would differ from an individualist in terms of commitment to and knowledge about their chosen occupation. Presumably, even if they are choosing a career to satisfy their ingroup they may have even convinced themselves that this is the best career for them and their ingroup probably provided with much information on that particular

option. In fact, this may be the only career path that they have explored. For example, if a collectivist family wanted a student to study medicine. The collectivist may decide then to study medicine and become completely committed to that career path. But this would not result in differences in level of knowledge or even commitment to their newly chosen field. A much more likely scenario for a collectivist is that they may have considered fewer other careers or that their knowledge of other careers may be weak, because they probably depend more on the career choices approved by their ingroup.

Another flaw in the research design is the use of the “I am” – Twenty Statement Test, instead of the INDCOL (Individualism-Collectivism) scale designed by Hui (1988) or another validated scale. While there is some evidence supporting the validity of the Twenty Statement Test, it can be subject to interpretation. It also measures one dimension of individualism-collectivism – whether the person defines themselves as members of collectivities or as an individual. The authors point out that many participants appeared to get tired of the test and by the end of the twenty statements responded without paying attention to the task. For example, “I am running out of things to say” and “I am glad that this is over” are two statements that respondents wrote by the end. Furthermore, Cousins (1989) have criticized this scale for being inappropriate for Japanese because they are collectivists. The scale “isolates” the “I” from the context, thus making it artificial for true collectivists, who cannot think of themselves separate from the social and group context. The author argues that Americans, who are individualists, are

quite used to thinking about themselves separate from their context and they have no problem filling out the TST.

Finally, the authors categorized the work values according to their understanding of the field. Some of the categorizations demonstrate a lack of understanding of the individualism-collectivism construct. For example, prestige was categorized as an individualist-centered work value. However, a collectivist would also find prestige desirable in their work because this would be a way to make the family proud, a way to bring honor and financial resources to their in-group.

In conclusion, this study failed to advance an understanding on the effect of individualism-collectivism on career behavior. More research is warranted.

Individualism-Collectivism and Career Study:

Hypotheses and Measures

This study evaluates the effect of collectivism on career behavior, using a variety of different approaches. Additionally, this study will try to fill in one of the research gaps in the individualism-collectivism literature that has been pointed out earlier in this paper: whether different ethnic groups exhibit different levels and types of collectivism.

Career behavior was assessed by four distinct approaches: career development, career decision-making, family involvement in career decision making, as well as by presenting participants with vignettes that represent individualist or collectivist career situations. The career development approach was assessed by the career maturity construct, measured via Crites' CMI Attitude Scale. The career decision-making approach – which evaluates how people make career decisions – was measured by Harren's (1979) Assessment of Career Decision Making. The third approach asked participants about their family's involvement in their career choices. The questionnaire built by Tang et al. (1999) was used to assess the extent of family involvement. The fourth approach was through the Individualism-Collectivism Career Situations, which were purposely constructed to present individualist or collectivist situations that may occur when people are making career decisions. These types of situations are not included in other mainstream career behavior measures. The measures were chosen to reflect different approaches to the measurement of career behavior.

Hypotheses

Are Ethnic Minorities More Collectivist than Whites?

Research has suggested that ethnic minorities in the United States exhibit collectivist tendencies (Triandis et al., 1990; Triandis et al., 1984, Marin & Triandis, 1985; Cox, Lobel, & McLeod, 1991). It is expected that this sample will also demonstrate that ethnic minorities are significantly more collectivist than Whites. There is a need for additional research that indicates the level of collectivism of ethnic minority groups in the United States. It is hypothesized that each of the individual ethnic minorities, the Asians, the Hispanics, and the Blacks will be significantly more collectivist than Whites.

Hypothesis 1: Asian Americans, Hispanics, and Blacks will each score more collectivistic on Hui's (1984) INDCOL Scale than Whites

Do All Ethnic Minorities Exhibit the Same Type of Collectivism?

In addition to establishing whether the main ethnic groups are more collectivist than Whites, there is also a research need to establish if all ethnic groups exhibit the same *type* of collectivism. As put forth by Hui (1984) and Triandis (1995), collectivism is a target-specific, multi-faceted construct, which means that a person can behave collectivistic towards their family or their friend, but not towards their co-workers or their extended family/kin. Some individualism-collectivism scales tap this construct towards a specific target. For example, Wagner & Moch's (1986) scale taps collectivism towards the

work group and co-workers. Hui (1984) constructed the INDCOL scale to measure collectivism towards different groups (spouse, parent, kin, neighbor, friend, and co-worker), and it is the only scale that measures collectivism towards different targets. However, a research question that has yet to be answered is whether there are differences between ethnic minorities in the United States in the extent to which they are collectivist towards different target groups. Only one published study has come close to exploring this idea. As previously reviewed, Triandis et al., (1984) conducted an exploratory study with Hispanic and White participants using scenarios and found out that the Hispanic sample appeared to be more collectivist towards the family than the White sample, but that the White sample appeared to be more collectivist towards co-workers than the Hispanic sample. While the results are exploratory, they concluded that in terms of Hui's types of collectivism, Hispanics appear to be high on parent, kin, and friend collectivism. However, the shortcomings of this study is that it did not systematically study collectivism towards the different groups and it only explored individualism-collectivism with a Hispanic and White sample. They did not actually utilize Hui's INDCOL scale in determining participants' level of collectivism, they only utilized Hui's propositions to shed light on the results. The exploratory results suggest that there might be differences between ethnic groups in terms of how collectivist they are towards different targets.

Hypothesis 2: There will be differences between Asian Americans, Hispanics, and Blacks in terms of how much collectivism they display towards six target groups: parent, spouse, kin, friend, neighbor, and co-worker.

Is Individualism-Collectivism Related to Career Maturity?

Career mature individuals are those who are actively involved in career planning, who make career decisions independently, who act decisively regarding their career plans, who can compromise correctly between career plans and reality, and who have a realistic and positive orientation towards career decision making and work (Crites, 1978). Collectivism may be related to being involved in career planning, making career decisions independently, and acting decisively regarding career plans. Collectivists may be less likely than individualists to actively participate in career planning because they may rely more on their ingroup (their family and close friends) to provide career direction and to help them in their career decision-making process.

Collectivists are less likely to be independent in making career decisions and less likely to take responsibility for their career decisions because they will rely on the goals and plans indicated by their ingroup. Additionally, because collectivists may be more likely to follow a career path suggested by their ingroup, in order to satisfy their ingroup's goals, they may be less likely to get involved in exploring other career possibilities.

Career mature individuals are also characterized by being more decisive about their career plans. If there is a conflict between the individual's

career interests or preferred career choices and the family's career suggestions, the individual may experience indecisiveness. When the family exerts pressure to make a certain career decision, the individual may feel confused and undecided between that career choice and other choices. Career maturity measures tap into this indecision and conflict. Additionally, if certain career paths would interfere with the obligations towards the family (i.e., by limiting time to devote to the family or by having to move farther away from the family), the decision-maker may feel undecided. Thus we would expect collectivists to be less independent, less involved in their career planning, and less decisive, which translates into lower career maturity. The relationship between collectivism and career maturity should be an inverse linear relationship: the more collectivist the person is, the less career mature they will be.

Hypothesis 3: There will be a relationship between individualism-collectivism and career maturity: the higher the level of collectivism, the lower the level of career maturity.

Crites (1978) defined and built the Career Maturity Inventory instrument to tap five separate areas that comprise career maturity: Decisiveness, Involvement, Independence, Orientation and Compromise (the CMI will be described in greater detail in the Measures section). Each of these scales taps different constructs and it is possible that individualism-

collectivism is only related to some of these areas. As indicated above, it makes sense that it would be related to Independence, Involvement, and Decisiveness. It is important to measure the relationship between individualism-collectivism and each of the scales because, for example, a collectivist person may not be very independent from their family during the career decision-making process, but be very decisive about their choice because they want to follow the family's needs and suggestions. Therefore, the relationship between individualism-collectivism and each of these scales will be explored to further shed light on the ways in which individualism-collectivism is related to career maturity.

Is Individualism-Collectivism Related to Having a Dependent Decision Making Style?

The group-orientation of collectivists and the consideration of one's own decisions and actions for the ingroup, implies that the career decision making process would be shared. Collectivists have an interdependent orientation and it would be unlikely that they would rely solely on themselves throughout the decision-making process. It is hypothesized that collectivists depend more on their ingroups for making career decisions, and as such, will be more likely to have a dependent decision making style than individualists. Thus, we would expect that the relationship between collectivism and dependent decision making will be positive and linear: the more collectivist the person, the higher the dependent decision making score. Leong (1991)

found that Asian Americans have a more dependent decision making style than Whites. In his discussion he proposes that this finding may be due to the fact that Asian Americans tend to be more collectivist than Whites. Buck and Daniels (1985) also evaluated differences in decision making styles between Whites, Asians, Blacks, and Hispanics in the United States. Buck & Daniels (1985) did not find any difference between ethnic minorities and Whites in the Dependent scale. The discrepancy of the results may be due indeed to different levels of collectivism in the different samples. As previously explained, not all ethnic minorities are collectivist, and it is possible that Leong's sample may have been more collectivist than Buck and Daniels' (1985). Additionally, Buck and Daniels found that Whites were more dependent than Blacks in their decision making style. Again, it is possible that the Blacks in Daniels & Buck (1985) sample may not have been collectivists. This underlines the importance of actually measuring whether collectivism is related to career decision making, which is research that has yet to be done.

Additionally, no relationship is expected between individualism-collectivism and endorsement of the rational decision making style. A collectivist would have a rationale for choosing a career, it is based on the goals and needs of the family. It is likely that the ingroup has voiced an opinion that supports a certain career choice. The decision-maker would have to deliberately choose a career that satisfied their obligations towards their ingroup. Previous research with ethnic minorities suggests that no

differences have been found between ethnic minorities and Whites on responses on the Rational decision-making scale. Leong (1991) did not find significant differences between Asian Americans and Whites. Buck and Daniels (1985) found that Asian Americans scored higher than Whites in the Rational decision-making scale, but the difference was small.

Furthermore, there is no reason to suspect that either individualists or collectivists will have a more intuitive decision making style, and therefore we wouldn't expect individualism-collectivism to be associated with the Intuitive decision making scale. Neither Leong (1991) nor Buck and Daniels (1984) found any differences between Whites and ethnic minorities in the Intuitive scale.

Hypothesis 4a: There will be a relationship between individualism-collectivism and dependent decision making style: the higher the level of collectivism, the higher the likelihood of engaging in dependent decision making style.

Hypothesis 4b: Individualism-collectivism will not be related to having a rational decision making style.

Hypothesis 4c: Individualism-collectivism will not be related to having an intuitive decision making style.

Is Individualism-Collectivism Related to Family Involvement?

Research has indicated that family involvement influences the career choices of Asian Americans, an ethnic group considered to be collectivist

(Tang et al., 1999). In fact, Hui and Triandis (1986) have suggested that collectivists share outcomes and share a feeling of involvement in each others' lives. This involvement is probably extended to a major decision, such as choosing a career and developing for a career. Case studies and studies conducted on career aspirations, career development, career choices and career decision making suggest that the family appears to have a greater influence on ethnic minorities than on Whites (Lee, 1984; Clayton et al., 1993; McWhirter, 1997; Dillard & Campbell, 1981). It is hypothesized that an explanation for these differences is that the family has a greater involvement in collectivists' career behavior than in individualists' career behavior. We would expect to find a positive linear relationship: the higher the level of collectivism, the higher the level of family involvement.

Hypothesis 5: Individualism-collectivism will be related to family involvement: the more collectivist the person, the higher the likelihood that the family will have greater involvement in career behavior.

Is Individualism-Collectivism Related to Other Career Behaviors?

Researchers have also suggested that collectivism could influence career behavior in a variety of ways, including that the person experiences a strong sense of obligation towards the family, that the person is expected to take care of the family in the present and/or provide for the family in the future, that the family has already chosen a career for the person, that the

person might not want to move away from the family to pursue career opportunities, or that the person is taking their family's goals into consideration when making career decisions. A close look at the published measures that are being utilized in this study (CMI, ACDM, and Family Involvement), reveals that some of these ideas are tapped into, but not to their full extent. The CMI and ACDM include items such as, "I plan to follow the line of work my parents suggest" (CMI) "Choosing your occupation is something you have to do on your own" and (CMI) and "I rarely make a decision without talking to a close friend first" (ACDM), which relate to indecision and dependence on the ingroups. However, there seemed to be a lack of items that tap the specific career situations described above.

Specifically, collectivists may feel reluctant to move away from the family (Bowman 1995a), which may result in the person giving up career opportunities. The present author has witnessed an entire collectivist family move to a different town, after they decided that educational opportunities for one of its members required moving, and the family was unwilling to separate. This idea is not included in any of the published measures.

Researchers have also proposed that collectivists may be more inclined to continue a family business, which could result in them not being open to other opportunities (Leong and Serafica, 1995; Tang et al., 1999). This concept is explored in the Family Involvement scale, but not in the CMI or the ACDM.

Another idea, which is tapped to some extent in the Family Involvement scale but not tapped at all by the CMI and the ACDM, is that a collectivist family would see a career choice as a decision meant to be shared, because collectivists share outcomes (Hui and Triandis, 1986). As such, the family would suggest, choose or even pressure a family member to follow a certain career path that the group would find desirable (Leong and Gim-Chung, 1995). It is possible that the family's career preference may be in conflict with the individual's preference or even with suggestions from other groups in a person's life (peers, teachers, counselors, etc.). However, the published scales do not explore the possibility of a situation whether there is conflict between the family career suggestion and a different career path that the person wants to follow.

Another way in which collectivists may differ from individualists regarding career behavior is that their career development process may be directed at providing for one's family in the future (Leong & Chou, 1994; Leong and Serafica, 1995). This idea is not explored by any of the published measures. Additionally, researchers have proposed that collectivists may limit their career opportunities by having home and family responsibilities, such as baby-sitting (Fouad, 1995). Again, this possibility is not explored by any of the published measures.

In conclusion, collectivists may place more emphasis on fulfilling the goals of the family than on fulfilling individual preferences or interests (Leong, 1993; Leong and Serafica, 1995). The published career behavior instruments

measure important career behavior constructs that may be affected by a person's collectivist orientation, but do not measure many situations in which collectivists may differ from individualists. In order to explore whether individualism-collectivism indeed has an effect on the specific types of situations described above, fifteen career scenarios were constructed that depict individualist and collectivist career situations, such as conflict between the career suggested by the family and another career choice. These scenarios will be described in more detail in the Measures section.

Hypothesis 6a: The higher the level of collectivism, the more likely that participants will approve of situations displaying collectivist career behavior, and the less likely that they will approve of situations displaying individualist career behavior.

Hypothesis 6b: The higher the level of collectivism, the more likely that participants will indicate that situations displaying collectivist career behavior have occurred in their family, and the less likely that they would indicate that situations displaying individualist career behavior have occurred in their family.

Measures

Career Maturity Inventory (CMI) Attitude Scale

The Career Maturity Inventory (Crites, 1978) is "the most widely studied measure of career maturity and the measure most closely tied to a well-developed theory of...the construct of career maturity" (Betz, 1988, p.

81). It is regarded as the “most universally accepted and utilized career maturity instrument” (Naidoo, Bowman, & Gerstein, 1998). The CMI Attitude Scale, which is shown in Appendix A, assesses individuals' feelings and dispositions towards making a career choice and entering the workforce. The CMI Attitude scale measures five dimensions of the maturity of individuals toward career and career choices through 75 items (Crites, 1978). The first dimension is Decisiveness in career decision making, which Crites defines as the extent to which an individual is definite about making a career choice. A sample item of the Decisiveness dimension is “I keep changing my occupational choice.” The second dimension is Involvement in career decision making, which is defined as the extent to which an individual is actively participating in the process of making a choice. A sample item of the Involvement scale is “I’m not going to worry about choosing an occupation until I’m out of school.” The third dimension measured in the CMI is Independence in career decision making, which is defined as the extent to which an individual relies upon others in the choice of an occupation. A sample item is “I plan to follow the line of work my parents suggest.” The fourth dimension is Orientation to career decision making, which Crites defines as the extent to which an individual is task-oriented or pleasure-oriented in his or her attitudes toward work and the values that he or she places upon work. A sample item is: “I have little or no idea of what working will be like.” The final dimension measured by the CMI is Compromise in career decision making. It is defined as the extent to which the individual is

willing to compromise between needs and reality. A sample item of the Compromise dimension is "I spent a lot of time wishing I could do work I know I can never do."

The CMI is scored by assigning one point for each correct answer. The correct answers can be found at the end of each statement in Appendix A. A higher score reflects higher career maturity.

The CMI Attitude Scale has adequate internal consistency: a mean of .74 across grade levels (Crites, 1978). Since there are five distinct components in this scale, this level of internal consistency is deemed adequate (Healy, 1994). Test-re-test reliability is estimated at .71 for a one-year interval. This is sufficient, because career maturity would presumably increase over time and we would not expect the scores between the two testings to be the same. In fact, when maturational variance was taken into consideration, and the coefficient was corrected, it increased to .82 (Crites, 1978).

The internal consistency coefficients for the individual scales that compose the CMI are .67 for Decisiveness, .62 for Involvement, .71 for Independence, .72 for Orientation, and .50 for Compromise. All these scales have only 10 items each, while the Compromise scale, which has the lowest internal reliability, has only seven items. Internal reliability tends to increase with the number of items in a measure; the low reliability of the individual scales in comparison to the entire CMI measure, reflects that it is most reliable when taken as a whole. However, the individual scales can still

provide some additional insights into career maturity. Additionally, a factor analysis of the CMI revealed that there are indeed 5 factors, and all items correlated more highly with their own scale than with other scales. This supports the notion that the CMI is tapping into five areas of career maturity and that the items in each scale are indeed measuring their own scale.

Crites (1978) reports the mean scores of high school seniors for each scale. The Decisiveness mean was 5.77 (out of a possible maximum score of 10), the Involvement mean was 8.80 (out of a possible maximum score of 10), the Independence mean was 9.01 (out of a possible maximum score of 10), the Orientation mean was 8.14 (out of a possible maximum score of 10) and the Compromise mean was 5.69 (out of a possible maximum score of 7). These individual scale scores suggest that seniors are already scoring towards the top end of the Involvement and Independence scale. A couple of studies with college student participants that have used the shorter 50-item CMI Attitude scale (without the five subscales) have reported means in the thirties: 33.9 (Healy, O'Shea, & Crook, 1985) and 36.8 (Luzzo, 1993).

In general, studies conducted before and after 1978 support the validity of the CMI Attitude Scale (Healy, 1994). Crites (1978) explains in the *Theory and Research Handbook* that over 500 studies were conducted between 1965 and 1978, mostly on the Attitude Scale, supporting its validity. One of the key pieces of evidence for the validity of the CMI Attitude Scale is that total score rises with each grade level (Crites, 1978; Betz, 1988). This is

consistent with the developmental framework, which proposes that career development and career maturity increase with age and career stage.

Evidence for the content validity of the scale is based mostly on the fact that the items were derived from the central concepts of the career development literature (Betz, 1988). Evidence for the construct validity of the scale comes from studies that show that the scale does not demonstrate response bias and, more importantly, studies that show that the scale correlates with other variables that it should correlated with, such as self-confidence, achievement, autonomy and endurance (Crites, 1978). It also correlates with career variables such as realism of occupational aspirations, career decisiveness, certainty about and commitment to a career choice (Crites, 1978). Additionally, several studies have found that there is a strong significant relationship between the CMI Attitude Scale and congruence between Holland's personality and environment (Crites, 1978; Walsh & Osipow, 1976). Furthermore, studies that used a multi-trait, multi-method technique have shown that the Attitude Scale demonstrates convergent and discriminant validity (Stowe, 1985; Luzzo, 1993).

Evidence for the criterion validity comes from studies that have found that the CMI Attitude scale correlates positively with outcome variables, such as GPA, persistence in college, success in vocational training, vocational success, and career satisfaction (Crites, 1978). The attitude scale also correlated significantly with a composite of job satisfaction, employee's certainty of having selected the best job, job earnings and job stability, for a

sample of nursing students and mechanic students (Crites, 1978). Crites' research also suggests that career counseling and career education programs can raise career maturity.

The CMI is suitable for the population of college students that will be the participants in this study (Crites, 1974). It has been used in repeated research with college students (Naidoo, Bowman, & Gerstein, 1998; Davis & Horne, 1986). Research indicates that career maturity attitude scores rise with age and with employment experience for the college student population, which support the developmental nature of the career maturity construct (Healy, O'Shea, & Crook, 1985). Additionally, Luzzo (1993) used a multi-trait, multi-method matrix to gather convergent and divergent validity evidence for the CMI Attitude scale with the college-level population.

