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What Is Most Important to Students' Long-Term Career Choices

Analyzing 10-Year Trends and Group Differences

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This study examined the variables incoming first-year college students believed were most important to their long-term career choice. A sample of 31,731 students were surveyed from 1995 to 2004, and results revealed that men placed a greater emphasis on making money, women placed a greater emphasis on working with people and contributing to society, White students placed a greater emphasis on having independence and intrinsic interest in the field, and African Americans and Asian Americans espoused higher extrinsic work values. Additional analyses revealed significant cohort differences, as over the 10-year period students reported a 10% increase in the selection of intrinsic values, a 5% decrease in selection of extrinsic values, and a 5% decrease in selection of prestige values.

Keywords: career choice; college students; work values

One of the hallmarks of research in the fields of counseling and vocational psychology involves understanding the process by which individuals make career decisions. For nearly 100 years, since Parsons (1909) proposed the concept of *person-job fit*, psychologists have attempted to identify how decisions are made and the optimal way to make them. Traditionally, career researchers have attributed career decision making to a variety of variables, with particular importance being placed on vocational interests, skills, personality,

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values, and perceived abilities (Russell, 2001). Within this framework, the largest area of research to date has focused on the role of vocational interests as they relate to career choice, and in general this research has supported a strong correlation between the two (Betsworth & Fouad, 1997; Spokane & Cruza-Guet, 2005). However, though it is clear that interests are a critical component of the decision-making process, additional research has shown correlations between person–job interest congruence and job satisfaction to be surprisingly low, about .25 to .30 (Hansen, 2005). This suggests there are a number of other variables critical to the choice process and satisfaction in a certain work environment (Dawis, 2001). The purpose of the current study is to examine what variable individual incoming college students believe is most important to their long-term career decision and analyze how these top choices differ by gender, race/culture, status in choosing a major, and cohort year over a 10-year period.

Within the vocational literature, one way of conceptualizing the personal importance of different variables in an individual's career choice is through a work values framework. *Work values* refer to what outcomes an individual desires out of work in general and also what components of a job are important to that individual's work satisfaction (Dawis & Lofquist, 1984; Elizur, 1984). In a broad sense, work values could be considered to encompass a host of vocationally related variables, including interests and skills, which could be seen as values if matching these with a job is a desired work outcome (Elizur & Sagie, 1999). However, most often work values correspond to career-related desires not measured in interest and skill inventories, such as a desire to make money, contribute to society, or work independently (Elizur & Sagie, 1999; Keller, Bouchard, & Arvey, 1992; Zytowski, 1994). Work values have been classified in a variety of ways. Some theorists suggest that individual work values represent distinct constructs (Neville & Super, 1989), whereas others support a stratified approach where values can be classified in a range of two to four group types, with typical groups relating to intrinsic, extrinsic, social, and prestige values (Elizur, 1984; Ros, Schwartz, & Surkiss, 1999).

Although addressing work values with college students is a critical component of career counseling practice, it remains a relatively understudied area of research in comparison to vocational interests. What the existing research does suggest is that the work values of students play a significant role in their decision-making process (Judge & Bretz, 1992; Ravlin & Meglino, 1987), that work value congruence is significantly related to job satisfaction (Knoop, 1994), and that work values often significantly differ by gender and race/culture. Specifically, males have been shown to be more prone to work values related to making money and having prestige, whereas women are more likely to

espouse work values related to working with people and helping others (Abu-Saad & Isralowitz, 1997; Duffy & Sedlacek, 2007; Post-Kammer, 1987). Other studies have shown White students to place a greater emphasis on intrinsic and social work values than students from minority groups, and White men to place greater emphasis on economic work values than women (Duffy & Sedlacek, 2007; Johnson, 2002).

A main focus of the current study is to not only assess work value differences by gender and race/culture but also most importantly to understand how work values differ with groups of students across years. In the field of vocational psychology, most research assessing differences related to career variables over time has been completed on work interests and has focused on how interests shift on an individual basis. For example, a recent meta-analysis analyzing longitudinal studies confirmed that individual career interests remain relatively stable after age 18 years (Low, Yoon, & Roberts, 2005). Additional studies have pointed to the importance and stability of other important career-related variables, such as self-efficacy, skills, and personality (Nauta & Epperson, 2003; O'Brien, Friedman, & Tipton, 2000; Seibert, Kraimer, & Crant, 2001). Similar results have been found with limited studies related to work values, where values have been found to be relatively stable for various points during adolescence and from late adolescence to young adulthood (Johnson, 2002; Lindsay & Knox, 1984; Madill, Montgomerie, & Stewin, 2000). However, though these studies have demonstrated career-related stability in individuals over time, very few studies to date have examined cohort differences and potential shifts in group career-related attitudes over a time span.

The current study provides a unique view of the work values of college students across 10 cohort groups, from 1995 to 2004. Also, the current study sought to understand which values were most important for a student's long-term career choice, where instead of rank ordering values or answering each value on a continuum, students picked one of 10 possible choices as most important. Previous research and factor analyses on college students' work values have found that values can be grouped into four facets: intrinsic, extrinsic, social, and prestige (Elizur, 1984; Ros et al., 1999). The degree to which students endorse these four types of values may play a significant role in their ultimate major and career choices (Brown, 2002). For example, Judge and Bretz (1992) surveyed a group of college students and found that achievement values were highly correlated with jobs emphasizing achievement. Similarly, students with strong social welfare values were very likely to endorse careers that had this component. Although definitions can vary somewhat in the literature, *intrinsic values* typically refer to the importance placed on autonomy

and interest, *social values* refer to an importance placed on working with people and making contributions to society, *extrinsic values* refer to an importance to make money and have job security, and finally *prestige values* refer to an importance placed on having a prestigious and respected occupation (Ros et al., 1999). In developing the work values instrument for the current study, the second author organized the 10 choices around these four general facets, where, for example, the two prestige choices were “a career that is prestigious” and “rapid career advancement possible.”

