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ABSTRACT

Social class and ethnic group differences in college students' career maturity were investigated. Participants were 401 undergraduates (250 females, 151 males) attending California State Univesity, Long Beach. Quantitative measurements included: (1) the Duncan Index of social class; (2) Career Maturity Inventory-Attitude Scale; (3) the Vocational Preference Inventory and coding of a subject's career aspiration to determine vocational congruence; (4) the Career Development Inventory's University and College Form (to measure career decision-making ability); and (5) grade point average (GPA). One-third (n=128) of the sample participated in the survey and interview phases; the other two-thirds participated only in the survey. Quantitative analyses did not reveal significant social class differences in career maturity. Various ethnic group differences were observed in regard to career mature attitudes, vocational congruence, and GPA. In terms of career mature attitudes, Caucasian-Americans exhibited significantly greater career maturity than did Filipino and Asian-American students. Filipino students reported a significantly lower mean vocational congruence than all other ethnic groups. Findings suggested that current theories of career development and career counseling were lacking in their application to today's ethnically diverse college population. (33 references) (YLB)

Social Class and Ethnic Differences in College Students' Career Maturity: A Quantitative and Qualitative Analysis

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Abstract

Social class and ethnic group differences in 401 college students' career maturity were investigated. Quantitative measurements included career mature attitudes, vocational congruence, career decision making skills, and grade point average (GPA). Quantitative analyses did not reveal significant social class differences in career maturity. Various ethnic group differences, however, were observed in regards to career mature attitudes, vocational congruence, and GPA ($p < .001$). Qualitative analyses included detailed interviews conducted with 128 of the participants. Findings suggest that current theories of career development and career counseling are lacking in their application to today's ethnically-diverse college population.

Social Class and Ethnic Differences in College Students' Career Maturity: A Quantitative and Qualitative Analysis

Much of the early research on career-related variables focused on the evaluation of different methods of career exploration and career counseling (e.g., Allen & Keaveny, 1980; Granovetter, 1974; Reid, 1972). Recent work, however, has addressed motivational and individual differences associated with career development (Betz & Hackett, 1983; Suglaski & Greenhaus, 1986). As one of the leading vocational theorists recently noted (Crites, 1987), there is no question that the field of educational and psychological research is experiencing a "resurgence of career psychology reminiscent of its early days (p. 39)."

Vocational maturity is widely recognized as a developmental yardstick used to measure the readiness of a person to address the various career-related tasks imposed by her or his life stage (Phillips & Strohmer, 1983). For example, in the exploration stage of career development the mature individual is characterized by awareness and use of resources, knowledge about participation in the world of work, the ability to integrate and execute career decisions, and general vocational strategy. Vocational maturity is defined,

then, as representing a person's stage of vocational or career development along a continuum of vocational tasks, attitudes, skills, and behaviors (Crites, 1965).

As countless researchers have emphasized (e.g., Bernardelli, De Stefano, & Dumont, 1983), if we are concerned with enhancing career development in young adults, then important individual differences in career maturity need to be the primary focus of career-related research. Only then can programs be developed that provide varied experiences through which pertinent career information may be obtained and utilized by a large cross-section of the population. Determining the characteristics of individuals unlikely to benefit from traditional programs may be of even greater importance. Such information provides practitioners with ways in which to design more comprehensive counseling strategies.

A commonly cited criticism of Super's (1957) initial theory of career and life development is reflected in Osipow's (1983) argument that Super's concept lacks a provision for the economic and social factors that influence career decisions. Yet, in a recent presentation of the theory, Nevill and Super (1988) continue to propose that social class differences (e.g., socioeconomic status)

do not relate to measures of career maturity.

The influence of social class and ethnic group differences in career status and attainment has been substantially overlooked throughout the development of traditional vocational theories. Newer proposed social theories of career and vocational choice, such as the status-attainment model of careers (Duncan, Featherman, & Duncan, 1972), postulate that the social status of one's parents powerfully affects the occupational level that one achieves. Such theories, however, lack a description of the precise ways in which social class affects career growth and development.

As Hotchkiss and Borow explain (1984), sociological research in the vocational domain has been largely confined to the effect of one's parent's occupational status upon a person's own occupational status. Hotchkiss and Borow suggest that extending sociological analyses to the considerable body of conceptual and empirical literature in vocational psychology would be a "logical and fruitful extension (p. 146)." Nevertheless, there is little integration of social class variables into the current study of career maturity (Grant & Sleeter, 1986). As Spokane and Hawks (1990) noted in their recent review

of career development research, "the literature reflects a need for a more diverse array of intervention strategies and efforts, especially to address the needs of at-risk groups (p. 116)."

Taking into account the definition of career maturity offered earlier, two traditional affective components of the construct (career mature attitudes and vocational congruence) as well as career decision making ability (a cognitive measure of career maturity) and academic achievement were chosen to assess the relationship between social class and vocational maturity.