After reviewing the technical manual, the published research on the CMI Attitude scale, and earlier published reviews, Healy (1994) concluded that:

"The introduction of the CMI in 1973 was groundbreaking, and it has served the profession well over 20 years. Subsequent studies confirm that the Attitude Scale provides information useful in studying adolescents' development" (p. 272).

When considering all the evidence taken together, the studies provide support for the validity of the CMI Attitude Scale.

The Assessment of Career Decision Making (ACDM)

The Decision Making Styles scales of the ACDM were developed by Harren (1979) to assess the strategy that an individual uses in making career decisions. There are three scales, Rational, Intuitive, and Dependent, and each corresponds to the decision making style that Harren has proposed. The ACDM Styles scale has 30 items, ten for each style. It can be found in Appendix B. Scoring is simple, each "true" response scores one point. Appendix B also shows which items are part of the Rational scale (R), which items are part of the Intuitive scale (I) and which items are part of the Dependent scale (D).

The ACDM Style scales appear to have adequate reliability. Buck and Daniels (1985) report that the internal consistency of the Rational scale is .84, .71 for the Intuitive scale and .77 for the Dependent scale. Thus, it appears that each scale is measuring one construct. The test-retest reliability of the Rational scale for a two-week interval is .76, .81 for the Intuitive scale, and .79 for the Dependent scale.

According to the ACDM Manual, evidence for the content validity of the Decision Making Style scales comes from the fact that it is based on the taxonomy empirically developed by Dinklage to categorize students according to their decision making styles. The construct validity evidence for these scales is much more impressive though. The scales are correlated significantly with other career development and decision making measures. Jepsen and Prediger (1981) found that three of Super's Career Development

Inventory scales were positively correlated with the Rational scale (range of .23 to .29), and negatively correlated with the Intuitive and Dependent scale (range of -.10 to -.29). These researchers also found that the Rational scale correlated low but positively with other career development measures, including the CMI, the Career Skills Assessment Program, the Career Decision Scale and the Assessment of Career Development. The range of correlations between the Rational scales and the various career development measures ranged from no correlation (.00) to .24. They also found that the Intuitive scale correlated mostly negatively with those career development measures. The range of correlations was between .02 to -.32. The Dependent scale correlated negatively with all the career development measures, ranging from -.07 to -.33. These correlations signal that the scales are related to other career development constructs, however, because the correlations are moderate they also show that these scales are tapping into different constructs than other career development measures. Additional evidence for divergent construct validity is the fact that the Decision Making Styles scales were found to be unrelated to cognitive and verbal measures (Harren, 1979, cited in Buck and Daniels, 1985).

Further evidence for the construct validity of the ACDM Decision Making Scales comes from a study that factor analyzed the scales (Phillips, Friedlander, Pazienza & Kost, 1985). The ACDM Decision Making Styles scales were factor analyzed on a sample of 819 undergraduates and found that three factors were retained that were clearly defined. After orthogonal

rotation, the factor structure that emerged corresponded to the three Decision Making Style scales. The factor pattern was similar for males and females.

The manual for the ACDM quotes a number of articles that found support for the criterion validity of the Decision Making Styles scales. Warren (1982) conducted a study on 215 undergraduates and found that the Rational scores correlated positively and significantly with self-reported satisfaction with school and with certainty about occupational goal and satisfaction with occupational goal. Sarnoff and Remer (1982) found that the Rational scale was significantly and positively related (.48) to the number of career alternatives that undergraduates generated during a career planning program. Supporting Harren's proposition that a Rational decision-making style is more effective than a Dependent or an Intuitive, the researchers also found that the Intuitive and Dependent scores correlated negatively with the number of alternatives generated (-.21 and -.33, respectively). This means that a higher score in the Dependent scale or in the Intuitive scale was associated with a lower number of career alternatives generated.

The ACDM scales are a useful tool for studying special university populations. Phillips, Strohmer, Berthaume, and O'Leary (1983) utilized them to study the relationship of career maturity and decision-making styles of disabled and disadvantaged college students. The framework they followed in this study has been praised by other researchers as being "excellent" (Fouad, 1995). They report that disabled college students had a mean score of 7.91 on the Rational scale, 4.21 on the Intuitive scale and 3.15 on the

Dependent scale. Disadvantaged college students had a mean of 7.86, 4.45, and 2.45 on the Rational, Intuitive and Dependent scales, respectively.

Leong (1991) also utilized the ACDM Styles scales, in this case, to assess Asian American and White college students' career decision-making styles. He reports that Asian Americans had a mean of 7.92 on the Rational scale, 4.33 on the Intuitive scale and 4.00 on the Dependent scale, while Whites had a mean of 7.54 on the Rational scale, 4.59 on the Intuitive scale, and 3.15 on the Dependent scale.

Family Involvement in Career Decision Making

Family involvement in career decision making will be assessed via the seven-item Family Involvement Questionnaire developed by Tang et al. (1999), which can be found in Appendix C. The authors used the scale to assess family involvement in Asian Americans. All items were reversed-scored so that the higher the score, the higher the level of family-involvement.

Tang et al.'s (1999) study found that the average mean score in the family involvement scale with their Asian American population was 3.47. Since three is the midpoint this mean shows that, on average, the Asian-Americans indicated moderate family involvement.

The reliability (internal consistency) of the questionnaire was .59. The less than ideal reliability may be due to the fact that it is a relatively short scale, only seven items. The population in Tang et al.'s (1999) study is comparable to the population in this study, they were all college students.

Individualism-Collectivism (INDCOL) Scale

The INCOL Scale was developed specifically to measure collectivism as a psychological construct, in other words, at the individual person level (Hui, 1988). It takes the approach that collectivism is a multi-faceted construct, rather than being a unitary disposition. It is composed of 63 items that tap collectivism towards different groups: parents, friends, kin, co-workers or classmates, spouse, and neighbor. It is shown in Appendix D. The response scale is a Likert-type 5-point scale.

The INCOL scale was validated using a multi-method approach (Hui, 1988). It was first given to a group of American and Chinese (from Hong Kong) university students. Items that scored in the correct direction of what would be expected of the samples were kept and the other ones were discarded. The scale was further refined and the response scale was changed from a 6-point response scale without a neutral center to a 5-point scale with a neutral center. Then, the items were administered to a group of 45 American students and a group of 178 Chinese students from Hong Kong. The means by culture and gender can be found on Table 1. As this Table shows, most means are between two and three, that is clustered around moderate individualism. The exception is Americans' display of collectivism towards their parents. Students from the United States displayed the most collectivism towards their parents, followed by their kin. They displayed the most individualism towards the spouse ingroup, followed by the co-worker ingroup. In contrast, the Hong Kong students displayed the most collectivism

towards the co-worker and friend ingroups and the most individualism towards the neighbor and kin ingroups.

The reliability for each scale was determined with the pooled American and Hong Kong samples. The test-retest reliabilities were mostly in the .7 range: spouse scale was .62, parent scale was .78, kin scale was .71, neighbor scale was .73, friend scale was .79 and co-worker scale was .71. The internal consistency coefficients for the INDCOL scales tended to be lower. The alpha coefficients are: .46 for the spouse scale, .76 for the parent scale, .72 for the kin scale, .70 for the neighbor scale, .47 for the friend scale and .58 for the co-worker scale. Hui suggested that the spouse reliability was lower because many students do not have direct knowledge of marriage. Unfortunately, Hui (1988) does not report the reliability for the entire INDCOL scale.

In the third step of the validation process, the scale was sent to a group of 60 colleagues in various countries in Africa, Asia, Australia, Europe and the Americas. Forty-one researchers responded, eighteen were from individualist areas and twenty-three were from collectivist areas. The t-tests between the collectivists and the individualists show that there were significant differences between the 2 groups in the INDCOL scale. Furthermore, almost all items discriminated between individualists and collectivists. The scale was also acceptable to researchers from the different cultures. Other scales (such as the Twenty-Statement Test) have been criticized for not being sensitive to other cultures (Cousins, 1989). The scale

is appropriate for use with college students because it was validated with college students (Hui, 1988).

For this study, changes were made to Hui's scale in order to make it easier to understand and to avoid bias. To avoid gender bias, the items "I have never told my parents the number of sons I want to have" and "The number of sons my parents would like me to have differs by _____ from the number I personally would like to have" were changed to "I have never told my parents the number of children I want to have" and "The number of children my parents would like me to have differs by _____ from the number I personally would like to have". Additionally, the item "I have never loaned my camera/coat to any colleagues/classmates" was changed to "I have never loaned a personal item (e.g., camera, coat, etc.) to any colleagues/classmates" to make it more applicable. Item #58 originally said that the food was "unpalatable". This word may be difficult to understand and it was changed to "the food was not good." Finally, the response scale was reversed from a Strongly Disagree-Strongly Agree format to a Strongly Agree-Strongly Disagree format. This was done to make it easier for the reader to follow the scale.

For scoring, the items that were reversed-scored are marked with an asterisk in Appendix D. Lower score reflect collectivist responses, whereas higher scores reflect individualist responses.

Background Information Form

A Background Information form, which can be found in Appendix E, will be used to collect data in order to describe the sample and also to collect information to be used as control variables. The Background Information form asked participants their names, their ethnic background, their class year, their gender, their age, their generation level, and whether they have made a career choice, and if so, what is the career that they have chosen. The form also included questions derived from Hollingshead's (1975) Four Factor Index of Social Status regarding their parents' occupations and educational level. Hollingshead's Four Factor index was chosen to measure SES because of its widespread use and because it allows the measurement of different family situations (Gottfried, 1985). Hollingshead's measure can assess the SES of a family whose head is a single man or a single woman, a male or female head of household, or a family where both the husband and the wife work. Other measures estimate socioeconomic status based solely on the head of the household; that is they assume there is one breadwinner (Gottfried, 1985). Gottfried (1985) conducted an analysis of Hollingshead's Four Factor Index and other SES measures (revised Duncan Socioeconomic Index and Siegel Prestige Index) and found that they all produced similar, valid and reliable results.

Individualism-Collectivism Career Situations

Career researchers have proposed that collectivism can affect career behavior in a variety of ways. The underlying idea is that career behavior would be treated by collectivists as any other decision; career behavior would satisfy the family's goals, needs, and obligations towards the family.

Researchers have suggested a variety of ways in which collectivists would behave differently from individualists regarding career behavior, however many of these situations and behavior are not included in any published measure. Thus, it became necessary to develop an instrument that would explore more specific situations in which collectivists would differ from individualists. To tap these ideas, the stimuli chosen were scenarios to which participants could respond whether they approved of the situation or whether the situation was likely to occur in their family. The main purpose of the Individualism-Collectivism Career Situations is to gather additional information on how collectivists may differ from individualists using a more exploratory approach, than the published measures.

Fifteen situations that represent individualist or collectivist scenarios were constructed and can be viewed in Appendix F. The situations were based on ideas put forth by career researchers and which have already been discussed in this literature review. The ideas that the situations cover include: continuing the family business (Leong and Serafica, 1995), taking care of parents in their older age (Leong and Chou, 1994), taking care of siblings or other family members (Fouad, 1995), being unwilling to move away from the

family (Bowman, 1995a), family pressuring the individual to follow a particular career path (Leong and Gim-Chung, 1995), the importance of ingroup's goals and needs over the individual's goals and needs (Hui and Triandis, 1986), and sharing of outcomes (Hui and Triandis, 1986).

After each scenario is presented, the participant is asked to indicate on a 5-point Likert scale whether they approve what the character in the situation is doing, and how likely it is that a similar situation would occur in their family. One or both of these scales will be chosen after the pilot data is analyzed, based on reliability. Out of the fifteen situations, nine show the character behaving collectivistically (Situations 1, 5, 6, 7, 8, 11, 12, 13, 15) and six situations show the character behaving individualistically (Situations 2, 3, 4, 9, 10, 14). The scoring for the individualistic scenarios is reversed.

Pilot of the Individualism-Collectivism Career Situations

The fifteen situations were piloted. The pilot had five main goals: to choose the best scale, to determine the reliability of the instrument, to check that the situations conveyed the individualism or collectivist themes clearly, to assess possible group differences and to allow participants to express feedback on the measure.

Pilot Participants

Participants were 78 Baruch College students, who were taking an introductory psychology class during the summer. Participants were given research credit for their participation in the study.

Pilot Surveys

The pilot materials were the Individualism-Collectivism Career Situations shown on Appendix F and a second survey, shown on Appendix G that asks participants to indicate whether they think each scenario depicts the character behaving in a collectivist or an individualistic manner. This second survey ensures that the scenarios are written clearly and that the participants can distinguish the collectivist scenarios from the individualistic scenarios. Additionally, participants were asked whether they think the wording is clear and whether they have any suggestions for improving them. A short background information form asking their class year, age, whether they have selected a major, their gender, ethnic background, and generation level was also included.

Pilot Procedure

Participants were welcomed to the study and given the consent form and the surveys. The experimenter read the consent form and asked participants if they have any questions. They were given instructions to complete the first section (the situations) and to not continue to the next

section until the instructions for that section were given. Once everyone finished the first section, composed of the situations, subjects were debriefed. They were explained that the experimenter is in the process of building an instrument that can distinguish people who are collectivist and those who are individualist, when making career decisions. The definitions of collectivists and individualists that were included in the Pilot instrument were read aloud. Participants were asked if they had any questions.

Pilot Results

Reliability and Scale Choice

Reliability was measured by the alpha method of internal consistency. Conceptually, internal consistency estimates the correlation between the participants' actual scores and the scores on a theoretical parallel form of the measure. The less amount of error measurement present, the higher the reliability. In actuality, internal consistency methods divides the test into components and assumes that if someone scored high on one of its components, that they would also score high on another component. If this occurs, then the test is presumed to have high reliability. The alpha method treats each item as a component. The internal consistency reliability of the fifteen items utilizing Scale A ("To what extent do you approve what the character is doing?") was .60, while the reliability for the fifteen items utilizing Scale B ("How likely it is that a situation similar to the character's would occur in your family?") was .20. This indicates that Scale A has much better

reliability. While Landy (1989) indicates that a reliability of .7 or higher is considered acceptable, lower coefficients are often found in the literature (Santos, 1999).

The two scales combined have a reliability of .62, but they are also highly correlated ($r = .53$, $p < .001$). This suggests that including both scales would be repetitive and would only increase reliability by .02. Therefore, the situations with the extent of approval scale were more reliable than the likelihood of occurrence scale and will be utilized in the complete study. Hypothesis 6b, which was based on the less-reliable Scale B, was eliminated, and Hypothesis 6a will be tested using Scale A. Unfortunately, a second form of reliability, such as test-retest, could not be determined because the pilot was conducted with summer students, who need to complete their research participation requirement in only a few weeks.

Item Analyses

Means, range, and standard deviations for each item are reported on Table 2. Most items had a range of 1 through 5, indicating that all scale options were chosen by at least one person, which reflects that all answers were plausible. Only items 9 and 14 had a range of 1 through 4.

Do the Items Portray Individualism and Collectivism Situations?

The frequencies for the second part of the survey, which asked participants to read the situations and indicate whether they thought the

character in each situation is behaving in a collectivist or an individualist manner, can be found on Table 3. At least 90% of all participants correctly identified in thirteen out of fifteen items whether the character was behaving individualistically or collectivistically and 83% of all participants correctly identified item 10 as portraying the character behaving individualistically. Thus, most items were clearly depicting a character behaving in either a collectivist way or an individualist way.

Item 12, however, caused some confusion. Only 44% of the participants indicated that the character was behaving collectivistically. In the feedback section a couple of people mentioned that the main character in this situation (Audrey) was acting more individualistic, but her family was acting more collectivistic. The focus of the situations is on the main character, because he/she is making the career decision and it does appear that the main character is behaving individualistically. Therefore, item 12 will be treated as portraying an individualistic career situation and will be reverse-scored.

The Individualism-Collectivism Career Situations were scored as a mean of the fifteen situations. The highest score possible would be a 5 and the lowest score possible would be 1. The higher the score, the more collectivist are the participant's responses. The scores ranged from a mean of 1.53 to 3.33. The mean of the Individualism-Collectivism across all participants, with Item 12 scored as individualistic, is 2.38 and the standard deviation is .41.

Group Differences

Various analyses of variance were conducted to test for differences in scores due to gender, ethnic background and generation level. In addition, a correlation analysis was conducted to if the Individualism-Collectivism Career Situations are related to age.

Table 4 shows the means and standard deviation by gender group. As Table 5 shows, there were no significant differences between males and females, ($F_{(1, 75)} = 3.365$, $p = .071$). However, with a larger sample this difference may have been significant, and thus it is important to test for gender differences whenever using the Individualism-Collectivism Career Situations in the future.

The means and standard deviation for each ethnic group are shown on Table 6. Table 7 shows the results of an ANOVA testing for group differences between ethnic groups. There were significant differences between ethnic groups ($F_{(3, 73)} = 3.275$, $p = .026$).

Post-hoc contrasts were performed to determine where these significant differences are found. The test for homogeneity of variance was non-significant (Levene Statistic = .061, $p = .980$), demonstrating homogeneity of variance. The Tukey HSD Contrasts can be found on Table 8. The Asian American mean was significantly different from the Hispanic mean. Asian Americans scored the most collectivistically on the Individualism-Collectivism career Situations, while Hispanics scored the most individualistically.

Because only one person checked "Myself, my parents and my grandparents were born in the United States" and only six participants checked "Myself and my parents were born in the United States, but one or more of my grandparents were born outside the United States" these two categories were combined for the analysis into one category called "Self and parents born in the United States." The means and standard deviations for the different generation levels can be found on Table 9, and the ANOVA results can be found on Table 10. The results indicate that there are no significant differences between the generation levels ($F_{(2, 75)} = 1.516, p = .226$).

The mean age of participants in the study is 25.35, and the standard deviation is 7.07. A correlation analysis was conducted to determine if age is associated with the Individualism-Collectivism Career Situations. The correlation between age and the Individualism-Collectivism Career Situations was $-.095$ ($p = .410, n.s.$). This demonstrates that age and the Individualism-Collectivism Career Situations are not significantly correlated.

Pilot Discussion

To conclude, the Individualism-Collectivism Career Situations have adequate reliability when the approval scale is used. The items appear to be clearly written and most participants agree that the collectivism items reflect the characters behaving collectivistically, while the individualism items portray the character behaving individualistically. Thus, the items seem to be

measuring collectivist and individualist situations. The only exception was item 12, which will be treated as an individualistic item. The items also appear to have adequate range. Neither gender, generation level, nor age differences resulted in any score differences. Significant differences were only found in terms of ethnic groups; Asian Americans scored more collectivistically than Hispanics. The final version of the Individualism-Collectivism Career Situations, which was utilized for the full study can be found on Appendix H.

Method

Participants

Participants were 231 college students recruited through the Baruch Psychology Subject Pool. Participants were given research credit for their time. Baruch has a diverse student body; the sample was very ethnically diverse, and included Whites, Asians, Hispanics, and Blacks.

Procedure

Subjects were welcomed into the study and were told that the study is about understanding the career behavior of college students. Participants were given a consent form, informing participants what the study is about and indicating voluntary participation and anonymity of results. They were also given six surveys: 1) Background Information form, 2) INDCOL scale, 3) CMI Attitude Scale, 4) ACDM Decision Making Scales, 5) the Family Involvement

scale, 6) the Individualism-Collectivism Career Situations. The surveys were paginated in a random order. Participants were debriefed and told that if the career questions had made them think about their careers they should contact the Career Development Center (CDC) at Baruch and talk to a career counselor. Phone numbers and web-addresses were provided for the CDC, as well as the experimenter's phone number and the Baruch's Research Office phone number, in case of future questions.

Data Analyses and Results

Sample Demographics

The gender and ethnic composition of the sample is shown on Tables 11 and 12, respectively. Approximately 59% of the sample is female and 41% is male. Asians are the group with the largest representation and Hispanics are the group with the smallest representation.

Table 13 displays the generation level composition of the sample. Roughly half of the sample was born outside the United States and 37% had parents born outside the United States. Table 14 shows the mean age and SES. The mean age is approximately 20 years and the mean SES is middle-class².

Table 15 indicates that 55% of the participants in the sample indicated that they have chosen a career. The career choices of those who indicated that they have chosen a career can be found on Table 16.

Outliers

The INDCOL, CMI, ACDM, Family Involvement and Career Situations scales were checked for outliers by dividing the skewness statistic of each by the standard error. Those that had a standardized skewness of over 2.50 were looked at more closely through SPSS Explore graphs to determine

² In order to facilitate interpretation, Hollingshead (1975) grouped scores into five 'social strata' categories. Scores of 8-19 fall into the lowest category (unskilled laborers), scores of 20-29 fall into the second-lowest (semiskilled workers), scores of 30 – 39 fall into the medium category (clerical and sales workers), scores of 40 – 54 fall into the second-highest category (medium business and minor professional) and finally, scores of 55 - 66 fall into the highest category (major business and professional).

whether the high skewness was only due to a 'long-tail' or whether there were outliers. The ACDM Rational scale and the ACDM Dependent scale each had a standardized skewness of over 2.5. Through the graph, it was possible to determine that the ACDM Dependent scale did not have any outliers. The ACDM Rational scale had outliers; two participants scored very low on it. The question that emerged is whether these scores were real scores or whether the participants may not have been paying attention or did not understand the measures. To determine this, the scores on the Dependent and Intuitive scales for these two participants were looked at closely. Both participants scored very high on the Intuitive scale and a little below average on the Dependent scale. This information suggested that those participants' low scores on the Rational scale do reflect that they have a low Rational orientation and high Intuitive orientation. Because the scores appear to be valid, they were kept in the analyses.

Descriptive Statistics of Measures

The means, ranges, and standard deviations of all measures used in this study are displayed on Table 17.

Table 18 shows the reliability coefficients for the measures in this study. The CMI reliability was .77, which is slightly higher than the one reported by Crites (1978). The INDCOL scale had a reliability of .68, which cannot be compared to Hui's original study, because he did not provide the reliability of the general scale in his study. The ACDM Rational and

Dependent scales had good reliabilities in the .7 range, that are comparable to the ones reported by Buck & Daniels, but the Intuitive scale reliability of .43 is lower than the one in Buck and Daniels' sample. The reliability for the Family Involvement scale with this population was .68, which is higher than the one quoted by Tang et al. (1999) in their original study. The reliability of the Career Situations, .64, is comparable to the reliability coefficient from its pilot. Overall, the reliabilities for the subscales (INDCOL subscales and some of the CMI subscales) were lower than the ones reported in the original studies.

Table 19 shows the correlation matrix for the CMI and its subscales. All the subscales are significantly correlated with each other, except for Independence and Decisiveness. Decisiveness and Orientation to Career Decision-Making had the largest correlation with CMI, indicating that they contributed the most to the CMI's variance.

Table 20 shows the correlation matrix for the ACDM scales. The ACDM Rational scale is significantly correlated with both, the Intuitive and the Dependent scales. However, the Intuitive and Dependent scales were not correlated with each other.

The correlation matrix for INDCOL and its subscales can be found on Table 21. About half of the correlations were significant. The Spouse subscale, which also had the lowest reliability, did not correlate with any of the other subscales and contributed the least to the INDCOL scores. The

parent and the kin subscales had the highest correlation with the total INDCOL scores.

How correlated are the career measures? Table 22 shows the correlations between all the career measures used as dependent variables in this study. Most career measures are correlated with each other. The only measures that were not correlated with each other were the ACDM Dependent and Intuitive scales (as mentioned earlier) and the Career Situations with the Dependent and Intuitive Scales. The highest correlation, over .5, was found between the CMI and the ACDM Dependent measures.

INDCOL Correlates and Descriptives

Before delving into the hypotheses that explore the relationship between individualism-collectivism and ethnicity, and those that explore the relationship with career development, it is important to understand how individualism-collectivism might be related to other demographic variables. The correlation between INDCOL and age was .042, which is not significantly different from zero ($p = .53$, n.s.). The correlation between INDCOL and SES is $-.111$, which is also not significant ($p = .096$, n.s.).

Analyses of variance were conducted to determine possible differences in INDCOL scores between different groups. THE ANOVA comparing males ($M = 2.85$) and females ($M = 2.84$) indicated that there is no difference between their INDCOL scores ($F_{(1,229)} = .06$, $p = .81$). In fact, the INDCOL means are almost identical for men and women. There were no

differences either in scores between different classes: Freshmen ($M = 2.82$), Sophomores ($M = 2.93$), Juniors ($M = 2.89$) and Seniors ($M = 2.89$) all had comparable INDCOL means ($F_{(3,226)} = 2.14$, $p = .10$).

Means in individualism-collectivism between different generation levels were also very similar. Those who were born outside the USA had an INDCOL mean of 2.85, those born in the USA but with parents born outside the USA had a mean of 2.86, and those who were born in the USA along with their parents had a mean of 2.80. These means are very similar and are all towards the mid-point of the scale. The ANOVA indicated that there are no significant differences between the generation levels ($F_{(2, 226)} = .55$, $p = .58$).

The last question explored is whether there is a relationship between individualism-collectivism and having chosen a career. Those participants who indicated that they have chosen a career had a mean INDCOL score of 2.83, whereas those who have not yet chosen a career had an almost identical mean of 2.86. This relationship is not significant either ($F_{(1,229)} = .66$, $p = .42$).

In conclusion, neither age, SES, gender, generation level, class year, nor making a career choice had any impact on INDCOL scores for this population. INDCOL is not correlated with any of the demographic variables.

Hypothesis 1

Hypothesis 1 proposed that Asian Americans, Hispanics, and Blacks would be more collectivist than Whites. Figure 2 depicts a Box Plot of the

individualism-collectivism scores of the ethnic groups. The box represents the 25th to the 75th percentile score in each category, also referred to as the inter-quartile range. The middle line on the Box Plot represents the 50th percentile. The 25th, 50th and 75th percentile can also be found on Table 23, for a more precise reading. The lines coming out of the box in Figure 2 represent the 5th to the 95th percentile, and the bubbles represent outliers. There was one outlier in each of the White, the Black and the Hispanic groups.

The figure suggests that the most homogeneous group is the White group. The Black and the Asian groups are the most spread out; they have the most variability in scores. The figure also illustrates that there is overlap between the groups, in particular between the White, Black, and Hispanic groups.

As Table 24 shows, the individualism mean for Whites is lower than the means for each of the other Ethnic groups, meaning that Whites scored more collectivistically than either Asian Americans, Hispanics or Blacks. The group that scored the most individualistically were the Asian-Americans. The overall ANOVA, shown on Table 25, is significant, ($F_{(2, 224)} = 2.74, p < .05$), and thus demonstrates that there are significant differences between groups.

Post-hoc contrasts were done to determine where the significant differences lie and they are displayed on Table 21. Because the Levene Test indicates homogeneity of variances (Levene = 1.539, $p = .205$) the Tukey HSD test was used for the contrasts. The only contrast that is significant is

the difference between Whites, the group that scored the most collectivistically, and Asian-Americans, the group that scored the most individualistically.

An effect size analysis was conducted between the individualism-collectivism mean of Whites and that of the other ethnic groups. Effect sizes help illustrate group differences when the raw scores are not well understood. In this case, what does it mean that Whites had an INDCOL mean of 2.77 and Asian Americans had a mean of 2.89? The mean score for each group is towards the mid-point, and leaning a little towards collectivism. But how big is the difference? The difference between the Asian American and White means is .61 INDCOL standard deviation units. This means that Asian Americans responded to the survey between a half and two-thirds of a standard deviation more individualistically than Whites. Because the effect size is in standard deviation units, one can conclude that the average Asian American (the one at the 50th percentile) scored more individualistic than 73% of Whites. The difference between the Hispanic and White INDCOL means is .44, which is one-third to one-half of a standard deviation. This means that the average Hispanic (the one at the 50th percentile) scored more individualistic than 67% of all Whites). The difference between the Black and White means is .34, which is one-third of a standard deviation. This means that the average Black scored more individualistic than 63% of all Whites.

However, it needs to be emphasized that the difference in scores between ethnic groups is rather small. All groups' scores were concentrated

around the middle of the INDCOL scale and there was little variability within groups. Most participants scored around the middle (2.5 – 3.5).

Hypothesis 2

Hypothesis 2 proposed that there would be differences between ethnic groups in terms of the degree to which they espouse collectivism towards different target groups: parent, spouse, kin, neighbor, friend, and co-worker. This hypothesis was tested through six separate ANOVAs, one for each target group (parent, spouse, kin, neighbor, friend, and co-worker).

As shown on Table 27, the collectivism mean towards the spouse group is very similar for all ethnic groups. All the means were similar. The Levene's Statistic for testing homogeneity of variance is 1.23 ($p = .30$), which indicates that there is homogeneity of variances across groups. The ANOVA analysis, shown in Table 28, indeed indicates that there were no significant differences between ethnic groups in terms of the degree to which they espouse collectivist values towards the spouse ingroup ($F_{(3, 224)} = .76, p = .52$).

Table 29 shows the collectivism mean for each of the ethnic groups towards the parent ingroup. On average, the group that scored the most individualistic was the Asian-American group ($M = 2.74$), while Hispanics scored the most collectivistically ($M = 2.49$). There is homogeneity of variance between groups, as shown by the non-significant value of the Levene's Statistic (Levene = 1.099, $p = .350$). Table 30 confirms that the

ANOVA was significant, indicating that statistically significant differences are found between ethnic groups in terms of individualism-collectivism displayed towards their parents ($F_{(3, 224)} = 5.76, p < .001$).

Post-hoc contrasts were conducted to find out where these significant differences lie. Tukey's HSD analysis is shown on Table 31. It denotes that the mean for Asian Americans is significantly higher, that is more individualistic, than the mean for each of the other groups, Whites, Blacks or Hispanics. No other contrasts were significant. Therefore, Asian Americans exhibited the least amount of collectivism towards their parents of any group.

All ethnic groups displayed similar levels of individualism-collectivism towards the kin (extended family) ingroup. The means can be found on Table 32. Whites scored the most collectivistic ($M = 2.60$), and Asian Americans scored the most individualistic ($M = 2.77$), but the scores are comparable. A homogeneity of variance test revealed that the Levene statistic was 1.613 ($p = .19$), which indicates that there is homogeneity of variances across groups. The ANOVA table (Table 33) shows that there are no significant differences between groups ($F_{(3, 224)} = 1.37, p = .25$). Thus, all groups espouse about the same level of collectivism towards their extended families.

Table 34 shows that the means for collectivism towards the neighbor ingroup are comparable between all ethnic groups. On average, the responses of the Hispanic group were the most individualistic ($M = 3.46$), while the responses from the Black ($M = 3.19$) and the White group ($M = 3.20$) were the most collectivist. There is homogeneity of variance across

ethnic groups (Levene's Statistic = .982, $p = .40$). As shown on Table 35, the ANOVA analysis indicates that there were no significant differences between ethnic groups at the .05 level ($F_{(3, 224)} = 2.19$, $p = .09$). Hence, it can be said that the differences in individualism-collectivism between ethnic groups toward neighbors are not statistically significant.

Table 36 shows the individualism-collectivism mean towards friends. The group that responded the most individualistically were the Hispanics ($M = 2.66$), and the group that responded the most collectivistically were the Whites ($M = 2.43$). Once again, the homogeneity of variance assumption is tenable (Levene Statistic = .35, $p = .79$). The overall ANOVA, displayed on Table 37, indicates that there are significant differences between groups ($F_{(3, 227)} = 3.23$, $p < .05$).

Tukey's HSD Post Hoc analyses were conducted to determine where the group differences are found. These contrasts can be found on Table 38. Indeed, the only significant contrast is the one comparing the Hispanic to the White mean. It can be concluded that Whites demonstrate a higher level of collectivism towards their friends than Hispanics.

The last of Hui's INDCOL subscales is individualism-collectivism towards co-workers. Table 39 shows that, on average, Blacks responded the most individualistic ($M = 2.96$) and Whites responded the most collectivist ($M = 2.75$), closely followed by Hispanics ($M = 2.78$). The Levene's Test of Homogeneity was almost significant, indicating that variances are close to being heterogeneous (Levene = 2.628, $p = .051$). The overall ANOVA was

significant (Table 40), indicating that there are significant differences between groups ($F_{(3, 224)} = 3.10, p < .05$). Contrasts were conducted, using the Games-Howell test, which assumes unequal variances. The only post-hoc significant differences were found between Blacks and Whites. This indicates that Blacks hold values that are more individualistic towards co-workers than Whites. All contrasts can be found on Table 41.

Hypothesis 3

Hypothesis 3, which proposed that the higher the level of collectivism the lower the level of career maturity, was analyzed via a multiple linear regression. The Career Maturity Inventory (CMI) score was the dependent variable. The demographic variables, which are age, gender, SES and generation level, were forced into the regression in order to avoid possible confounds. After the demographic variables were entered, the forward method was utilized to determine if individualism-collectivism and/or the interaction between individualism-collectivism and any of the demographic variables predicted career maturity. The forward method enters one variable at a time. It first enters the independent variable that is the best predictor (i.e., the one that has the highest correlation with the dependent variable). If no variables predict the dependent variable at the .05 level, the process stops. Then, it adds a second independent variable, if it adds a significant amount of additional unique variance. The process stops when there are no additional variables that explain a significant portion of additional variance.

The independent variables that were entered in the first step of the analysis were age, gender, generation level, and SES. These demographic variables were kept in the regression analyses, regardless of whether they were significant predictors of career maturity to avoid possible confounds. In the second step, individualism-collectivism, the interaction between individualism-collectivism and age, the interaction between individualism-collectivism and gender, the interactions between individualism-collectivism and generation level, and the interaction between individualism-collectivism and SES were entered using the forward method. Individualism-collectivism, age, and SES were centered, which helps reduce multicollinearity.

Age was entered into the regression analysis because of the developmental nature of career maturity (Crites, 1978; Super, 1955). The interaction between age and individualism-collectivism was entered because of the possibility that the relationship between career maturity and individualism-collectivism is not equivalent across different age groups. For example, it is possible that the more collectivistic the person is, the lower their career maturity, but this relationship may hold only for younger students. Older students may be equally career mature, regardless of their individualism-collectivism orientation.

Gender was also added to the analysis because some studies have found gender to be associated with career maturity (Westbrook et al., 1980; Naidoo et al., 1998). Gender was dummy coded. The interaction between individualism-collectivism and gender was also included to explore the

possibility that career maturity may be predicted by a combination of both gender and individualism-collectivism.

Generation level was also entered into the regression analysis because different generations may face different barriers, such as language barriers, naturalization problems and work permit problems that would affect career behavior (Leong and Serafica, 1995; Arbona, 1995). Generation level was dummy coded and split into two separate variables, one called 'Generation Level 1' that compares those 'born outside the USA' versus those 'born in the USA whose parents were born outside the USA', and one called 'Generation Level 2' that compares those 'born outside the USA' versus those who were 'born in the USA along with their parents'. The interactions between individualism-collectivism and generation level were also included to explore the possibility that career maturity may be predicted by a combination of both individualism-collectivism and generation level.

SES was also entered into the regression equation. While many studies have not found SES to be related to career maturity, SES is often confounded with ethnic variables and it is important to rule out any SES confounds (Brown, 1995; Arbona, 1995; Bowman, 1995a; Leong & Serafica, 1995). The interaction between SES and individualism-collectivism was also included. For example, a possible scenario is that no differences are found in career maturity between individuals who are more collectivist versus more individualistic if they belong to a higher SES scale, but that differences

between collectivistic and individualistic individuals may be found at lower SES levels.

As previously mentioned, the means, standard deviations, and ranges for the CMI and its subscales were displayed on Table 17.

In the first step, the demographic variables were entered. No variables were entered by the forward method in the second step, indicating that none of the individualism-collectivism variables predicted career maturity beyond what is predicted by the demographic variables. A significant ANOVA indicated that at least one beta weight was significantly different from zero ($F_{(5, 217)} = 2.46, p < .05$). As shown on Table 42, age is the only variable that significantly predicted career maturity ($t = 3.07, p < .01$). Table 42 also shows the beta weights, standard error, standardized beta weights, t-values, significance levels and partial correlations for the other demographic variables that were forced into the equation.

All the demographic variables accounted for 5.4% of the career maturity variance. The partial correlations and beta weights indicate that SES and generation level correlated very little with career maturity. Of the non-significant demographic predictors, gender had the highest partial correlation (.112) which is relatively small, but suggests that it would account for about 1% of the variance in career maturity scores.

The standardized beta in weights³, t-values, significance levels and partial correlations for the excluded variables⁴, the ones that did not predict career maturity, can be found on Table 43.

The regression equation predicting CMI is:

$$\text{CMI} = 46.51 - .012 (\text{SES}) + .40 (\text{Age}) + 1.15 (\text{Generation Level } 1^5) + .11 (\text{Generation Level } 2^6) + 1.83 (\text{Gender}^7)$$

Because age is centered, this equation shows that the career maturity score for males born outside the USA and who are of average age (20 years old) and SES (middle-class) is 46.5. This equation also predicts that for each year increase in age above the mean, the CMI score increases by .40. This equation indicates that career maturity does increase with age.

Hypothesis 3 was not confirmed, as individualism-collectivism was not found to be a significant predictor of career maturity. However, in the previous discussions it was noted that some aspects of the career maturity construct, such as decisiveness and involvement and, in particular, independence, may be more related to individualism-collectivism than other

³ Standardized beta weights that would result if the variable would have been entered in the next step.

⁴ INDCOL, INDCOL*Gender, INDCOL*Generation Level 1, and INDCOL*Age had partial correlations which were almost zero. Of the non-significant individualism-collectivism predictors, INDCOL*Generation Level 2 and INDCOL*SES, had the highest partial correlations (about .1), which is rather small, but suggest that they each account for about 1% of the variance in career maturity scores.

⁵ 'Generation Level 1' is dichotomous: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA.

⁶ 'Generation Level 2' is dichotomous: 0 = Self born outside the USA; 1 = Self and parents born in the USA.

⁷ 'Gender' is dichotomous: 0 = male; 1 = female.

aspects of career maturity. In order to shed light on the specifics of how individualism-collectivism is related to career maturity, correlations were conducted between individualism-collectivism and the five subscales of the CMI, Decisiveness, Involvement, Independence, Orientation and Compromise. If any of the subscales are significantly related to individualism-collectivism, regression analyses will be conducted to further explain the relationship.

The correlation between each of the CMI subscales and individualism-collectivism can be found on Table 44. Individualism-collectivism was only significantly correlated with the Independence scale.

CMI Independence

It is hypothesized that the more collectivist a person is, the less career mature he/she will be in terms of independence. They will rely more on others to help them define and make a career choice. Based on the correlation between individualism-collectivism and the Independence subscale, a regression analysis was conducted to predict Independence. Individualism-collectivism, age, gender, generation level, SES, individualism-collectivism and age interaction, individualism-collectivism and gender interaction, individualism-collectivism and generation level interactions, and individualism-collectivism and SES interaction were the independent variables and CMI Independence score was the dependent variable.

As with the previous regression analysis, the demographic variables (age, gender, SES and generation levels) were entered and kept in the regression analysis in the first step to avoid confounds. INDCOL and the interactions between INDCOL and the demographic variables were entered using the forward method in the second step. Again, as in the other analyses, individualism-collectivism, age, and SES were centered to reduce multicollinearity.

The significant ANOVA demonstrates that at least one of the independent variables did not have a beta weight of zero ($F_{(6, 216)} = 3.682, p < .01$). Two of the demographic variables, 'Generation Level 1' and 'Generation Level 2' significantly predicted CMI Independence. Furthermore, the forward method entered one variable, INDCOL, which indicates that individualism-collectivism significantly predicts CMI Independence. No other variables were entered. Table 45 shows the beta weights, standard error, t-values, significance levels and partial correlations for Generation Level 1, Generation Level 2, INDCOL, and the other demographic variables.

All the demographic variables accounted for 7.3% of the variance in CMI Independence scores, which is mostly accounted for by the significant generation level variables. When INDCOL was added to the regression equation, the R^2 increased from 7.3% to 9.3%, indicating that individualism-collectivism accounted for 2% of the CMI Independence variance.

The standardized beta in weights, t-values, significance levels and partial correlations of the excluded variables can be found on Table 46. All

the excluded variables had very low partial correlations with CMI Independence.

The final regression equation predicting CMI Independence is:

$$\text{CMI Independence} = 7.986 - .013 (\text{SES}) + .021 (\text{Age}) + .596 (\text{Generation Level } 1^8) + 1.091 (\text{Generation Level } 2^9) + .112 (\text{Gender}^{10}) + .919 (\text{INDCOL})$$

This equation indicates that a male of average age, born outside the United States, who is of average SES for this sample and who scored average on the INDCOL measure would score a 7.986 on the CMI Independence scale, out of a possible maximum of 10. Furthermore, this equation predicts that for each INDCOL point scored above the mean, CMI Independence will go up by almost one point. The equation also predicts that someone who is born in the USA and whose parents were also born in the USA would score a little over a point higher in the CMI Independence subscale than those born outside the USA. Those born in the USA, from parents born outside the USA would score about .6 points higher on the CMI Independence subscale than those born outside the USA. Thus, those born outside the USA are predicted to score the lowest on the CMI Independence scale in comparison to other generation levels.