It is expected that individuals from upper social classes will be significantly more vocationally developed than those from lower social classes in terms of both the affective components of development (career mature attitudes and vocational congruence) and the cognitive component of career decision making ability. Yankelovich (1979) provides detailed reasoning for expecting a strong relationship between social class and affective components of career maturity. He notes that workers from higher social classes are more salient in their work, exhibit mature career attitudes, and are more likely to seek occupations that match their interests than workers from

lower social classes. Decision making ability is expected to relate to social class according to Healy (1990), who claims that career decision making skills relate to competitive achievements such as higher statuses and work roles.

Another relationship that career development research has been remiss in examining concerns the differences in career maturity between various ethnic groups. Therefore, although there is no empirical evidence for hypothesizing ethnicity as a predictor of career maturity, the data collected in this study will be tested for differences between college students (although not a random sample) of various ethnic backgrounds.

Finally, in addition to quantitative analyses, approximately one third of the subjects (n=128) will also be interviewed by the researcher. This will provide a qualitative method for observing social class and ethnic differences in career maturity.

Method

Participants

The participants included in this investigation were 401 (250 females, 151 males) undergraduates attending California State University, Long Beach. Additional

demographic information is presented in Table 1. The

Insert Table 1 about here

students who participated in the quantitative study (78 females, 50 males) were also interviewed by the researcher. All students participated as part of an introductory psychology course requirement.

Measures

Social Class

As noted by Lundberg (1974), the few theories of social stratification that have appeared in the literature have been of little assistance to investigators trying to measure social class differences. In reviewing numerous studies of social class that date back as far as the mid-1950s (e.g., Hollingshead & Redlich, 1958; Kahl & Davis, 1955), Lundberg reports that occupation is the best single indicator of social class positions. Even social class categories that are not based directly upon occupation reveal the same lower, middle, and upper class dividing lines as the categorization based upon occupation alone.

As Grant and Sleeter (1986) more recently demonstrated after reviewing 15 contemporary articles focused primarily on social class differences in

relationship to educational variables, the definition of social class is widely varied, ranging from no definition in the literature to the use of income, education and parent's occupation-based information. Although sociologists and psychologists recognize the numerous differences within predominantly middle-class groups (e.g., the difference between the social experiences of a department store manager versus a high school teacher), there is no consensus as to where to draw additional boundary lines (Lundberg, 1974). Therefore, dividing the majority of the population into three groups, lower, middle, and upper class, appears to be most appropriate.

In an effort to adequately measure subjects' social class, the Duncan Index (Reiss, Duncan, Hatt, & North, 1961) was used. This index, which has been used in various other studies of college students' career development (e.g., Healy, Mitchell, & Mourton, 1987), provides the opportunity to calculate a weighted index of a person's current or past occupation.

For those subjects participating in this study who have only one working parent, that parent's current occupation was coded along the Duncan Index continuum. For those subjects whose parents are no longer married

(and have not been for over two years), the occupation of the parent with whom the subject lives (or most recently lived) was used for tabulating the social class measure. Finally, for subjects whose parents are married and both are currently employed, the larger of the two Duncan-Index values was used to measure the subject's social class. Based on the Duncan-Index value (which is measured as a continuous variable, with scores ranging from 0 on the low end of the scale and 99 on the high end), subjects were classified as belonging to either the lower, middle, or upper social class for comparisons between groups, based on the 33rd and 66th percentile breakdowns of the measure. This sample's Duncan values (based on parents' current occupation) ranged from 1 to 97, with a mean of 59.00 and a standard deviation of 21.67.

Career Mature Attitudes

The Career Maturity Inventory-Attitude Scale (CMI-A) (Crites, 1978) was developed from the previously described maturational model of career choice. The CMI-A was selected for this investigation on the basis of its widespread use as a measure of career maturity. As Guthrie and Herman (1982) note, the CMI-A is the most common assessment of career maturity and has been in use

for well over a decade (Palmo & Lutz, 1983).

The assessment consists of 50 true-false items which represent five different attitudinal variables theorized to be necessary in making a career choice. Higher scores indicate a greater degree of car er mature attitudes and a higher level of vocational decidedness (Newman, Fuqua, & Seaworth, 1989). The Attitude Scale is one part of the two-part Career Maturity Inventory and "elicits the feelings, the subjective reactions, the dispositions that the individual has toward making a career choice and entering the world of work" (Crites, 1978, p. 3). Subjects in this study had CMI-A scores ranging from 17-48, with a mean of 36.84 and a standard deviation of 5.08.

Vocational Congruence

The calculation of vocational congruence requires measuring the "person" and the "environment." These two measures are then compared in order to arrive at a congruence value.