⁸ Generation Level 1 is dichotomous: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA.

⁹ Generation Level 2 is dichotomous: 0 = Self born outside the USA; 1 = Self and parents born in the USA.

¹⁰ Gender is dichotomous: 0 = male; 1 = female.

Hypothesis 4

Hypothesis 4, which proposed that the more collectivist a person is, the more likely that they will engage in Dependent decision-making, and that individualism-collectivism will not be associated with having a Rational or Intuitive decision-making style, was analyzed via three separate multiple regressions. Individualism-collectivism, age, generation level, SES, gender, and the interaction between individualism-collectivism and age, the interaction between individualism-collectivism and gender, the interactions between individualism-collectivism and generation level, and the interaction between individualism-collectivism and SES were the independent variables. Rational, Intuitive, and Dependent decision-making style scores were the dependent variables. As with the previous regression analyses, the demographic variables (gender, SES, age and generation levels) were entered in the first block and kept in the equation, while individualism-collectivism and the interactions between individualism-collectivism and the demographic variables were entered in the second block using the forward method, which enters one variable at a time if it is significant. Age, INDCOL and SES were centered to help reduce multicollinearity.

Age was entered into the equation because differences in grade level have been found in the ACDM (Buck and Daniels, 1985). Age, instead of grade-level, is a more appropriate measurement for the Baruch population, because many students are older than typical college-age students and it would be unsuitable to group a 35-year old sophomore with a 19-year old

sophomore. Entering both age and grade level into the regression may cause multicollinearity. The interaction between age and individualism-collectivism was entered to allow for the possibility that the relationship between career decision-making and individualism-collectivism is not the same across different age groups.

Gender differences have also been found in ACDM scores (Buck and Daniels, 1985) and the same could occur in this study. The interaction between individualism-collectivism and gender was also included due to the possibility that career decision-making may be predicted from a combination of both gender and individualism-collectivism.

Generation level was entered into the analyses because different generations may face different barriers, such as language barriers, naturalization problems and work permit problems that would affect career behavior (Leong and Serafica, 1995; Arbona, 1995). As in previous regression analyses, the interaction between generation level and individualism-collectivism will be entered as an independent variable to determine whether there is a relationship between career decision-making and individualism-collectivism that varies according to generation level.

It is also important to rule out any SES confounds and therefore, SES was entered into the regression analyses (Brown, 1995; Arbona, 1995; Bowman, 1995a), as well as the interaction between SES and individualism-collectivism. The interaction will be added to assess whether the relationship between career decision-making and INDCOL varies by SES level.

Dependent Decision-Making Style

Is individualism-collectivism related to having a dependent decision-making style? The significant ANOVA indicates that at least one of the independent variables predicts scores on the Dependent scale ($F_{(6,216)} = 3.050, p < .01$). Of the five demographic variables, only age significantly predicted scores on the Dependent decision-making style scale ($t = -2.852, p < .01$). After the demographic variables were entered, the forward procedure entered only one variable, individualism-collectivism, indicating that it significantly predicts Dependent decision-making beyond what the demographic variables were already predicting ($t = -2.425, p < .05$). No other variables were entered. Table 47 shows the beta weights, standard error, standardized Betas, t-values and partial correlations for the five demographic variables in the model and individualism-collectivism.

The standardized beta in weights¹¹, t-values, significance levels and partial correlations¹² for the non-significant INDCOL interaction variables can be found on Table 48.

The R^2 with all the demographic variables in the equation is .053, which indicates that they account for approximately 5% of the Dependent score variance. When individualism-collectivism was added to the model, the change in R^2 was .025. This is a small effect, but slightly above Cohen's guidelines for a small effect (Cohen 1992). This indicates that individualism-

¹¹ Standardized beta weights that would result if the variable would have been entered in the next step

¹² Partial correlations for the excluded variables were very low, except for the interaction of INDCOL and 'Generation Level 2' which was about .1. Of the demographic variables, SES and 'Generation Level 1' also had partial correlations of about .1.

collectivism accounted for 2.5% of the variance in the Dependent decision making scores. Age, the other significant predictor, had a partial correlation of $-.191$ with the Dependent scale, suggesting that it accounted for approximately three and a half percent of the Dependent scale variance.

The regression equation predicting Dependent decision-making is:

$$\text{Dependent} = 3.715 - .023 (\text{SES}) - .116 (\text{Age}) - .608 (\text{Generation Level } 1^{13}) + .222 (\text{Generation Level } 2^{14}) - .168 (\text{Gender}^{15}) - 1.666 (\text{INDCOL})$$

This equation shows that for males of average age (20 years) and of average socioeconomic status (middle class), who were born outside the United States and who had a mean INDCOL score, their predicted Dependent scale score is 3.715, out of a maximum possible score of 10. Age is centered, so for each year that a person is older than the mean age, this equation predicts that their Dependent score decreases by .12. That is, this regression predicts that older students will have a lower Dependent score, meaning that they will be less dependent in their career decision-making. For example, a 30 year-old student is predicted to score 1.2 points lower on the Dependent scale than a student who is 20 years old.

Individualism-collectivism is also centered, so for each point scored above the mean INDCOL score, the dependent score increases by one and

¹³ Generation Level 1: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA.

¹⁴ Generation Level 2: 0 = Self born outside the USA; 1 = Self and parents born in the USA.

¹⁵ Gender is dichotomous: 0 = male; 1 = female.

two-thirds points. A person who scored above the mean INDCOL score, meaning more individualistic, would have a lower score on the Dependent scale. This indicates that the more individualist the person is, the less dependent they are in their career decision-making style.

Rational Decision-Making Style

The two hypotheses that predicted that there will not be a relationship between individualism-collectivism and engaging in a Rational and Intuitive decision-making style really predicted that the effect will be rather small - that individualism-collectivism would have very little impact on the variance of Rational and Intuitive scores. Thus, there were two parts to this hypothesis. In the first part, a regression analysis was conducted to determine if any of the independent variables predict Rational or Intuitive decision-making style, as it has been done with the other analyses in this study. In the second part, the change in R^2 and partial correlations were analyzed to determine if individualism-collectivism had a small, medium, or large effect on Rational and Intuitive style. It was hypothesized that the change in R^2 and the partial correlations would be very small, indicating that individualism-collectivism does not have a meaningful effect on Rational or Intuitive decision-making style. Cohen (1992) defines a small effect for a multiple correlation as .02, so it is expected that the change in R^2 will be smaller than .02.

As shown on Table 49, none of the demographic variables significantly predicted Rational decision-making style. However, the forward procedure

entered individualism-collectivism into the regression, although the ANOVA was close to being significant ($F_{(6,216)} = 2.065$, $p = .059$). This indicates that individualism-collectivism significantly predicted Rational decision-making style ($t = -2.807$, $p < .01$). No other variables were found to have a significant relationship with Rational scores. The partial correlations for the non-significant predictors were low, which confirms that no other variables predicted Rational scores. Table 50 shows the standardized beta in weights, t-values, significance levels and partial correlations of the variables that were excluded from the model.

The regression equation for Rational decision making is:

$$\text{Rational} = 6.816 - .002 (\text{SES}) + .051 \text{ Age} + .190 (\text{Generation Level } 1^{16}) - .383 (\text{Generation Level } 2^{17}) + .587 (\text{Gender}^{18}) - 1.946 (\text{INDCOL})$$

This equation shows that for males of average age and socioeconomic status, who were born outside the United States and who had a mean INDCOL score, their predicted Rational scale score is 6.816, out of a maximum possible score of 10. This equation also indicates that for every individualism-collectivism point scored above the mean, their Rational

¹⁶ Generation Level 1: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA.

¹⁷ Generation Level 2: 0 = Self born outside the USA; 1 = Self and parents born in the USA

¹⁸ Gender: 0 = male; 1 = female

decision-making score decreases by almost two points. In other words, as the individualism score increases, the Rational score decreases.

The R^2 produced by the five demographic variables predicting Rational decision making style was .020. When individualism-collectivism was added the R^2 increased to .054, indicating that individualism-collectivism accounts for 3.4% of the variance in rational scores. This is a rather small effect, but still above Cohen's .02 general guideline. Furthermore, as shown on Table 44, the partial correlation of individualism-collectivism is -.188, which is modest, but it does suggest that there is a relationship between Rational decision-making and individualism-collectivism.

Intuitive Decision Making Style

The overall ANOVA was not significant ($F_{(5, 217)} = 1.725, p = .130$). However, as demonstrated on Table 51, one of the demographic variables 'Generation Level 1' significantly predicted Intuitive decision-making style ($t = 2.568, p < .05$). 'Generation Level 1' compares those born outside the USA, versus those born in the USA of foreign-born parents. The forward method did not enter any variables. This denotes that individualism-collectivism does not predict Intuitive decision-making style. The standardized beta in weights, t-values, significance levels and partial correlations for the non-significant variables can be found on Table 52. The partial correlations on Tables 51 and 52 also suggest that the non-significant variables have very little impact on Intuitive scores.

The regression equation for Intuitive decision making is:

$$\text{Intuitive} = 4.651 + .012 (\text{SES}) + .002 (\text{Age}) + .717 (\text{Generation Level } 1^{19}) + .442 (\text{Generation Level } 2^{20}) - .167 (\text{Gender}^{21})$$

This equation predicts that those born in the USA, but whose parents were born outside the USA, will score on the Intuitive scale about .7 higher than participants born outside the USA. This means that those who are first-generation Americans had slightly higher scores on the Intuitive scale than those who were born outside the USA.

The partial correlation for individualism-collectivism was .049, which is very small. This number suggests that individualism-collectivism has almost a zero effect on Intuitive scores.

Hypothesis 5

Hypothesis 5, which proposed that collectivism would be related to greater family involvement, was analyzed via another multiple regression. As with the other regression analyses, the demographic variables were forced into the regression to avoid possible confounds and the forward method was used to determine if individualism-collectivism or interactions between

¹⁹ Generation Level 1: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA.

²⁰ Generation Level 2: 0 = Self born outside the USA; 1 = Self and parents born in the USA

²¹ Gender: 0 = male; 1 = female

individualism-collectivism and the demographic variables significantly predicted family involvement. The independent variables were individualism-collectivism, gender, generation level, SES, as well as the interaction of individualism-collectivism with each of the demographic variables. The dependent variable was family involvement score. All continuous independent variables were centered to reduce the possibility of multicollinearity.

Tang et al. (1999) found that family involvement was associated with SES ($r = .21$). It is, therefore, important to enter SES into the regression analysis as well as the interaction between individualism-collectivism and SES, because the relationship between SES and Family Involvement may not be equivalent between individualists and collectivists. Gender, age, and generation level and the interaction of individualism-collectivism with each will also be entered in order to assess possible confounds. For example, it is possible that some families may get more involved with the career decision-making of younger children than older children, and this relationship may be more pronounced at lower levels of individualism.

Results indicate that at least one of the independent had a beta different from zero ($F_{(6,216)} = 6.745, p < .001$). Table 53 shows that three variables significantly predicted family involvement: SES, age, and individualism-collectivism. The demographic variables, including age and SES accounted for 12.7% of the variance in family involvement. When individualism-collectivism was entered by the forward procedure, the R^2

changed from .127 to .158 a change of .031. This shows that individualism-collectivism accounts for 3.1% of the family involvement variance. Also shown on Table 53 are the partial correlations of the demographic variables and INDCOL. Based on these partial correlations, it is estimated that the percentage of variance accounted for by age and SES is approximately 8% and 3%, respectively. These results are consistent with Tang et al. (1999) findings, in which SES predicted family involvement. Unfortunately, comparisons regarding the effect of age cannot be made with Tang et al. (1999) because they did not include it in their analyses.

Finally, Table 54 shows the beta in weights, t-values, significance levels and partial correlations for the non-significant variables that were excluded from the model. None of the non-significant variables had a meaningful partial correlation with family involvement.

The regression equation predicting family involvement is:

$$\text{Family Involvement} = 20.656 + .055 (\text{SES}) - .309 (\text{Age}) - .459 (\text{Generation Level } 1^{22}) - 1.131 (\text{Generation Level } 2^{23}) - .561 (\text{Gender}^{24}) - 3.367 (\text{INDCOL})$$

Family involvement was reversed-scored so that the higher the score, the higher the level of family involvement. This equation predicts that for

²² Generation Level 1: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA

²³ Generation Level 2: 0 = Self born outside the USA; 1 = Self and parents born in the USA

²⁴ Gender: 0 = male; 1 = female

every year that a participant is older than the mean, family involvement score would be reduced by almost one-third of a point. This means that someone who is younger would report greater family involvement than those who are older.

This equation also predicts that for every point increase in individualism, family involvement score decreases by three and a third points. That is, the more collectivist the score (lower score on individualism-collectivism) the higher the score on the Family Involvement scale.

Finally, for every point increase in SES, family involvement increases by about .05. Someone who has a below average score on SES will have a lower family involvement score.

Thus, families are more involved in career development when participants are younger, more collectivist, and of higher socio-economic backgrounds.

Hypothesis 6

Hypothesis 6 proposes that the more collectivist a person is the more likely that he/she would approve of the characters in the career situations behaving in a collectivist manner and the less likely that he/she would approve of the character behaving individualistically. This hypothesis was also analyzed using a multiple regression analysis, by entering and keeping the demographic variables into the equation and then performing the forward procedure. The dependent variable is total score on the Individualism-

Collectivism Career Situations. The main independent variables are INDCOL, gender, SES, generation level and age, as well as the interaction of individualism-collectivism with each of the demographic variables. The results of the pilot indicated that the only demographic differences found were due to ethnicity, which is not one of the independent variables. Nevertheless, it is important to always test for demographic differences, especially gender, since differences due to gender were close to being significant in the pilot.

A significant ANOVA indicates that at least one of the independent variables had a beta significantly different from zero ($F_{(6, 216)} = 2.579, p < .05$). As Table 55 shows, none of the demographic variables significantly predicted the Situations, but the interaction between individualism-collectivism and age was added by the forward procedure, indicating that it is a significant predictor ($t = -2.993, p < .01$). Also shown on Table 55 are the partial correlations of the demographic variables and of INDCOL*Age. Table 56 shows the beta in weights, t-values, significance levels and partial correlations for the non-significant variables that were excluded from the model.

The percentage of variance accounted for by the demographic variables was 2.8%. When the interaction of INDCOL and Age was entered into the equation, the R^2 increased from .028 to .067, which shows that it accounts for 3.9% of the variance in the Situations scores.

The regression equation predicting Individualism-Collectivism Career Situations is:

$$\begin{aligned} \text{Individualism-Collectivism Career Situations} = & 2.502 + .0009 (\text{SES}) - .0037 \\ & (\text{Age}) - .0698 (\text{Generation Level } 1^{25}) - .0067 (\text{Generation Level } 2^{26}) - .0966 \\ & (\text{Gender}^{27}) - .0702 (\text{INDCOL} * \text{Age}) \end{aligned}$$

This equation indicates that the predicted score for a male of average SES, age, who was born outside the United States is 2.5. This equation also indicates that the relationship between the career situations and individualism-collectivism is not consistent across age groups. It predicts that those who are more individualist and older than the mean will score more individualistic in the Career Situations. Those who are more individualist than the mean, but who are younger than the mean, will have more collectivistic Career Situations score. However, those who are younger and more collectivist than the mean are predicted to score more individualistic in the Career Situations. Finally, those who are older and more collectivist than the mean are expected to score more collectivist on the Career Situations.

²⁵ Generation Level 1: 0 = Self born outside the USA; 1 = Self born in USA, parents born outside the USA

²⁶ Generation Level 2: 0 = Self born outside the USA; 1 = Self and parents born in the USA

²⁷ Gender: 0 = male; 1 = female

Discussion

The first surprising result is that Hypothesis 1, which proposed that Blacks, Asians and Hispanics would score more collectivistically than Whites, was not supported. In fact, the White college students in this sample hold values, beliefs and norms which are more collectivistic than the Asian-American students and their scores are indistinguishable from Hispanics and Blacks. These results are not unprecedented though. A closer look at the previously discussed Rhee et al.'s (1995) study with NYU Asian students, shows that 33% of the Asian students at that time did not identify themselves as either Asian, or by their country (e.g., Japan, Korea, China, etc.). These unidentified students tended to score more individualistic than the White students in the sample. Rhee et al. (1995) conclude that some students in their attempt to fit in and adopt mainstream values have overshot the norm.

The participants in this study are also New York City college students and therefore, they might be very similar to Rhee et al.'s participants. They may have also overshot the norm. A close look at the Box Plot on Figure 2 does show that there was a lot more variability in the distribution of INDCOL scores for ethnic minorities than for Whites. This suggests that there are minority students who tend towards the collectivist side of the continuum, but there are also students who have completely overshot the norm and tend to be more individualist.

Another study that shows that ethnic minorities in the United States may be as individualistic (or more), as Whites is the previously mentioned

Oyserman et al. (2002) meta-analysis. Its results are fairly consistent with the results from the present study. Regarding the difference in individualism-collectivism between Blacks and Whites, the meta-analysis determined that Blacks were more individualistic than Whites, and that they were equivalent to Whites in collectivism levels²⁸. The INDCOL scores of Blacks in the present study were slightly more individualistic and less collectivistic than Whites, although this difference was not significant. These results seem to be in the same direction as the results of the studies included in the Oyserman et al. (2002) meta-analysis, although due to Oyserman's split of scales into either individualism or collectivism, it is impossible to determine if the results of the present study mirror exactly the results from Oyserman et al. (2002). It does appear, though, that there is wide variability among Blacks regarding their individualism-collectivism orientation and that the assumptions in the literature that Blacks are more collectivistic than Whites are not supported.

Furthermore, Oyserman et al.'s (2002) meta-analysis shows that Hispanics in the United States were both more individualistic and more collectivistic than Whites, indicating that they value uniqueness, freedom, self-sufficiency and other individualist values and norms, but feel a collectivist obligation towards their in-groups. Correspondingly, in cross-country comparisons, Latin Americans (from Latin America) were also significantly more individualistic and more collectivistic than Whites from the United States, although the effect sizes were small.

²⁸ They treated individualism-collectivism as orthogonal constructs.

Because Hui (1988) and Oyserman et al., (2002) have conceptualized and measured individualism-collectivism differently, it is not possible to determine if the results from the present study exactly mirror the results from the meta-analysis. Oyserman et al. (2002) conceptualized and measured individualism and collectivism as separate constructs, while Hui conceptualized and measured individualism-collectivism as a continuum. Hui's scale appears to have items that measure both individualism and collectivism, although unlike Oyserman et al. (2002), he did not divide individualism and collectivism into separate scales. If indeed Hispanics are both more individualistic and more collectivistic than Whites, as Oyserman et al. (2002)'s results suggest, Hispanics and Whites would appear to share approximately equivalent levels of individualism-collectivism in a scale that measured both constructs simultaneously. That is, for Hispanics, the effect of higher individualism than Whites would cancel out the effect of higher collectivism than Whites in the INDCOL scale. Thus, on average, Hispanics and Whites would score similarly on the INDCOL scale. This may reflect the results of the present study: Hispanics scored higher on individualism than Whites, but this difference was not statistically significant. It thus appears that the generalizations found in the literature (Triandis et al., 1984; Marin & Triandis, 1985; Arbona, 1995; Fouad, 1995), that Hispanics are less individualistic than Whites, is not supported by the results of this study.

The Asian Americans in the present study were the only ethnic minority group that scored significantly more individualistic than Whites in Hui's

INDCOL scale. These results contrast with some previous research, including Oyserman et al.'s (2002) meta-analysis, which showed that Asian Americans were more collectivistic and less individualistic than Whites. However, the statistically significant effect sizes for the difference between Whites and Asian Americans were small. This means that Whites were significantly more individualistic than Asian Americans in Oyserman et al.'s (2002) study, but the difference was not large.

Additionally, cross-country comparisons between the United States and Asian countries show that some Asian countries, which were very different from the United States in Hofstede's original research, were not in Oyserman et al.'s (2002) meta-analysis. For example, the meta-analysis demonstrated that Japan and the United States showed comparable levels of individualism. However, when reliable scales are used, the Japanese are slightly less individualistic than the Americans. Furthermore, when reliable individualism-collectivism scales are used, Americans are more collectivistic than the Japanese. Further comparisons between the United States and other Asian countries have failed to find large differences in individualism-collectivism. Oyserman et al. (2002) report that effect sizes comparing the United States and Korea on individualism-collectivism were not significant from zero, or were small.

Oyserman et al. (2002), thus, concluded that the evidence supports the theory that, in general, European Americans are more individualistic and less collectivistic than other cultural groups (particularly those in the Middle East,

in Africa, and China). However, within the United States, “the meta-analysis did not support the notion of European Americans as a gold standard of individualism” (p. 41). While the results from the present study do not parallel exactly Oyserman et al.’s (2002) findings, because Asian Americans were more individualist than Whites in the present study, the Oyserman et al.’s (2002) study does indicate that the Whites in the United States are not as individualistic as once believed by researchers. Furthermore, in comparison to some Asian countries, such as Japan and Korea, the United States may not be as individualistic as it was once believed. The Oyserman et al. (2002) findings help explain the once-puzzling results of Whites being the most collectivist group in the present study.

It is also important to point out that while the difference between the White and Asian American groups was significant in the present study, there is still a great deal of overlap in scores between all groups. The scores of the Black and Hispanic groups, which fell in between the Asian American and the White group, were not significantly different from either group. As Figure 2 illustrates, Whites shared a lot of their distribution with Hispanics and Blacks, except that the White scores had less variability. Additionally, all groups scored in the 2.7 or 2.8 range, which indicates that the mean for all groups is in the middle of the individualism-collectivism scale, leaning towards collectivism. Thus, all ethnic groups share comparable levels of individualism-collectivism.

The evidence suggesting that Blacks, Hispanics and Asian Americans may be as individualistic or more individualistic than Whites, and the great amount of overlap in INDCOL scores among the four groups, support the idea that researchers and practitioners cannot assume that individuals from a particular ethnic minority in the United States will behave in a collectivist manner. This emphasizes our need to measure each person's individualism-collectivism level, and not treat all Asians as collectivists or all Whites as individualists. It is certainly evidence for treating individualism-collectivism as an individual difference, as opposed to a cultural variable.

Hypothesis 2 proposed that ethnic groups would differ on the degree of collectivism that they hold towards six target groups. Only a few differences were found. The largest difference was that Asian Americans were more individualistic towards their parents than the other groups. This is a surprising result since many researchers seem to believe that Asian Americans tend to be collectivist, especially towards their parents. Again, these results are consistent with the results found by Rhee et al. (1995), in a similar New York City university sample, in which many Asian Americans seem to not only have adopted individualistic values, but seem to be "overshooting" the norm.

The only two other differences found were that Whites were more collectivistic towards their friends than Hispanics and more collectivistic towards their co-workers than Blacks. Besides these differences all the other means were relatively consistent between ethnic groups. In fact all ethnic groups show similar levels of collectivism towards the different ingroups, and

the lack of significant differences indicates that Hypothesis 2 was mostly unsupported.

The third hypothesis was only partially supported. Individualism-collectivism did not predict general career maturity. Only age predicted career maturity. This is consistent with the conceptualization of career maturity and previous research, which indicates that age is positively related to career maturity.

Career maturity, however, is composed of five unique dimensions. The results of this study indicate that individualism-collectivism is significantly related to one of the dimensions - career maturity independence. The results are consistent with the idea that the more collectivist a person is, the more likely that they will rely on others to help them define an occupational choice. A look at sample CMI independence items shows that these items tap independence from others in career development. For example, "I plan to follow the line of work my parents suggest;" "You should decide for yourself what kind of work to do;" "Your parents probably know better than anybody else which occupation you should enter;" "When it comes to choosing a job, I'll make up my own mind;" and "I feel I should do what my parents want me to do." As these sample items show, the CMI Independence subscale differentiates between the student who is deciding by him/herself what career to follow, versus those depending on others (e.g., parents) to help them make career choices.

The results also show that those who were born in the USA scored higher on independence career maturity than those born outside of the USA. A possible explanation for these findings is that those who are born in the USA have adopted the typical American values of independence and self-reliance whereas those who were born outside the USA have yet to internalize these individualistic values.

Thus, results did confirm the hypothesis that being more collectivist leads to lower career maturity, but only in terms of being less independent. However, being collectivist is unrelated to whether someone is definite about making a career choice, or whether they are actively participating in the career development process, or whether they are realistic about work, or whether the person can compromise between reality and their needs, abilities and limitations. Thus, Hypothesis 3 is partly confirmed; individualism-collectivism is related to some aspects of career maturity, the higher the level of collectivism, the lower their level of independence in career maturity.

Hypothesis 4a was confirmed, the more collectivist that a person is, the more likely that they will have a Dependent career decision-making style. Hypothesis 4b was unsupported. Scoring more collectivistically was associated with having a Rational decision-making style. Hypothesis 4c, which proposed that individualism-collectivism would not be related to having an Intuitive decision-making style was also supported. Individualism-collectivism did not predict Intuitive career decision-making style and the effect size was very close to zero.

These findings mostly confirm the hypotheses put forth. Individualism-collectivism is related to having a Dependent and a Rational career decision-making style, but not an Intuitive style. The effect of individualism-collectivism is not indiscriminate but rather targeted to areas that make conceptual sense. It makes conceptual sense that a collectivist would be more likely to depend on their in-group when making career decisions. This is confirmed by the positive relationship between high collectivism and dependent decision-making. This means that collectivists will rely on the opinions and advice of parents, peers and esteemed others to help them make the decisions necessary for building a career.

While the original hypothesis put forth suggested that collectivism would be unrelated to having a Rational decision making style, the relationship between collectivism and Rational decision-making is not entirely surprising. Having a Rational decision-making style means that the individual has deliberately been making plans and understands how current decisions affects future decisions. Here are some Rational scale sample items: "When I make a decision I consider it's consequences in relation to decisions I will have to make later on;" "When I make a decision I take my time and think it through carefully;" "Before I do anything important, I have a carefully worked out plan;" "Often I see each of my decisions as stages in my progress towards a definite goal." These items illustrate that people who score high on rational decision-making have thought about how their decisions can affect future

plans. They make decisions deliberately, taking into consideration their current situation and information and what they want to do in the future.

It is probable that collectivists have a strong rationale when choosing careers based on their ingroups' input. They may have thought about how to best achieve their ingroup's goals through their career choices and this deliberate reasoning may have boosted their Rational decision-making scores. They may be thinking about how their current decisions may affect future decisions. In fact, a common thread in the literature by career researchers who have counseled collectivists is that collectivists seem to be very aware of their families' needs and preferences. This awareness may have helped them form a deliberate approach towards their career decision making (e.g., 'my family wants me to continue the family business, therefore I need to do 'X' to be able to satisfy that goal'). The basis of what drives these decisions is not measured by the Rational scale. In fact, collectivists' career decisions may be driven by the family's suggestions or by the desire to satisfy some aspect of the ingroup's goals. What is indeed measured by the Rational scale is whether the individual can think ahead and understand how to plan and achieve those goals in a deliberate, step-by-step manner. Collectivists may be driven to fulfill their ingroup's goals, and in the process may have deliberately formed step-by-step plans to achieve those career goals. This would explain their higher Rational scores.

Results provide support for the hypothesis that the more collectivistic a person is, the higher the level of family involvement in their career

development (Hypothesis 5). This means that more collectivist participants are more likely to indicate that their family has discussed with them their career plans, that they have been asked to continue the family tradition, and that they have been compared to others who are successful in certain occupations. It also means that the more collectivist a person is, the more likely that they have been pressured by their family to take a job that is financially secure. Results also suggest that collectivists are more likely to indicate that their parents have forced them to follow an occupation chosen by them and, on a more subtle note, parents may have provided information only on the type of job that they want the individual to pursue.

Finally, Hypothesis 6 was only partially confirmed by the findings. Individualism-collectivism did not predict scores on the Individualism Collectivism Career Situations. The Career Situations assessed approval of individualist and collectivist career situations having to do with the following ideas found in the literature: continuing the family business, taking care of parents, siblings or other family members, being unwilling to move away from the family, family pressuring the individual to follow a particular career path, and the importance of the ingroup's goals and needs over the individual's goals and needs. Only the interaction between individualism-collectivism and age predicted scores on these Career Situations. While older participants scored on the individualism-collectivism career situations as expected – collectivists indicated higher approval for collectivist situations and individualists indicated higher approval for individualist situations, younger

participants scored in the opposite direction –collectivists scored more individualistic on the situations and individualists scored more collectivistic on the situations. It makes sense that younger individualists would score more collectivistic on the situations than older students, given that their families may exert more influence than with older students. Younger participants may still have responsibilities at home, such as taking care of siblings, and they may be pressured more by their families regarding career paths and staying closer to home than older students. As such, younger individualists may see these situations to be more natural than older individualist students. However, it is unclear why younger collectivists would score more individualistic. It is possible that the Career Situations, written to follow a more indirect format that would be less threatening than direct questions, required a greater leap of inference between the measure and the constructs behind it. That is, the individualism-collectivism message may have been lost to younger participants among the storylines. Thus, individualism-collectivism predicted scores on the Individualism-Collectivism Career Situations in the expected direction only for students older than the mean.

A main theme that emerged throughout the study is that the effect of individualism-collectivism on career behavior is mostly limited to collectivists being less independent than individualists in their career development and decision-making process. Collectivists share the outcomes with their ingroup and as such, rely on them for their career development and decision-making. Families are more involved in the careers of collectivists. But the effect of

collectivism is not indiscriminate. It is unrelated to other aspects of career development, such as having a realistic view of work, being decisive about career decisions, being involved in the career development process and being able to compromise between career goals and personal limitations. It is also unrelated to being able follow present gut-feelings when making career decisions.

A second theme that has emerged is that because collectivist families are more involved in their members' careers, they may have discussed specific career options that satisfies the ingroup's goals, needs or preferences. This may result in collectivists needing to plan a career path and make decisions that in the future will lead to the desired outcome.

It is important to incorporate these findings into career development theories and career development interventions, where appropriate. It is necessary to formally include the appraising of individualism-collectivism into the career development assessment batteries as Hartung et al. (1998) have suggested, but understand that individualism-collectivism would only mostly affect independence and family involvement. Individualism-collectivism norms would be necessary in order to be able to accurately classify students as being more individualistic or more collectivistic. It would be more meaningful for those being tested if we could tell them that they are in the 75th percentile or in the 5th percentile in terms of individualism.

If an individual has a collectivist orientation, alternative career interventions might be more suitable. Indeed, researchers have shown that

interventions tailored to a person's individualist or collectivist orientation work better than interventions that are not matched to a person's orientation (Early, 1994; Shilo, 1995). Fouad (1995) suggests that "the career counseling process must be flexible to incorporate familial and group-related variables, rather than a sole focus on individual factors in decision making" (p. 186). Various researchers have suggested that group intervention would be most suitable for ethnic minorities because they have a group orientation (Betz, 1993; Bowman, 1995b; Dunn & Veltman, 1989). For example, D'Andrea & Daniels (1992) developed a career counseling program for inner-city youth that combined traditional methods with a group approach. The program included group exercises, role-playing, Black guest speakers and skills training. The authors claim that the program was effective in changing students' perceptions of work and their place in work. Unfortunately, the study did not provide follow-up to determine its long-term effectiveness. This group approach has the potential of being effective for collectivists, but it has to be emphasized that based on the results from this study, it cannot be assumed that ethnic minorities will be collectivist and that Whites would be individualists, but rather each individual has to be tested.

Furthermore, the results of the relationship between collectivism and family involvement suggest that it is important to incorporate the family into the career decision process. Since the family influences their collectivist children's career process, it is important that they too become part of the career development intervention. An example of this approach is provided by

Evanoski & Tse (1989). They developed a bilingual workshop on career awareness that included information on career choices, decision-making strategies and financial aid for Asian parents. These workshops included ethnic role models, including women in nontraditional roles.

Limitations

The main limitation of this study is the possibility of lack of generalizability towards non-student populations. This study is specifically focused on career development and career decision-making at a college student level, where a variety of career choices and career decisions are made. Many career decisions at this level are the base for career development later in life, but the career behavior results of this study are not meant to be generalized to the entire population. In regards to the use of student populations to assess differences in INDCOL between cultural groups in the United States, Oyserman et al (2002) found no difference between two studies that had a non-student sample and the other studies in the meta-analysis which used student samples.

Another limitation of this study is that in the interest of including various ethnic groups, it is impossible to hone on differences within ethnic groups. As previously suggested by other researchers and by the results of this study, there is wide variability within ethnic groups. This limitation is particularly troubling in light of Oyserman et al.'s (2002) findings regarding the variability in differences in individualism-collectivism effect sizes between the United

States and East Asian cultures, with Japan and Korea appearing to not be very different from the United States and China appearing to be much more collectivist.

Research within ethnic groups is also needed research (Arbona, 1995). One factor that determines variability within some ethnic groups is degree of acculturation, which could not be included into this study because it is culture-specific. Future studies might seek to determine the effects of collectivism, country background, and acculturation on each, Hispanics and Asian Americans.

Another limitation is that a large proportion of the participants in this study who have chosen a major are business students. And if they have not yet chosen a major, they are enrolled in a business-oriented school. This may have limited the diversity of the sample.

A final limitation of this study is that all measures used were paper-and-pencil questionnaires. Researchers have noted that when a common method is used to gather data, this common method may inflate the relationship between the different variables by adding an additional source of common variance – method variance. The fact that a relationship was found between variables when it made the most conceptual sense, and a relationship was not found between other variables (e.g. between individualism collectivism and most aspects of career maturity or individualism-collectivism and the Intuitive scores), suggests that the common method effect may have, at best, inflated the relationships that existed.

Further Research

If we are to incorporate individualism-collectivism into the career assessment process, future research should seek to determine its population norms for the best individualism-collectivism measurement. Currently, researchers compare participants in their studies vis à vis each other, but it would be more meaningful if we had national and international norms. Norms would allow career psychologists to assess individual's individualism-collectivism orientation and to more accurately determine whether the individual would benefit from group interventions, or whether the family needs to be incorporated into the career decision process. It would also allow researchers to determine whether their samples are representative of the general population or of their area.

Now that it has been established that individualism-collectivism is related to certain aspects of career behavior, the next step is to further define this relationship. Oyserman et al. (2002) have suggested that individualism-collectivism scales tap too many dimensions associated with this construct. More research is needed to empirically determine which dimensions are indeed essential to the construct of individualism-collectivism and build scales that tap each dimension. Once these dimensions are refined, and scales that measure narrower aspects of individualism-collectivism are built, research can evaluate the relationship between those narrower dimensions and behavior. For example, one of the dimensions that warrant further research is 'obligation to the ingroup,' which Oyserman et al. (2002) see as an essential

component of collectivism. Future research should seek to evaluate whether there are differences between cultural groups in terms of 'obligation to the ingroup' and to determine whether it is related to career behaviors. In this study, Hispanics and Blacks scored similarly to Whites in general individualism-collectivism, which tapped different areas of this construct. It would be interesting to evaluate if there are differences between Whites and ethnic minorities in some narrower collectivist dimensions, such as 'obligation to the ingroup'.

One of the limitations pointed earlier is the reliance of paper-and-pencil measures. Future research should seek to develop new measures of individualism-collectivism and career behavior that are not based on paper-and-pencil tests. Fiske (2002), an anthropologist, suggests that the best method of measurement of culture is observation by trained experts using taxonomies. Other ideas proposed by Fiske include using projective tests (e.g., Rorschach), in-depth interviews, life-history collections, and scenarios. He also recommends researchers to work with colleagues from different cultures. All these methods are more subtle, but as the present study with the Individualism-Collectivism Career Situations shows, these more implicit methods may not always be successful precisely because of the larger inference leap caused by the subtlety. They would also require cooperation with other fields, for example with anthropology to develop taxonomies for measuring individualism-collectivism, or with clinical psychology for training

and interpretation of individualism-collectivism or career behavior themes in Rorshack tests. These methods would also be more time-consuming.

Additionally, researchers have focused on individualism-collectivism, but there are other cultural dimensions that may shed light on cultural and individual differences. For example, Hofstede uncovered three other dimensions in his landmark study: power distance, masculinity-femininity and uncertainty avoidance. Triandis (1996) has argued that there are other cultural dimensions that can affect how individualism-collectivism is manifested, such as tight vs. loose norms, cultural complexity, vertical vs. horizontal (similar to Hofstede's power distance) and active vs. passive.

In the career behavior area, further research should be conducted using a longitudinal design. One question that still lingers, for both ethnic minorities and the population in general, is the stability of the career maturity construct over extended periods of time. For example, is the high school student who is career mature, the same one that will be more career mature in college and later on in life? What is the effect later in work life of career maturity interventions taken as a student?

The career maturity concept could be better defined for older populations. Research could be conducted that would seek to uncover behaviors, cognitions, and attitudes that define career maturity in detail for people working in organizations, including managers. These behaviors might include engaging in self-development, taking challenging developmental

assignments, making lateral moves, etc. They could be incorporated into a career maturity instrument for employees working in organizations.

The influence of collectivism on career development of people in organizations is another area of virgin research territory. Are collectivists more attracted to companies with family-friendly policies, such as telecommuting, on-site childcare, flexible workweek? Are collectivists less willing to relocate because of their dependence on their ingroups? Conceptually, it makes sense that collectivists would be more influenced by “extras” offered by organizations that would allow them increased time with their ingroups, but these propositions have yet to be researched. It also makes conceptual sense that collectivists may be more tied to their ingroups and, thus, might be more likely to turn down offers to relocate or even to search for employment in other areas.

Conclusion

While many researchers have assumed that collectivists behave differently than individualists regarding their careers, this is the first study that has evaluated the impact of individualism-collectivism on career maturity, career decision making, and family involvement. This study has found that collectivists, in fact, rely more on their ingroup when evaluating career possibilities and making career decisions. Collectivists' families have a larger role in their career development, from comparing them to successful people in their field to pressuring them to take a job that satisfies the family's needs.

Understanding these effects of individualism-collectivism on career development can help future practitioners provide better career counseling and help organizations understand how different people make career decisions.

This study started as a search to fill-in some of the gaps in the ethnic minority career development literature using emic variables. Individualism-collectivism was chosen as a major cultural variable that would help shed light on minority career development. The findings in this study suggest that individualism-collectivism is indeed a useful concept in understanding some aspects of career development and decision-making. More importantly, the results suggest that individualism-collectivism is a useful concept across different ethnic groups, and it is not only applicable to ethnic minorities, as was believed earlier. Since individualism-collectivism issues appear to be applicable across ethnic groups in the United States, it is important to move away from treating it as a cultural variable and start treating it as an individual difference.

Table 1

Hui's (1988) Mean College Student INDCOL Scores²⁹ by Culture and Gender

	INDCOL Subscales					
	Spouse	Parent	Kin	Neighbor	Friend	Co- worker
United States						
Male	2.18	3.14	3.00	2.74	2.52	2.50
Female	1.97	3.45	2.96	2.64	2.79	2.56
Hong Kong						
Male	2.25	2.47	2.20	1.96	2.74	2.99
Female	2.20	2.56	2.02	2.02	2.98	2.98

²⁹ Low scores reflect individualism, high scores reflect collectivism.