The results of the standardized Vocational Preference Inventory (VPI; Holland, 1978) served as the method of measuring the person. As Holland presented in the 1978 manual of the Vocational Preference Inventory, the instrument has moderate to high reliability, with test-

retest reliability up to .80. Based on a subject's inventoried interests regarding various occupations, results of the VPI indicate a three-letter index of vocational preference (these letters corresponding to the six categories of Holland's occupational types). For example, participants whose preferences revealed their top three areas of interest to be realistic types of jobs, followed by investigative and artistic occupations--in that order--were considered RIA types.

Most congruence studies reviewed by Spokane in a 1985 monograph defined the environment by using the Holland code of a student's career aspiration or preferred occupation of choice. Therefore, in this investigation the "environment" measure of congruence was determined by coding a subject's career aspiration. The three-letter code of the environment was determined by using the Dictionary of Holland Occupational Codes (Gottfredson, Holland, & Ogawa, 1982).

According to Spokane (1985), the better congruence studies compare the person and the environment based on mathematical combinations of all possible personality types using a three-letter code for both the person and the environment. The primary purpose of using

mathematical combinations to calculate level of congruence is to recapture information lost in first-letter indices. Iachan's (1984) method for calculating person-environment congruence, one method in particular for which Holland (1987) provides substantial support, was used for determining congruence. This calculation method takes into account the increasing importance of agreement in positions corresponding to the highest ranks. Comparing three-letter codes for both the person and the environment results in congruence scores ranging from 0 to 28, with lower scores indicating less vocational congruence. In this investigation, participants' congruence scores ranged from 0-28, with a mean of 19.67 and a standard deviation of 7.54.

Career Decison Making Ability

Career decision making ability was measured by the use of the 20-item decision making scale of the Career Development Inventory's University and College Form (Super, Thompson, Lindeman, Jordaan, & Myers, 1981). The decision making scale measures an individual's competence in resolving simulated career problems. Twenty questions focused on career-related decisions are asked of the participants, with four responses from which to choose the

correct answer. Scores on this scale have been shown to relate moderately to several other measures of career decision making ability and knowledge (Jepsen & Prediger, 1981, as cited in Healy, 1990). Participants' scores ranged from 3-19, with a mean score of 13.00 and a standard deviation of 2.46.

Demographic Information

Demographic information, including age, gender, ethnic background, current GPA, occupational aspiration, parents' current occupations, and other general information, was obtained by asking participants to provide responses to various questions appearing on the first two pages of the survey packet.

Procedure

There were two different phases of data collection in which approximately one third (n=128) of the sample participated, the survey and the interview phases. The other two-thirds participated in only the survey method of data collection.

The survey phase of the research involved participants completing a 40 min inventory of various measures previously described (demographics information, CMI-A, VPI, and the CDM Scale). The interview phase of

the study required participation in a 30 min interview, at which time a designated interviewer (in a one-on-one setting) obtained answers to open-ended questions about participants' perceptions of career development.

For those participating in both methods of measuring certain variables, the order of conditions was counterbalanced, such that one half of them first participated in the interview process and then completed the survey, whereas the other half of these participants first completed the survey packet and then participated in the interview. There was a one-to-two week interval between the two phases of data collection.

Results

Quantitative Analyses

All one-way analyses of variance (ANOVAs) were conducted after controlling for participants' age, gender, and current class standing. The a priori alpha level set for all statistical analyses was .001.

Social class differences were not observed in regards to career mature attitudes [$F(2, 376) = 0.442$, ns], vocational congruence [$F(2, 337) = 0.726$, ns], career decision making skills [$F(2, 377) = 0.192$, ns], and GPA [$F(2, 362) = 0.856$, ns].

Although there were no significant differences between subjects of various ethnic backgrounds in regards to their career decision making skills [$F(4, 376) = 1.358$, ns], analyses revealed ethnic group differences in terms of career mature attitudes [$F(4, 371) = 7.298$, $p < .001$], vocational congruence, [$F(4, 331) = 6.225$, $p < .001$], and current GPA, [$F(4, 355) = 6.646$, $p < .001$]. Tukey post-hoc tests further clarified which ethnic groups actually differed from the others on each of these career maturity measures.

In terms of career mature attitudes, Caucasian-Americans ($M = 37.97$) reported significantly greater career maturity than both Filipino ($M = 33.54$) and Asian-American ($M = 35.76$) students. No other ethnic group differences were revealed by the analyses.

According to post-hoc analyses, Filipino students ($M = 13.77$) reported a significantly lower mean vocational congruence than all other ethnic groups, including Asian-Americans ($M = 19.09$), Caucasian-Americans ($M = 20.35$), Hispanic students ($M = 20.96$), and African-American students ($M = 22.77$). No other group differences were significant.