Table 2

Means and Standard Deviations for Each Item of the Individualism-Collectivism Career Situations Using the Extent of Approval Scale from Pilot Data

Situations	Mean	Range	SD
1	3.026	1-5	.953
2	1.641	1-5	.852
3	2.346	1-5	1.215
4	1.936	1-5	1.177
5	2.013	1-5	1.051
6	2.667	1-5	1.147
7	1.974	1-5	1.116
8	2.833	1-5	1.333
9	1.692	1-4	.761
10	2.577	1-5	1.100
11	2.382	1-5	1.118
12	2.539	1-5	1.148
13	2.714	1-5	1.179
14	1.539	1-4	.659
15	3.769	1-5	1.018

Table 3

Percentage of Pilot Participants Who Correctly Identified whether the Situation Portrayed the Character Behaving in a Collectivist or an Individualist Way

Situations	Conveys a Collectivist or Individualist Situation	Percentage Who Correctly Identified Situation
1	Collectivist	90%
2	Individualist	97%
3	Individualist	97%
4	Individualist	97%
5	Collectivist	97%
6	Collectivist	97%
7	Collectivist	95%
8	Collectivist	99%
9	Individualist	95%
10	Individualist	83%
11	Collectivist	99%
12	Collectivist	44%
13	Collectivist	95%
14	Individualist	100%
15	Collectivist	100%

Table 4

Individualism-Collectivism Career Situations Means by Gender from Pilot Data

Career Situations			
Gender	N	Mean Scores	SD
Female	54	2.320	.412
Male	23	2.507	.403

Table 5

ANOVA Testing Gender Differences on Individualism-Collectivism Career Situations Scores from Pilot Data

Source	Sum of Squares	df	Mean Square	F
Between Groups	.565	1	.565	3.365
Within Groups	12.581	75	.168	
Total	13.145	76		

$p = .071$

Table 6

Individualism-Collectivism Career Situations Means by Ethnic Group from Pilot Data

Ethnic Group	N	Career Situations	
		Mean Scores	SD
White	20	2.373	.426
Black	12	2.283	.356
Asian	30	2.536	.385
Hispanic	15	2.164	.403

Table 7

ANOVA Summary Table for Differences between Ethnic Groups on Individualism-Collectivism Career Situations Scores from Pilot Data

Source	Sum of Squares	df	Mean Square	F
Between Groups	1.536	3	.512	3.275*
Within Groups	11.412	73	.156	
Total	12.948	76		

p = .026

Table 8

*Post-Hoc Contrasts Testing Differences between Ethnic Groups on
Individualism-Collectivism Career Situations from Pilot Data*

Contrasts	Value of Contrast		
	(Mean Difference)	Standard Error	Sig. Level
White-Black	.090	.144	.925
White-Asian	-.163	.114	.488
White-Hispanic	.208	.135	.417
Black-Asian	-.252	.135	.251
Black-Hispanic	.119	.153	.865
Asian-Hispanic	.371	.125	.021*

* $p < .05$

Table 9

Individualism-Collectivism Career Situations Means by Generation Level from Pilot Data

Generation Level	N	Career	
		Sits.	
		Mean	SD
		Scores	
Born outside USA	53	2.428	.405
Born in USA, parents born outside USA	18	2.300	.383
Self and parents born in USA	7	2.181	.520

Table 10

ANOVA Testing Generation Level Differences on Individualism-Collectivism Career Situations Scores from Pilot Data

Source	Sum of Squares	df	Mean Square	F
Between Groups	.511	2	.255	1.516
Within Groups	12.635	75	.168	
Total	13.146	77		

$p = .226$

Table 11*Gender Composition of the Sample*

Gender	N	Percent
Female	136	58.9%
Male	95	41.1%

Table 12*Ethnic Composition of the Sample*

Ethnic Group	N	Percent
White	54	23.4%
Black	51	22.1%
Asian	85	36.8%
Hispanic	38	16.5%
Other/NA	3	1.3%

Table 13

Generation Level Composition of the Sample

Generation Level	N	Percent
Born outside USA	121	52.8
Born in USA, parents born outside USA	85	37.1
Self and parents born in USA, grandparents born outside	8	3.5
Self, parents, grandparents born in the USA	15	6.6

Table 14

Mean and Standard Deviation of Age and SES

Demographic Variable	N	Mean	SD
Age	230	19.99	4.38
SES	224	37.08	14.00

Table 15*Number and Percentage of Students that Have Chosen a Career*

Chosen a Career?	N	Percent
Yes	127	55%
No	104	45%

Table 16

Career Choices of Students

Career Choice	N	Percent
Finance/Broker	31	24.4%
Accounting	28	22.0%
Business	18	14.2%
CIS	10	7.9%
Law	8	6.3%
Marketing	7	5.5%
Advertising	4	3.1%
HR	3	2.4%
Psychology	2	1.6%
Actuary	2	1.6%
Medicine	2	1.6%
Other/NA	12	9.4%

Table 17

Means, Ranges and Standard Deviations of Measures

Measure	N	Range	Mean	SD
INDCOL	231	2.38 - 3.78	2.85	.25
INDCOL Spouse Subscale	231	1.88 – 4.63	3.33	.45
INDCOL Parent Subscale	231	1.59 – 4.31	2.61	.39
INDCOL Kin Subscale	231	1.13 – 4.25	2.70	.50
INDCOL Neighbor Subscale	231	1.60 – 4.60	3.29	.58
INDCOL Friend Subscale	231	1.60 – 3.90	2.54	.37
INDCOL Worker Subscale	231	1.91 – 4.09	2.82	.40
CMI	230	26 – 65	47.98	8.04
CMI Decisiveness Subscale	231	0 – 10	4.18	2.50
CMI Involvement Subscale	231	2 – 10	8.09	1.72
CMI Independence Subscale	231	3 – 10	8.37	1.57
CMI Work Orientat. Subscale	231	0 – 10	6.67	2.67
CMI Compromise Subscale	231	1 – 7	4.71	1.41
ACDM Rational	231	0 – 10	7.22	2.50
ACDM Intuitive	231	0 – 10	4.84	1.86
ACDM Dependent	231	0 – 10	3.39	2.50
Family Involvement	231	7 – 35	19.99 ³⁰	4.61
I-C Career Situations	231	1.00 - 3.60	2.41	.39

³⁰ Because there was no missing data, Family Involvement scores can be divided by 5 to get a mean score. Thus, the mean score is 4.00.

Table 18

Reliability Coefficients of Measures and Subscales

Measures	N	Alpha
INDCOL	229	.68
INDCOL - Spouse	229	.33
INDCOL – Parent	231	.41
INDCOL – Kin	231	.53
INDCOL – Neighbor	231	.61
INDCOL – Friend	231	.23
INDCOL – Co-worker	231	.48
CMI	226	.77
CMI – Decisiveness	229	.71
CMI – Involvement	230	.57
CMI – Independence	229	.54
CMI – Orientation	230	.78
CMI – Compromise	229	.41
ACDM – Rational	228	.77
ACDM – Intuitive	230	.43
ACDM – Dependent	225	.75
Family Involvement	231	.68
Career Situations	229	.64

Table 19

Correlation Matrix of CMI Subscales

	Decisive.	Involve.	Indepen.	Orient.	Compro.	CMI
Decisive.	1					
Involvement	.201**	1				
Indepen.	.105	.364**	1			
Orientation	.627**	.240**	.178**	1		
Compromise	.468**	.341**	.233**	.494**	1	
CMI	.712**	.587**	.470**	.765**	.665**	1

**p < .01

Table 20

Correlation Matrix of ACDM Scales

Scales	Rational	Intuitive	Dependent
Rational	1		
Intuitive	-.363**	1	
Dependent	-.258**	.069	1

** $p < .01$

Table 21

Correlation Matrix of INDCOL Subscales

	Spouse	Parent	Kin	Neighbor	Friend	Co- worker	INDCOL
Spouse	1						
Parent	.112	1					
Kin	.106	.310**	1				
Neighbor	.105	.076	.116	1			
Friend	.057	.133*	.296**	.242**	1		
Co-worker	.086	.099	.278**	.152*	.384**	1	
INDCOL	.383**	.602**	.605**	.559**	.584**	.564**	1

** p < .01

* p < .05

Table 22

Correlation Matrix of Career Measures

	CMI	ACDM Rational	ACDM Intuitive	ACDM Depend.	Family Involve.	Career Situations
CMI	1					
ACDM Rational	.162*	1				
ACDM Intuitive	-.222**	-.363**	1			
ACDM Dependent	-.544**	-.258**	.069	1		
Family Involvement	-.297**	.130*	.151*	.199**	1	
Career Situations	-.264**	.033	-.034	.196**	.225**	1

** p < .01

* p < .05

Table 23

INDCOL Score Percentiles by Ethnic Group

Ethnic Group	25 th Percentile	50 th Percentile	75 th Percentile
White	2.64	2.77	2.88
Black	2.62	2.86	2.98
Asian	2.72	2.89	3.08
Hispanic	2.67	2.86	3.00

Table 24*Individualism-Collectivism Means by Ethnic Group*

Ethnic Group	INDCOL Mean	N	SD
White	2.770	54	.200
Black	2.834	51	.285
Asian	2.891	85	.238
Hispanic	2.858	38	.253
Total	2.845	228	.247

Table 25

ANOVA Testing Differences between Ethnic Groups on Individualism-Collectivism Means

Source	Sum of Squares	df	Mean Square	F
Between Groups	.488	3	.163	2.735*
Within Groups	13.333	224	.006	
Total	13.822	227		

* $p < .05$

Table 26

Post-Hoc Contrasts Testing Differences between Ethnic Groups on Individualism-Collectivism

Ethnic Group	Value of		
	Contrast		
Contrast	(Mean Difference)	Standard Error	Sig. Level
Whites-Asians	-.120	.004	.024 *
Whites-Blacks	-.007	.005	.502
Whites-Hispanics	-.009	.005	.330
Asian-Blacks	-.005	.004	.596
Asian-Hispanics	-.002	.005	.898
Blacks-Hispanic	-.002	.005	.979

* $p < .05$

Table 27

Means of Individualism-Collectivism towards Spouse by Ethnic Group

INDCOL Spouse			
Ethnic Group	Mean	N	SD
White	3.298	54	.431
Black	3.296	51	.527
Asian	3.330	85	.405
Hispanic	3.426	38	.478
Total	3.331	228	.452

Table 28

ANOVA Testing Differences in Means between Ethnic Groups on Individualism-Collectivism towards Spouse

Source	Sum of Squares	df	Mean Square	F
Between Groups	.465	3	.155	.756
Within Groups	45.965	224	.205	
Total	46.430	227		

$p = .520$

Table 29

Means of Individualism-Collectivism towards Parents by Ethnic Group

INDCOL Parent			
Ethnic Group	Mean	N	SD
White	2.553	54	.367
Black	2.525	51	.433
Asian	2.737	85	.359
Hispanic	2.486	38	.372
Total	2.604	228	.392

Table 30

ANOVA Testing Differences in Means between Ethnic Groups on Individualism-Collectivism towards Parents

Source	Sum of Squares	df	Mean Square	F
Between Groups	2.50	3	.788	5.755***
Within Groups	32.44	224	.145	
Total	34.94	227		

*** $p < .001$

Table 31

Tukey's Post-Hoc Contrasts Testing Differences Between Ethnic Groups on Individualism-Collectivism towards Parents

Contrasts	Value of Contrast		Post-Hoc Sig. Level
	(Mean Difference)	Standard Error	
Asians-White	.185	.0066	.027 *
Asians-Blacks	.213	.0067	.009 **
Asians-Hispanic	.251	.0074	.004 **
Hispanic-Whites	-.007	.0081	.843
Hispanic-Blacks	-.004	.0082	.965
Whites-Blacks	.003	.0074	.982

* $p < .05$

** $p < .01$

Table 32*Means of Individualism-Collectivism towards Kin by Ethnic Group*

Ethnic Group	INDCOL Kin	N	SD
	Mean		
White	2.597	54	.416
Black	2.711	51	.501
Asian	2.766	85	.515
Hispanic	2.645	38	.560
Total	2.693	228	.506

Table 33

*ANOVA Testing Differences in Means between Ethnic Groups on
Individualism-Collectivism towards Kin*

Source	Sum of		Mean	F
	Squares	df	Square	
Between Groups	1.050	3	.350	1.373
Within Groups	57.111	224	.255	
Total	58.161	227		

$p = .252$

Table 34*Means of Individualism-Collectivism towards Neighbor by Ethnic Group*

INDCOL			
Ethnic Group	Neighbor Mean	N	SD
White	3.200	54	.516
Black	3.192	51	.532
Asian	3.338	85	.605
Hispanic	3.455	38	.623
Total	3.292	228	.577

Table 35

ANOVA Testing Differences in Means between Ethnic Groups on Individualism-Collectivism towards Neighbor

Source	Sum of Squares	df	Mean Square	F
Between Groups	2.153	3	.718	2.192
Within Groups	73.333	224	.327	
Total	75.486	227		

$p = .090$

Table 36

Means of Individualism-Collectivism towards Friend by Ethnic Group

INDCOL Friend			
Ethnic Group	Mean	N	SD
White	2.426	54	.332
Black	2.576	51	.372
Asian	2.546	85	.364
Hispanic	2.655	38	.392
Total	2.542	228	.369

Table 37

ANOVA Testing Differences in Means between Ethnic Groups on Individualism-Collectivism towards Friend

Source	Sum of Squares	df	Mean Square	F
Between Groups	1.278	3	.426	3.226*
Within Groups	29.570	224	.132	
Total	30.847	227		

* $p < .05$

Table 38

Post-Hoc Contrasts Testing Differences between Ethnic Groups on Individualism-Collectivism towards Friends

Contrasts	Value of Contrast		Post-Hoc Sig. Level
	(Mean Difference)	Standard Error	
Whites-Hispanics	-.230	.0077	.015 *
Whites-Blacks	-.150	.0079	.148
Whites-Asians	-.120	.0063	.228
Hispanics-Blacks	.008	.0079	.738
Hispanics-Asians	.109	.0071	.412
Blacks-Asians	.003	.0064	.967

* $p < .05$

Table 39

Means of Individualism-Collectivism towards Co-Worker by Ethnic Group

INDCOL Co-			
Ethnic Group	Worker Mean	N	SD
White	2.751	54	.335
Black	2.963	51	.472
Asian	2.792	85	.383
Hispanic	2.779	38	.375
Total	2.819	228	.398

Table 40

ANOVA Testing Differences in Means between Ethnic Groups on Individualism-Collectivism towards Co-Workers

Source	Sum of	df	Mean	F
	Squares		Square	
Between Groups	1.433	3	.478	3.096*
Within Groups	34.567	224	.154	
Total	36.000	227		

* $p < .05$

Table 41

*Post Hoc Contrasts Testing Differences between Ethnic Groups on
Individualism-Collectivism towards Co-workers*

Contrasts	Value of		Post-Hoc
	Contrast		
	(Mean	Standard Error	Sig. Level
	Difference)		
Blacks-Whites	.212	.0080	.047 *
Blacks-Asians	.1701	.0078	.134
Blacks-Hispanics	.184	.0090	.177
White-Asians	-.004	.0068	.907
White-Hispanic	-.003	.0083	.983
Asians-Hispanic	.001	.0077	.998

* $p < .05$

Table 42

Regression Model with Demographic Variables Predicting Career Maturity (CMI) and Partial Correlations

Variables	Unstandardized Coefficients		Standard Coefficient	t	Partial r
	B	SE	β		
Constant	46.514	.957		48.595	
Age	.403	.131	.215	3.070 **	.204
SES	.012	.039	.021	.310	.021
Generation Level 1	1.148	1.206	.069	.952	.064
Generation Level 2	.113	1.909	.004	.059	.004
Gender	1.831	1.108	.112	1.653	.112

** p < .01

Table 43

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the CMI Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL	.012	.174	.862	.012
INDCOL*Gender	-.025	-.379	.705	-.026
INDCOL*Generation Level 1	-.033	-.497	.620	-.034
INDCOL*Generation Level 2	.106	1.566	.119	.106
INDCOL*SES	.114	1.711	.089	.116
INDCOL*Age	.011	.164	.870	.011

Table 44***Correlations between Individualism-Collectivism and the CMI Subscales***

CMI Scale	Correlation with
	Individualism-Collectivism
Decisiveness Scale	.057
Involvement Scale	-.010
Independence Scale	.169 **
Orientation Scale	-.077
Compromise Scale	-.064

**** p < .01**

Table 45

Regression Model with Demographic Variables Predicting Career Maturity Independence

Variables	Unstandardized Coefficients		Standard Coefficient		Partial r
	B	SE	β	t	
Constant	7.986	.184		43.502	
SES	.013	.008	-.116	-1.740	-.118
Age	.021	.025	.056	.819	.056
Generation Level 1	.596	.231	.183	2.577*	.173
Generation Level 2	1.091	.366	.207	2.980**	.199
Gender	.112	.213	.035	.526	.036
INDCOL	.919	.426	.142	2.160*	.145

* $p < .05$

** $p < .01$

Table 46

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the CMI Independence Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL*Gender	-.082	-.740	.460	-.050
INDCOL*Generation Level 1	-.009	-.102	.919	-.007
INDCOL*Generation Level 2	-.011	-.165	.869	-.011
INDCOL*SES	-.032	-.488	.626	-.033
INDCOL*Age	.074	1.123	.263	.076

Table 47

Regression Model with Demographic Variables Predicting Dependent Career Decision Making

Variables	Unstandardized		Standard		Partial r
	Coefficients		Coefficient		
	B	SE	β	t	
Constant	3.715	.296		12.536	
SES	-.023	.012	-.125	-1.862	-.126
Age	-.116	.041	-.198	-2.852**	-.191
Generation Level 1	-.608	.374	-.117	-1.627	-.110
Generation Level 2	.222	.591	.026	.376	.026
Gender	-.168	.343	-.033	-.489	-.033
INDCOL	-1.666	.687	-.160	-2.425*	-.163

* $p < .05$

** $p < .01$

Table 48

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the ACDM Dependent Scale Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL*Gender	.036	.325	.746	.022
INDCOL*Generation Level 1	.026	.298	.766	.020
INDCOL*Generation Level 2	-.114	-1.647	.101	-.112
INDCOL*SES	.043	.647	.518	.044
INDCOL*Age	-.019	-.289	.773	-.020

Table 49

Regression Model with Demographic Variables Predicting Rational Career Decision Making

Variables	Unstandardized Coefficients		Standard Coefficient		Partial r
	B	SE	β	t	
Constant	6.816	.299		22.795	
SES	-.002	.012	-.013	-.194	-.013
Age	.051	.041	.086	1.230	.083
Generation Level 1	.190	.377	.037	.504	.034
Generation Level 2	-.383	.597	-.046	-.641	-.044
Gender	.587	.346	.115	1.696	.115
INDCOL	-1.946	.693	-.188	-2.807**	-.188

** p < .01

Table 50

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the ACDM Rational Scale Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL*Gender	.040	.353	.725	.024
INDCOL*Generation Level 1	-.004	-.042	.966	-.003
INDCOL*Generation Level 2	.082	1.160	.247	.079
INDCOL*SES	-.017	-.252	.802	-.017
INDCOL*Age	-.040	-.602	.548	-.041

Table 51

Regression Model with Demographic Variables Predicting Intuitive Career Decision Making

	Unstandardized		Standard		
	Coefficients		Coefficient		
Variables	B	SE	β	t	Partial r
Constant	4.651	.221		21.000	
SES	.012	.009	.086	1.273	.086
Age	.002	.030	.004	.059	.004
Generation Level 1	.717	.279	.187	2.568*	.172
Generation Level 2	.442	.442	.072	1.002	.068
Gender	-.167	.256	-.044	-.650	-.044

* $p < .05$

Table 52

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the ACDM Dependent Scale Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL	.048	.714	.476	.049
INDCOL*Gender	.014	.205	.838	.014
INDCOL*Generation Level 1	.046	.675	.501	.046
INDCOL*Generation Level 2	-.115	-1.693	.092	-.114
INDCOL*SES	-.031	-.460	.646	-.031
INDCOL*Age	.089	1.329	.185	.090

Table 53*Regression Model with Demographic Variables Predicting Family Involvement*

Variables	Unstandardized Coefficients		Standard Coefficient		Partial r
	B	SE	β	t	
Constant	20.656	.515		40.117	
SES	.055	.021	.166	2.599**	.174
Age	-.309	.071	-.289	-4.361***	-.284
Generation Level 1	-.459	.649	-.048	-.707	-.048
Generation Level 2	-1.131	1.027	-.074	-1.101	-.075
Gender	-.561	.596	-.060	-.940	-.064
INDCOL	-3.367	1.194	-.178	-2.821**	-.189

** p < .01

*** p < .001

Table 54

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the Family Involvement Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL*Gender	.010	.095	.925	.006
INDCOL*Generation Level 1	.086	1.045	.297	.071
INDCOL*Generation Level 2	-.049	-.730	.466	-.050
INDCOL*SES	-.020	-.323	.747	-.022
INDCOL*Age	-.066	-1.039	.300	-.071

Table 55

Regression Model with Demographic Variables Predicting Individualism-Collectivism Career Situations

Variables	Unstandardized		Standard	t	Partial r
	Coefficients		Coefficient		
	B	SE	β		
Constant	2.502	.046		54.102	
SES	.0009	.002	.033	.487	.033
Age	-.0037	.006	-.041	-.589	-.040
Generation Level 1	-.0698	.058	-.086	-1.199	-.081
Generation Level 2	-.0067	.092	-.005	-.073	-.005
Gender	-.0966	.054	-.122	-1.799	-.122
INDCOL*Age	-.0702	.023	-.198	-2.993**	-.200

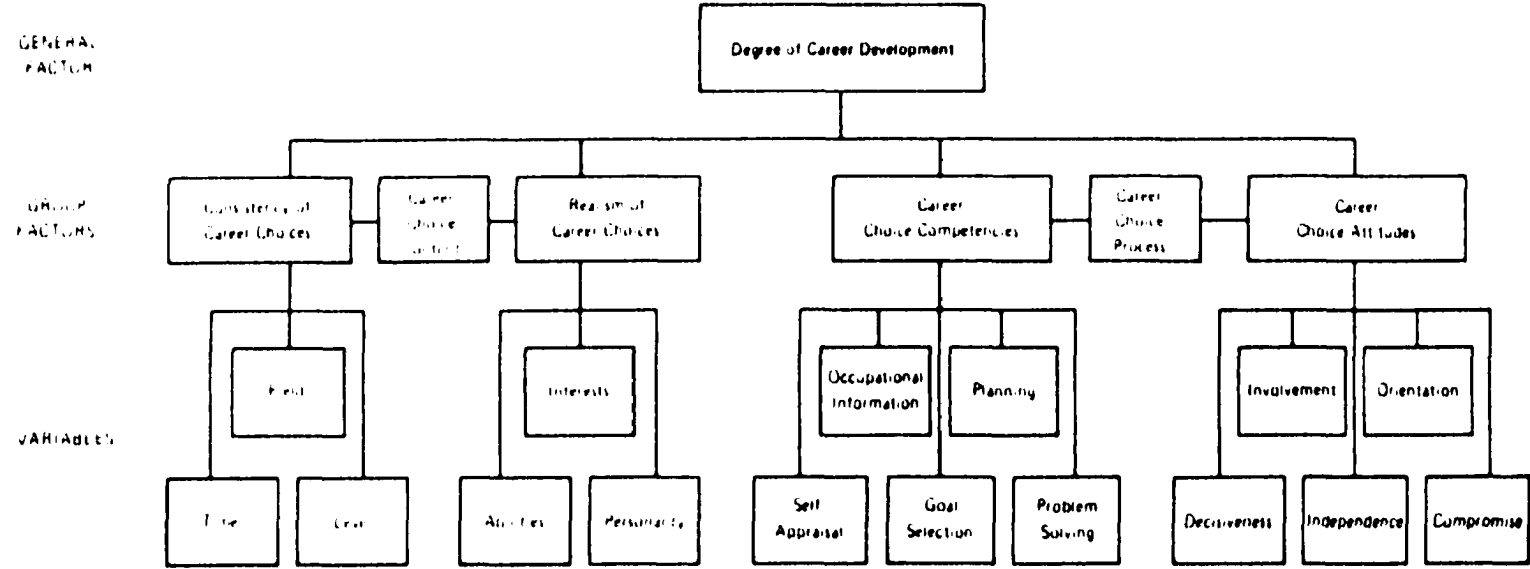
** p < .01

Table 56

Standardized Beta Weights, t-Values, Significance Levels and Partial Correlations for the Variables Excluded in the Individualism-Collectivism Career Situations Regression

Variable	β In	t	Sig. Level	Partial r
INDCOL	-.065	-.980	.328	-.067
INDCOL*Gender	-.076	-1.138	.256	-.077
INDCOL*Generation Level 1	-.061	-.896	.371	-.061
INDCOL*Generation Level 2	-.091	-1.342	.181	-.091
INDCOL*SES	.055	.824	.411	.056

Figure 1. Crites (1978) model of career maturity.