Current GPA differences between Caucasian-American

students (M = 2.99) and both African-American (M = 2.57) and Filipino (M = 2.59) students indicated that ethnic differences in academic achievement exist in this sample. No other ethnic differences were revealed by the analyses.

Qualitative Analyses

As previously indicated, 128 of the participants served in both the survey and the interview phases of the study. These participants included 18 African-Americans (11 females, 7 males), 26 Hispanics (15 females, 11 males), 45 Caucasian-Americans (29 females, 16 males), 19 Filipinos (13 females, 6 males), and 20 Asian-Americans (10 females, 10 males).

During the interview session, participants were asked to identify their own, personal career development and progress throughout their adolescent and young adult years. Although some students hesitated discussing their private career goals, many others enjoyed the opportunity to openly engage in a discussion of their career accomplishments and challenges. Determining trends in responses was the primary goal of analyzing the content of these interactions. Because only one interviewer conducted all of the interviews, consistency in the types of questions asked was assured. Answers to these open-

ended questions were recorded after each interview session.

Differences in the pattern of responses from participants of various social classes and ethnic groups were somewhat revealing. Generally, Asian-American and Filipino students reported the highest degree of career indecision, followed by Hispanic, Caucasian-American and African-American students, in that order. Career planfulness was a major distinguishing factor between groups.

When asked to report their individual career development and progress over the last few years, African-American students reported a greater number of challenges than students from other backgrounds, with Hispanic students reporting the next greatest number of barriers. Although the African-American and Hispanic students reported a relatively high number of past challenges in their career development, they also appeared to have been much more planful in their career decisions than students from the other ethnic groups. They seemed to report a greater frequency of having well-designed plans to achieve their aspirations and overcome life's obstacles than Asian-American, Caucasian-American, and Filipino students.

Discussion

Although social class differences in college students' career maturity were not revealed in this particular study, it is important to note that social class may still play a central role in the development of career maturity. Although there were no statistical differences between students of various social classes in terms of the career maturity measures employed in this investigation, social class is not necessarily irrelevant to career development. On the contrary, social class may interact with other psychological and cognitive variables in the development of various career-oriented skills and choices. Simply because class differences alone were not found, it is incorrect to imply that a person's social class is useless as a predictor of career maturity. In fact, concluding social class as irrelevant to career maturity has been one of the greatest oversights in theories of career development. Such unfounded claims may be responsible for the absence of social class factors in the majority of contemporary career counseling interventions. Investigating ways to overcome deficits in career maturity as they relate to social class and environmental influences is an area of research in need of

special focus.

In regards to ethnic group differences, Filipino and Asian-American students reported significantly less career mature attitudes than Caucasian-American students. Furthermore, Filipino students were also significantly less likely than students from any other ethnic group to be vocationally congruent. Filipino students' mean congruence scores (13.77) were more than 5 points less than the next highest group, Asian-Americans (19.09).

As revealed through analyses of the interviews, Filipino and Asian-American students were least career decisive (i.e., had the least focus in terms of having chosen a particular career of field of interest), least likely to report challenges that they had experienced in their career development, and least likely to report a planful career process in deciding to attend college. Given some of these trends, the role of variables such as perceived barriers in career maturity may be worthy of additional empirical focus.

Finally, although general social class differences were not revealed (in terms of social class being a consistent predictor of career maturity), the interactive role that social class plays as a differentiating factor

in career maturity must not be overlooked. Social class and environmental influences are real and can be stumbling blocks to career progress if not considered along with other important correlates of career maturity and vocational development. Future research should focus on such interacting relationships.

The results of this investigation have many direct implications for career development theory and the practice of career counseling. Of these implications, perhaps none is more important than the realization that we need far more comprehensive theories of career maturity than those with which most career counselors currently operate. Spokane and Hawks (1990) made it clear that our current career counseling practices do not appear particularly responsive to important societal needs, such as at-risk groups.

With the increasingly diverse student populations on campuses across the country, it is both an ethical and professional responsibility of all career counselors (and counselors in general) to more fully consider and consciously seek to understand issues of concern to various ethnic groups. The results of this study provide ample evidence that the issues related to career

development that are faced by students are not consistent across cultural and ethnic groups. It only follows, then, that the most comprehensive career counseling interventions require an awareness of these differences and an understanding of their role in career maturity.

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Table 1

Demographic Characteristics of the Students

Characteristic	Frequency	% of Sample
Age (M = 19.86)		
18	74	18.5
19	122	30.4
20	103	25.7
21 and over	102	25.4
Ethnic Background		
Caucasian-American	210	52.4
African-American	27	6.7
Hispanic	49	12.2
Asian-American	59	14.7
Filipino	38	9.5
Other	18	4.5
Class Standing		
Freshman	147	36.7
Sophomore	118	29.4
Junior	82	20.4
Senior	54	13.5