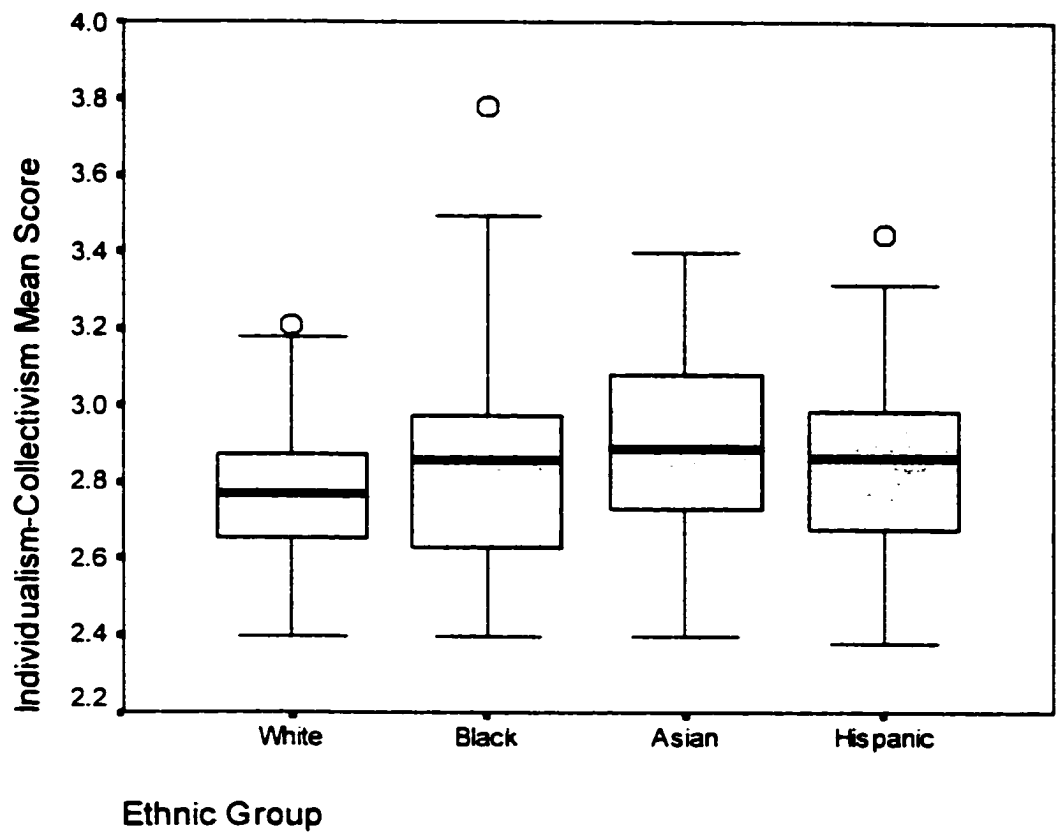


Figure 2. Boxplot illustrating individualism-collectivism scores for Whites, Blacks, Asians and Hispanics.

Appendix A

Career Maturity Inventory

The following statements will survey your feelings about making career choices. If you agree or mostly agree with a statement, please CIRCLE the letter T for true. If you disagree, or mostly disagree with a statement, please CIRCLE the letter F for False. There are no right or wrong answers, so describe your feelings as honestly as you can.

- | | TRUE | FALSE | |
|-----|------|-------|--|
| 1. | T | F | I often daydream about what I want to be, but I really haven't chosen a line of work yet. (F) |
| 2. | T | F | If I can just help others in my work, I'll be happy. (F) |
| 3. | T | F | Everyone seems to tell me something different; as a result I don't know which kind of work to choose. (F) |
| 4. | T | F | It's probably just as easy to be successful in one occupation as it is in another. (F) |
| 5. | T | F | In order to choose a job, you need to know what kind of person you are. (T) |
| 6. | T | F | It doesn't matter which job you choose as long as it pays well. (F) |
| 7. | T | F | I plan to follow the line of work my parents suggest. (F) |
| 8. | T | F | As long as I can remember, I've known what kind of work I want to do. (F) |
| 9. | T | F | You should decide for yourself what kind of work to do. (T) |
| 10. | T | F | I don't know how to go about getting into the kind of work I want to do. (F) |
| 11. | T | F | Work is worthwhile mainly because it lets you buy the things you want. (F) |
| 12. | T | F | I know very little about the requirements of jobs. (F) |
| 13. | T | F | When choosing an occupation, you should consider several different jobs. (T) |
| 14. | T | F | If you have some doubts about what you want to do, ask your parents or friends for advice and suggestions. (T) |
| 15. | T | F | I often feel that there is a real difference between what I am and what I want to be in my occupation. (F) |
| 16. | T | F | There are so many things to consider in choosing an occupation, it is hard to make a decision. (F) |
| 17. | T | F | You should choose an occupation which gives you a chance to help others. (F) |
| 18. | T | F | The best thing to do is to try out several jobs, and then choose the one you like best. (F) |
| 19. | T | F | There is no point deciding on a job when the future is so uncertain. (F) |

	TRUE	FALSE	
20.	T	F	Working is much like going to school. (F)
21.	T	F	There is only one occupation for each person. (F)
22.	T	F	Your parents probably know better than anybody else which occupation you should enter. (F)
23.	T	F	I want to really accomplish something in my work – to make a great discovery or earn a lot of money or help a great number of people. (F)
24.	T	F	When it comes to choosing a job, I'll make up my own mind. (T)
25.	T	F	I don't know what courses I should take in school. (F)
26.	T	F	The greatest appeal of a job to me is the opportunity it provides for getting ahead. (F)
27.	T	F	I can't understand how some people can be so certain about what they want to do. (F)
28.	T	F	I spend a lot of time wishing I could do work I know I can never do. (F)
29.	T	F	Work is dull and unpleasant. (F)
30.	T	F	Sometimes you have to take a job that is not your first choice. (T)
31.	T	F	I keep changing my occupational choice. (F)
32.	T	F	Once you choose a job, you can't choose another one. (F)
33.	T	F	As far as choosing an occupation is concerned, something will come sooner or later. (F)
34.	T	F	I'm not going to worry about choosing an occupation until I'm out of school. (F)
35.	T	F	You can do any kind of work you want to do as long as you try hard. (F)
36.	T	F	You get into an occupation mostly by chance. (F)
37.	T	F	You can't go very far wrong by following your parents' advice about which job to choose. (F)
38.	T	F	Whether you are interested in a particular kind of work is not as important as whether you can do it. (T)
39.	T	F	Choosing an occupation is something you have to do on your own. (T)
40.	T	F	I seldom think about the job I want to enter. (F)
41.	T	F	By the time you are 15, you should have your mind pretty well made up about the occupation you intend to enter. (F)

	TRUE	FALSE	
42.	T	F	I have little or no idea of what working will be like. (F)
43.	T	F	I keep wondering how I can reconcile the kind of person I am with the kind of person I want to be in my future occupation. (F)
44.	T	F	I would like to rely on someone else to choose an occupation for me. (F)
45.	T	F	I'd rather not work than take a job I don't like. (F)
46.	T	F	I'd rather work than play. (T)
47.	T	F	I guess everybody has to go to work sooner or later, but I don't look forward to it. (F)
48.	T	F	I don't know whether my future occupation will allow me to be the kind of person I want to be. (F)
49.	T	F	It's who you know, not what you know that's important in a job. (F)
50.	T	F	Your job is important because it determines how much you can earn. (F)
51.	T	F	You shouldn't worry about choosing a job since you don't have anything to say about it anyway. (F)
52.	T	F	I don't want my parents to tell me which occupation I should choose. (T)
53.	T	F	You almost always have to settle for a job that's less than you had hoped for. (T)
54.	T	F	If someone would tell me which occupation to enter, I would feel much better. (F)
55.	T	F	I am having difficulty in preparing myself for the work, I want to do. (F)
56.	T	F	I can't seem to become very concerned about my future occupation. (F)
57.	T	F	I really can't find any work that has much appeal to me. (F)
58.	T	F	I'm not going to give up anything to get the job I want. (F)
59.	T	F	Knowing what jobs are open is more important than knowing what you are good at when you choose an occupation. (T)
60.	T	F	The job I choose has to give me plenty of freedom to do what I want. (F)
61.	T	F	I don't know whether my occupational plans are realistic. (F)
62.	T	F	When trying to make an occupational choice, I wish that someone would tell me what to do. (F)
63.	T	F	I have so many interests it's hard to choose any one occupation. (F)
64.	T	F	You should choose a job in which you can someday become famous. (F)
65.	T	F	You should choose a job that allows you to do exactly what you want to do. (F)

	TRUE	FALSE	
66.	T	F	Entering one job is about the same as entering another. (F)
67.	T	F	Parents usually can choose the most appropriate jobs for their children. (F)
68.	T	F	You should choose an occupation, then plan how to enter it. (T)
69.	T	F	I feel that I should do what my parents want me to do. (F)
70.	T	F	Making an occupational decision confuses me because I don't feel that I know enough about myself or the world of work. (F)
71.	T	F	When I was trying to study, I often find myself daydreaming about what it will be like when I start working. (F)
72.	T	F	It's hard to imagine myself in any occupation. (F)
73.	T	F	I feel that my occupational goals are so high that I'll never be able to attain them. (F)
74.	T	F	The most important part of work is the pleasure which comes from doing it. (T)
75.	T	F	There may not be any openings for the job I want most. (T)

Thank you for completing this survey. If you are finished, please stay in your seat until the surveys are collected.

Appendix B

Assessment of Career Decision Making

The following statements will survey how you go about making career decisions. If you agree or mostly agree with a statement, please CIRCLE the letter T for true. If you disagree, or mostly disagree with a statement, please CIRCLE the letter F for False. There are no right or wrong answers, so describe your feelings as honestly as you can.

- | | TRUE | FALSE | |
|-----|------|-------|--|
| 1. | T | F | I am very systematic when I go about making an important decision. (R) |
| 2. | T | F | I like to have someone to steer me in the right direction when I am faced with an important decision. (D) |
| 3. | T | F | I make my decisions pretty creatively, following my own inner instincts. (I) |
| 4. | T | F | I usually make my decisions based on how things are for me right now rather than how they'll be in the future. (I) |
| 5. | T | F | I rarely make an important decision without gathering all the information I can find. (R) |
| 6. | T | F | I often make a decision which is right for me without knowing why I made the decision. (I) |
| 7. | T | F | When I make a decision I consider its consequences in relation to decisions I will have to make later on. (R) |
| 8. | T | F | When I make a decision it is important to me what my friends think about it. (D) |
| 9. | T | F | I really have a hard time making important decisions without help. (D) |
| 10. | T | F | Even on important decisions I make up my mind pretty quickly. (I) |
| 11. | T | F | When I make a decision I just trust my inner feelings and reactions. (I) |
| 12. | T | F | I often make my decisions based on what other people think, rather than on what I would really like to do. (D) |
| 13. | T | F | When I need to make a decision I take my time and think it through carefully. (R) |
| 14. | T | F | I often decide on something without checking it out and getting the facts. (I) |
| 15. | T | F | I rarely make a decision without talking to a close friend first. (D) |
| 16. | T | F | I put off making many decisions because thinking about them makes me uneasy. (D) |
| 17. | T | F | When an important decision is coming up, I look far enough ahead so I'll have enough time to plan and think it through before I have to act. (R) |

	TRUE	FALSE	
18	T	F	I double-check my information sources to be sure I have the right facts before deciding. (R)
19	T	F	I don't really think about the decision; it's in the back of my mind for a while, then suddenly it will hit me and I know what I will do. (I)
20	T	F	Before I do anything important, I have a carefully worked-out plan. (R)
21	T	F	I seem to need a lot of encouragement and support from others when I make a decision. (D)
22	T	F	In coming to a decision about something, I usually use my imagination or fantasies to see how I would feel if I did it. (I)
23	T	F	There's not much sense in making a decision that is going to make me unpopular. (D)
24	T	F	I don't have to have a rational reason for most decisions I make. (I)
25	T	F	I don't make decisions hastily because I want to be sure I make the right decisions. (R)
26	T	F	A decision is right for me if it is emotionally satisfying. (I)
27	T	F	I don't have much confidence in my ability to make good decisions, so I usually rely on others' opinions. (D)
28	T	F	Often I see each of my decisions as stages in my progress towards a definite goal. (R)
29	T	F	I usually don't have a lot of confidence in my decisions unless my friends give me support for them. (D)
30	T	F	I like to learn as much as I can about the possible consequences of a decision before I make it. (R)

Thank you for completing this survey. If you are finished, please stay in your seat until the surveys are collected.

Appendix C

Family Survey

The following statements will survey the role of your family in your career choices. Please CIRCLE the number that best describes how you feel. There are no right or wrong answers, so describe your feelings as honestly as you can.

1. How often have your parents or any family member discussed your career plans with you?

1	2	3	4	5
Very frequently	Frequently	Neither frequently nor infrequently	Infrequently	Very infrequently or not at all

2. Have your parents asked you to carry on the family tradition?

1	2	3	4	5
Definitely agree	Agree	Neither agree nor disagree	Disagree	Definitely disagree

3. How much do they listen to your opinion about career plans?

1	2	3	4	5
To a very great extent	To a great extent	To a medium extent	To a little extent	Not at all

4. Have your parents pressured you to take a job that is financially secure?

1	2	3	4	5
Definitely agree	Agree	Neither agree nor disagree	Disagree	Definitely disagree

5. Have your parents forced you to follow their choice of occupations for you?

1	2	3	4	5
Definitely agree	Agree	Neither agree nor disagree	Disagree	Definitely disagree

6. Have your parents provided you only the information of the job that they want you to pursue?

1	2	3	4	5
Definitely agree	Agree	Neither agree nor disagree	Disagree	Definitely disagree

7. Have they compared you with others who are successful in certain occupations?

1	2	3	4	5
Definitely agree	Agree	Neither agree nor disagree	Disagree	Definitely disagree

Appendix D

INDCOL Scale

Please circle the number that corresponds to how much you agree or disagree with each of the following statements. There are no right or wrong answers, so describe your feelings as honestly as you can.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. If a husband is a sports fan, a wife should also cultivate an interest in sports. If the husband is a stock broker, the wife should also be aware of the current market situation.	1	2	3	4	5
2. A marriage becomes a model for us when the husband loves what the wife loves and hates what the wife hates.	1	2	3	4	5
3. Married people should have some time to be alone from each other everyday, undisturbed by their spouse. *	1	2	3	4	5
4. If one is interested in a job about which the spouse is not very enthusiastic, one should apply for it anyway. *	1	2	3	4	5
5. Even if my spouse were of a different religion, there would not be any interpersonal conflict between us. *	1	2	3	4	5
6. It is better for a husband and wife to have their own bank accounts rather than to have a joint account. *	1	2	3	4	5
7. The decision of where one is to work should be jointly made with one's spouse, if one is married.	1	2	3	4	5
8. It is desirable that a husband and a wife have their own sets of friends, instead of having a common set of friends. *	1	2	3	4	5
9. My musical interests are extremely different from my parents. *	1	2	3	4	5
10. In these days parents are too stringent with their kids, stunting the development of initiative. *	1	2	3	4	5
11. When making important decisions, I seldom consider the positive and negative effects my decisions have on my father. *	1	2	3	4	5
12. Teenagers should listen to their parent's advice on dating.	1	2	3	4	5

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
13. Even if the child won the Nobel prize, the parents should not feel honored in any way. *	1	2	3	4	5
14. It is reasonable for a son to continue his father's business.	1	2	3	4	5
15. I would not share my ideas and newly acquired knowledge with my parents. *	1	2	3	4	5
16. I practice the religion of my parents.	1	2	3	4	5
17. I would not let my needy mother use the money that I have saved by living a less than luxurious life. *	1	2	3	4	5
18. I would not let my parents use my car (if I have one), whether they are good drivers or not. *	1	2	3	4	5
19. Children should not feel honored even if the father were highly praised and given an award by a government official for his contribution and service to the community. *	1	2	3	4	5
20. Success and failure in my academic work and career are closely tied to the nurture provided by my parents.	1	2	3	4	5
21. Young people should take into consideration their parents' advice when making education/career plans.	1	2	3	4	5
22. The bigger a family, the more family problems there are. *	1	2	3	4	5
23. I have never told my parents the number of children I want to have. *	1	2	3	4	5
24. The number of children my parents would like me to have differs by _____ from the number I personally would like to have.	0	1	2	3	4 or more
25. I would help, within my means, if a relative told me that he/she is in financial difficulty.	1	2	3	4	5
26. If I met a person whose last name was the same as mine, I would start wondering whether we were, at least remotely, related by blood.	1	2	3	4	5
27. Whether one spends an income extravagantly or stingily is of no concern to one's relatives (cousins, uncles). *	1	2	3	4	5

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
28. I would not let my cousin use my car (if I have one). *	1	2	3	4	5
29. When deciding what kind of work to do, I would definitely pay attention to the views of relatives of my generation.	1	2	3	4	5
30. When deciding what kind of education to have, I would pay absolutely no attention to my uncles' advice. *	1	2	3	4	5
31. Each family has its own problems unique to itself. It does not help to tell relatives about one's problems. *	1	2	3	4	5
32. I can count on my relatives for help if I find myself in any kind of trouble.	1	2	3	4	5
33. I have never chatted with my neighbors about the political future of this state. *	1	2	3	4	5
34. I am often influenced by the moods of my neighbors.	1	2	3	4	5
35. My neighbors always tell me interesting stories that have happened around them.	1	2	3	4	5
36. I am not interested in knowing what my neighbors are really like. *	1	2	3	4	5
37. One need not worry about what the neighbors say about whom one should marry. *	1	2	3	4	5
38. I enjoy meeting and talking to my neighbors everyday	1	2	3	4	5
39. In the past, my neighbors have never borrowed anything from me or my family. *	1	2	3	4	5
40. One needs to be cautious in talking to neighbors, otherwise others might think you are nosy. *	1	2	3	4	5
41. I don't really know how to befriend my neighbors. *	1	2	3	4	5
42. I feel uneasy when my neighbors do not greet me when we come across each other.	1	2	3	4	5
43. I would rather struggle through a personal problem by myself than discuss it with my friends. *	1	2	3	4	5

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
44. If possible, I would like co-owning a car with my close friends, so that it wouldn't be necessary for them to spend much money to buy their own cars.	1	2	3	4	5
45. I like to live close to my good friends.	1	2	3	4	5
46. My good friends and I agree on the best places to shop.	1	2	3	4	5
47. I would pay absolutely no attention to my close friends' views when deciding what kind of work to do. *	1	2	3	4	5
48. To go on a trip with friends makes one less free and mobile. As a result there is less fun. *	1	2	3	4	5
49. It is a personal matter whether I worship money or not. Therefore, it is not necessary for my friends to give any counsel. *	1	2	3	4	5
50. The motto "sharing in both blessings and calamity" is still applicable even if one's friend is clumsy, dumb, and causes a lot of trouble.	1	2	3	4	5
51. There are approximately _____ of my friends who know how much my family as a whole earns each month.	0	1	2	3	4 or more
52. On the average, my friends' ideal number of children differs from my own ideal by: *	0	1	2	3	4 or more
53. It is inappropriate for a supervisor to ask subordinates about their personal life (such as where one plans to go for the next vacation). *	1	2	3	4	5
54. When I am among my colleagues/classmates, I do my own thing without minding about them. *	1	2	3	4	5
55. One needs to return a favor if a colleague lends a helping hand.	1	2	3	4	5
56. I have never loaned a personal item (e.g., camera, coat, etc.) to any colleagues/classmates. *	1	2	3	4	5
57. We ought to develop the character of independence among students, so that they do not rely upon other students' help in their schoolwork. *	1	2	3	4	5

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
58. A group of people were discussing where to eat at work. A popular choice was a restaurant which had recently opened. However, someone in the group had discovered that the food was not good. Yet the group disregarded this person's objection, and insisted on trying it out. There were only two alternatives for the person who objected: either to go or not to go with the others. In this situation, <u>not</u> going, with the others is a better choice. *	1	2	3	4	5
59. There is everything to gain and nothing to lose for classmates to group themselves for study and discussion.	1	2	3	4	5
60. Classmates' assistance is indispensable to getting a good grade at school.	1	2	3	4	5
61. I would help if a colleague at work told me he/she needed money to pay a utility bill.	1	2	3	4	5
62. In most cases, to cooperate with someone whose ability is lower than one's own is not as desirable as doing the thing alone. *	1	2	3	4	5
63. Do you agree with the proverb "Too many cooks spoil the broth"? *	1	2	3	4	5

* = Reverse scored

Appendix E**Background Information**

The information that you provide here will be kept completely confidential. I will be used to describe the sample of respondents. Please mark only one response for each question.

1. What is your class year?

- ☐ 1. Freshman
- ☐ 2. Sophomore
- ☐ 3. Junior
- ☐ 4. Senior
- ☐ 5. Graduate Student

2. What is your age? _____**3. Have you chosen a career?**

- ☐ 1. No
- ☐ 2. Yes

If yes, what is your career choice? _____

4. What is your gender?

- ☐ 1. Male
- ☐ 2. Female

5. What is your ethnic background?

- ☐ 1. White
- ☐ 2. Black
- ☐ 3. Asian or Pacific Islander
- ☐ 4. Hispanic
- ☐ 5. Native American
- ☐ 6. Other: (please specify): _____

6. What is your Generation Level?

- ☐ 1. I was born outside the United States
- ☐ 2. I was born in the United States, but one or both of my parents were born outside the United States
- ☐ 3. Myself and my parents were born in the United States, but one or more of my grandparents were born outside the United States
- ☐ 4. Myself, my parents, and my grandparents were born in the United States

Please describe your household:

1. ☐ I live in a household with my mother and my father (Please complete questions 7, 8, 9, 10)
2. ☐ I live in a household with my mother and her spouse/partner (Please complete questions 7 and 8 referring to your mother's spouse/partner and questions 9 and 10 referring to your mother)
3. ☐ I live in a household with my father and his spouse/partner (Please complete questions 7 and 8 referring to your father and questions 9 and 10 referring to your father's spouse/partner)
4. ☐ I live in a household with only my mother because she is widowed, divorced, or separated (Please complete questions 9 and 10. Also complete questions 7 and 8 if she receives support, insurance, or estate payments from your father)
5. ☐ I live in a household with only my father because he is widowed, divorced, or separated (Please complete questions 7 and 8. Also complete questions 9 and 10 if he receives support, insurance or estate payments from your mother)

7. What is your **father's** (or your mother's spouse) occupation?

- ☐ 9 High Executive of a Large Business, Owner of a Large-sized Business or Major Professional (e.g., Actuaries, Architects, Engineers, Lawyers, Physicians)
- ☐ 8 Business Manager, Owner of Medium-sized Business or Lesser Professional (e.g., Accountants, Administrator, Computer Specialist, Editor, Production Manager)
- ☐ 7 Administrative Personnel, Owner of Small-Business, Minor Professional, Managers (e.g. Office or Sales Manager, Social Worker, Real-Estate Broker, Teacher, Artist)
- ☐ 6 Technician or Owner of Very Small Business (e.g., Technician, Secretary, Inspector)
- ☐ 5 Clerical and Sales Employee (Bank teller, Bookkeepers, Dental Assistant)
- ☐ 4 Skilled Manual Employee (Blacksmith, Cabinetmaker, Decorator, Electrician)
- ☐ 3 Machine Operator or Semi-Skilled Employee (Construction, Barber, Cosmetologist)
- ☐ 2 Unskilled Employee (Waiter, Food Service)
- ☐ 1 Farm or Service Worker (Maid, Janitor)
- ☐ 0 Unemployed

9. What is your **mother's** (or your father's spouse) occupation?

- ☐ 9 High Executive of a Large Business, Owner of a Large-sized Business or Major Professional (e.g., Actuaries, Architects, Engineers, Lawyers, Physicians)
- ☐ 8 Business Manager, Owner of Medium-sized Business or Lesser Professional (e.g., Accountants, Administrator, Computer Specialist, Editor, Production Manager)
- ☐ 7 Administrative Personnel, Owner of Small-Business, Minor Professional, Managers (e.g. Office or Sales Manager, Social Worker, Real-Estate Broker, Teacher, Artist)
- ☐ 6 Technician or Owner of Very Small Business (e.g., Technician, Secretary, Inspector)
- ☐ 5 Clerical and Sales Employee (Bank teller, Bookkeepers, Dental Assistant)
- ☐ 4 Skilled Manual Employee (Blacksmith, Cabinetmaker, Decorator, Electrician)
- ☐ 3 Machine Operator or Semi-Skilled Employee (Construction, Barber, Cosmetologist)
- ☐ 2 Unskilled Employee (Waiter, Food Service)
- ☐ 1 Farm or Service Worker (Maid, Janitor)
- ☐ 0 Unemployed

8. How many years of school has your **father** (or your mother's spouse) completed?

- ☐ 7 Professional (e.g., M.A., M.D., Ph.D., J.D.)
- ☐ 6 Four-year college graduate (A.B., B.S.)
- ☐ 5 Partial four-year college or community college graduate
- ☐ 4 High school graduate
- ☐ 3 Partial high school
- ☐ 2 Junior high school (9th grade)
- ☐ 1 Less than seventh grade

10. How many years of school has your **mother** (or your father's spouse) completed?

- ☐ 7 Professional (e.g., M.A., M.D., Ph.D., J.D.)
- ☐ 6 Four-year college graduate (A.B., B.S.)
- ☐ 5 Partial four-year college or community college graduate
- ☐ 4 High school graduate
- ☐ 3 Partial high school
- ☐ 2 Junior high school (9th grade)
- ☐ 1 Less than seventh grade

Appendix F

Career and Family Situations

Please read the situations that follow. For each situation, please indicate to what extent you approve of the situation presented and how likely it is that a similar situation would occur in your family?

Situation 1

Jim's family owns a small business. Jim has worked with his mother and father at the business every summer and after school and has a good grasp of it. Since he was young, Jim's mother and father have told him that he will inherit their business. Jim has decided to work full-time at the business; he has not considered any other career options nor work opportunities.

To what extent do you approve what Jim is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Jim's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 2

Mary has always been a good student and loves art and children. Her mother, father, aunts, and uncles have been telling her for years that they would be very proud of her if she were to pursue a career in law. They emphasize that being a lawyer is a prestigious and lucrative career. However, Mary has told them that she will not become a lawyer.

To what extent do you approve what Mary is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Mary's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 3

Anne has obtained her college degree and has accepted a position with a company in a different state. Her new job is two-hours away from her hometown by plane or 14 hours by car.

To what extent do you approve what Anne is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Anne's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 4

Johnny, a high-school senior, has applied to two colleges. One is the state university in his hometown and the other one is a small technical college 3 hours away. His family would prefer that he go to the state university. His school counselor has told him that going to the technical college will provide him with more educational and career opportunities. He agrees with his counselor, and if accepted, he will go to the technical college.

To what extent do you approve what Johnnie is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Johnnie's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 5

Erika has had to drop her day classes because she could not keep up with her school work and with her baby-sitting responsibilities at home. She takes care of her younger siblings while her parents work.

To what extent do you approve what Erika is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Erika's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 6

While in high school and college, J.J. has become very involved in theater and has been part of the cast of various productions. He would like to pursue a career in acting and would like to major in acting. However, his father has been pressuring him to major in business and find a more secure job when he is done with his studies. J.J. is undecided and confused, but he is taking business classes and doing well in them and he thinks he will probably major in business to appease his father.

To what extent do you approve what J.J. is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to J.J.'s would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 7

Ruth has received considerable financial aid and grants to go to graduate school in California. She felt so torn about leaving behind her family in New York City that she has decided to not go to graduate school and find a job close to home.

To what extent do you approve what Ruth is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Ruth's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 8

James needs only one more year to earn his Engineering degree. However, his grandfather is ill and his family needs someone to stay at home with him. Since James does not have work responsibilities yet, he has been asked by his family, and has agreed, to take a leave of absence from school and take care of his grandfather.

To what extent do you approve what James is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to James's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 9

William has been offered a research assistant position by one of his professors. This would be a good opportunity for him, since he is considering going to graduate school. William already had his time committed to helping his mother in her catering business to earn pocket money. He has decided to accept the research position.

To what extent do you approve what William is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to William's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 10

Dana's family has always wanted her to become a scientist. They have encouraged her to take many science courses in high school and college. Lately, Dana has not been doing well in her science courses and has told her family that she will change majors. Her family has become very upset with her and they have told her that she needs to study more to do well in her classes.

To what extent do you approve what Dana is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Dana's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 11

When deciding what career path to follow, Rachel took more into consideration her family's situation and needs than her own interests.

To what extent do you approve what Rachel is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Rachel's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 12

Audrey will be moving from her hometown to start college in the fall at College City. Her widowed mother and her brother have decided to move to College City so that she will not be by herself.

To what extent do you approve what Audrey is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Audrey's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

.

Situation 13

Through a colleague David has found out about a great job opportunity in a different city for which he would be qualified, but he is reluctant to apply because he feels his mother, father, and siblings are too much of his responsibility for him to leave them behind.

To what extent do you approve what David is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to David's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 14

Nick loves math and wants to be a math teacher. His family absolutely opposes this idea, but Nick has already made up his mind.

To what extent do you approve what Nick is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Nick's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Situation 15

Walter has many interests, but his primary concern is to choose a career that will allow him to provide for his parents when they are older.

To what extent do you approve what Walter is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

How likely it is that a situation similar to Walter's would occur in your family?

1	2	3	4	5
Very unlikely	Unlikely	Neither likely nor unlikely	Likely	Very likely

Appendix G

Career and Family Situations

You are participating in the early stages of the development of a measure to test for differences in career behavior between different types of people. Your role at this stage of the research is to provide us with information that will help us decide whether the measure is clear and conveys what we want it to convey.

The measure consists of 15 situations. The situations were written to reflect ways in which individualists and collectivists may behave differently when making career decisions.

- 1) Please read carefully the following definitions of Collectivists and Individualists.
- 2) Read carefully each situation.
- 3) For each situation, please indicate whether the character is behaving in a collectivist or an individualist way

Who is a collectivist?

A collectivist sees him/herself as part of one or more collectives, such as the family or the clan. Collectivists are primarily motivated by the norms and the duties established by those collectives, and they give priority to the goals of those collectives over their individual goals. Collectivists tend to live with their extended families, which may include grandparents, uncles, cousins, even tribal units or clans. Collectivists are more sensitive to the views of others and are emotionally dependent on their ingroup. They share a concern for the well-being of their ingroup and will direct their energies towards providing for their ingroup. Collectivists do not distinguish between their group goals and their personal goals.

Who is an individualist?

Individualists, on the other hand, view themselves as independent from those collectives, and are primarily motivated by their own preferences, needs, and rights. Their goals have priority over the goals of others. Individualists tend to live in nuclear families, composed of husband, wife and children. Individualist "do their own thing." Individualist cultures assume the individuals look primarily after their own interests and the interests of the immediate family (husband, wife, children).

1. Jim's family owns a small business. Jim has worked with his mother and father at the business every summer and after school and has a good grasp of it. Since he was young, Jim's mother and father have told him that he will inherit their business. Jim has decided to work full-time at the business; he has not considered any other career options nor work opportunities.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

2. Mary has always been a good student and loves art and children. Her mother, father, aunts, and uncles have been telling her for years that they would be very proud of her if she were to pursue a career in law. They emphasize that being a lawyer is a prestigious and lucrative career. However, Mary has told them that she will not become a lawyer.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

3. Anne has obtained her college degree and has accepted a position with a company in a different state. Her new job is two-hours away from her hometown by plane or 14 hours by car.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

4. Johnny, a high-school senior, has applied to two colleges. One is the state university in his hometown and the other one is a small technical college 3 hours away. His family would prefer that he go to the state university. His school counselor has told him that going to the technical college will provide him with more educational and career opportunities. He agrees with his counselor, and if accepted, he will go to the technical college.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

5. Erika has had to drop her day classes because she could not keep up with her school work and with her baby-sitting responsibilities at home. She takes care of her younger siblings while her parents work.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

6. While in high school and college, J.J. has become very involved in theater and has been part of the cast of various productions. He would like to pursue a career in acting and would like to major in acting. However, his father has been pressuring him to major in business and find a more secure job when he is done with his studies. J.J. is undecided and confused, but he is taking business classes and doing well in them and he thinks he will probably major in business to appease his father.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

7. Ruth has received considerable financial aid and grants to go to graduate school in California. She felt so torn about leaving behind her family in New York City that she has decided to not go to graduate school and find a job close to home.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

8. James needs only one more year to earn his Engineering degree. However, his grandfather is ill and his family needs someone to stay at home with him. Since James does not have work responsibilities yet, he has been asked by his family, and has agreed, to take a leave of absence from school and take care of his grandfather.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

9. William has been offered a research assistant position by one of his professors. This would be a good opportunity for him, since he is considering going to graduate school. William already had his time committed to helping his mother in her catering business to earn pocket money. He has decided to accept the research position.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

10. Dana's family has always wanted her to become a scientist. They have encouraged her to take many science courses in high school and college. Lately, Dana has not been doing well in her science courses and has told her family that she will change majors. Her family has become very upset with her and they have told her that she needs to study more to do well in her classes.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

11. When deciding what career path to follow, Rachel took more into consideration her family's situation and needs than her own interests.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

12. Audrey will be moving from her hometown to start college in the fall at College City. Her widowed mother and her brother have decided to move to College City so that she will not be by herself.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

13. Through a colleague David has found out about a great job opportunity in a different city for which he would be qualified, but he is reluctant to apply because he feels his mother, father, and siblings are too much of his responsibility for him to leave them behind.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

14. Nick loves math and wants to be a math teacher. His family absolutely opposes this idea, but Nick has already made up his mind.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

15. Walter has many interests, but his primary concern is to choose a career that will allow him to provide for his parents when they are older.

The Character in this situation is behaving in which way?

- ☐ Collectivist
☐ Individualist

PART III

Please use the following space to provide additional feedback on the situations. Are they clear? Please be specific.

Thank you for your participation!

Background Information

The information that you provide here will be kept completely confidential. It will not be used to identify you in any way. It will be used to describe the sample of respondents. Please mark only one response for each question.

1. What is your class year?

- ☐ 1. Freshman
- ☐ 2. Sophomore
- ☐ 3. Junior
- ☐ 4. Senior
- ☐ 5. Graduate Student

2. What is your age? _____**3. Have you selected a major?**

- ☐ 1. No
- ☐ 2. Yes
If yes, what is your major? _____

4. What is your gender?

- ☐ 1. Male
- ☐ 2. Female

5. What is your ethnic background?

- ☐ 1. White
- ☐ 2. Black
- ☐ 3. Asian or Pacific Islander
- ☐ 4. Hispanic
- ☐ 5. Native American
- ☐ 6. Other: (please specify): _____

6. What is your Generation Level?

- ☐ 1. I was born outside the United States
- ☐ 2. I was born in the United States, but one or both of my parents were born outside the United States
- ☐ 3. Myself and my parents were born in the United States, but one or more of my grandparents were born outside the United States
- ☐ 4. Myself, my parents, and my grandparents were born in the United States

THANK YOU FOR YOUR PARTICIPATION!

Appendix H

Career and Family Situations

Please read the situations that follow. For each situation, please indicate to what extent you approve of what the character is doing.

Situation 1

Jim's family owns a small business. Jim has worked with his mother and father at the business every summer and after school and has a good grasp of it. Since he was young, Jim's mother and father have told him that he will inherit their business. Jim has decided to work full-time at the business; he has not considered any other career options nor work opportunities.

To what extent do you approve what Jim is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 2

Mary has always been a good student and loves art and children. Her mother, father, aunts, and uncles have been telling her for years that they would be very proud of her if she were to pursue a career in law. They emphasize that being a lawyer is a prestigious and lucrative career. However, Mary has told them that she will not become a lawyer.

To what extent do you approve what Mary is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 3

Anne has obtained her college degree and has accepted a position with a company in a different state. Her new job is two-hours away from her hometown by plane or 14 hours by car.

To what extent do you approve what Anne is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 4

Johnny, a high-school senior, has applied to two colleges. One is the state university in his hometown and the other one is a small technical college 3 hours away. His family would prefer that he go to the state university. His school counselor has told him that going to the technical college will provide him with more educational and career opportunities. He agrees with his counselor, and if accepted, he will go to the technical college.

To what extent do you approve what Johnny is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 5

Erika has had to drop her day classes because she could not keep up with her school work and with her baby-sitting responsibilities at home. She takes care of her younger siblings while her parents work.

To what extent do you approve what Erika is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 6

While in high school and college, J.J. has become very involved in theater and has been part of the cast of various productions. He would like to pursue a career in acting and would like to major in acting. However, his father has been pressuring him to major in business and find a more secure job when he is done with his studies. J.J. is undecided and confused, but he is taking business classes and doing well in them and he thinks he will probably major in business to appease his father.

To what extent do you approve what J.J. is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 7

Ruth has received considerable financial aid and grants to go to graduate school in California. She felt so torn about leaving behind her family in New York City that she has decided to not go to graduate school and find a job close to home.

To what extent do you approve what Ruth is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 8

James needs only one more year to earn his Engineering degree. However, his grandfather is ill and his family needs someone to stay at home with him. Since James does not have work responsibilities yet, he has been asked by his family, and has agreed, to take a leave of absence from school and take care of his grandfather.

To what extent do you approve what James is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

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Situation 9

William has been offered a research assistant position by one of his professors. This would be a good opportunity for him, since he is considering going to graduate school. William already had his time committed to helping his mother in her catering business to earn pocket money. He has decided to accept the research position.

To what extent do you approve what William is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 10

Dana's family has always wanted her to become a scientist. They have encouraged her to take many science courses in high school and college. Lately, Dana has not been doing well in her science courses and has told her family that she will change majors. Her family has become very upset with her and they have told her that she needs to study more to do well in her classes.

To what extent do you approve what Dana is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 11

When deciding what career path to follow, Rachel took more into consideration her family's situation and needs than her own interests.

To what extent do you approve what Rachel is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 12

Audrey will be moving from her hometown to start college in the fall at College City. Her widowed mother and her brother have decided to move to College City so that she will not be by herself.

To what extent do you approve what Audrey is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 13

Through a colleague David has found out about a great job opportunity in a different city for which he would be qualified, but he is reluctant to apply because he feels his mother, father, and siblings are too much of his responsibility for him to leave them behind.

To what extent do you approve what David is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 14

Nick loves math and wants to be a math teacher. His family absolutely opposes this idea, but Nick has already made up his mind.

To what extent do you approve what Nick is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

Situation 15

Walter has many interests, but his primary concern is to choose a career that will allow him to provide for his parents when they are older.

To what extent do you approve what Walter is doing?

1	2	3	4	5
To a very little extent	To a little extent	To a medium extent	To a great extent	To a very great extent

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