Previous research has explored adolescent work values specifically and how these values differ based on two of the variables assessed in the current study: gender and race/culture. For example, Johnson (2002) traced the work values of a group of 2,373 adolescents from high school to adulthood and found that across all time periods, women placed a greater emphasis on social values (e.g., working with people) than men, and men placed a greater emphasis on extrinsic values (e.g., making money) than women. In a similar large-scale study of 25,194 participants, Marini, Fan, Finley, and Beutel (1996) found female adolescents to place a greater emphasis on social work values than men and slightly less of an emphasis on extrinsic rewards. Each of these studies also focused on racial/cultural differences in adolescent work values. In the Marini et al. (1996) study, the authors found students from minority groups to espouse greater extrinsic work values than White students, and Johnson (2002) found White students more likely to espouse social and intrinsic values (e.g., using one’s skills and abilities). Based on these previous studies, two hypotheses were proposed:

Hypothesis 1: In the overall sample, there will be significant gender differences, where men will espouse greater extrinsic values and women will espouse greater social values.

Hypothesis 2: In the overall sample, there will be significant racial/cultural differences, where White students will espouse greater intrinsic and social values and students of color will espouse greater extrinsic values.

The current study will also explore two research questions which to date have received little empirical attention:

Research Question 1: Do work values vary by students’ particular level of status in choosing a major?

Research Question 2: How have work values changed over time and where are these changes most significant?

Method

Sample

Participants were 31,731 incoming first-year students at a large Mid-Atlantic university entering college between the years of 1995 and 2004, the majority of which had just completed high school. Sixty-eight percent of the participants were White, 10% were Asian American, 9% were African American, 4% were Latino/Latina, 4% were Biracial, less than 1% were Native American, and an additional 4% of the participants did not report their race/culture. Fifty percent of the participants were males and 48% were females, with 2% not reporting gender. Within each of the racial/cultural groups studied, White students were 47% female and 52% male, African American students were 61% female and 39% male, Asian American students were 46% female and 54% male, and Latino/Latina students were 56% female and 44% male.

Procedure

The data were collected from the university New Student Census, a questionnaire addressing a variety of attitudinal, behavioral, and demographic variables, which has been distributed every year to incoming students at the authors' university. From 1995 to 2004, students at this large public university were administered the 250-item survey by proctors trained by the second author. These administrations occurred within a 30-min time period during the incoming students' summer orientation program, with the students' informed consent. The overall purpose of the survey was to attain a general understanding of the attitudes and behaviors of incoming students at the university for research and administrative purposes; data for the current study represent a subset of the total survey. Ninety-three percent of all incoming first-year students completed this questionnaire.

Instruments

Work values. Work values were assessed by an item asking students to choose one of 10 work values that was most important to their long-term career choice. The 10 scale choices were determined by the second author in 1994 based on Elizur's (1984) facets of work values, with the purpose of gaining a quick, general understanding of the most important factor in a student's long-term career choice. The 10 choices given to participants were

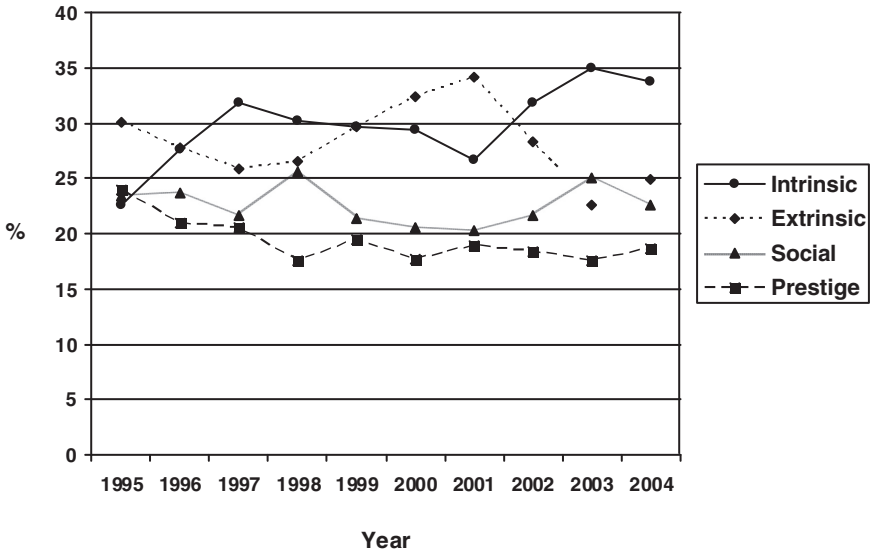
as follows: intrinsic interest, high anticipated earnings, contributions to society, prestige, working with people, rapid career advancement, independence, availability of job openings, working with ideas, and ability to avoid pressure. Based on a recent factor analytic study using Elizur's (1984) approach (Ros et al., 1999), the 10 choices were accordingly divided into four groups: intrinsic (intrinsic interest and independence), extrinsic (high anticipated earnings and availability of job openings), social (contributions to society and working with people), and prestige (prestige and rapid career advancement). The other two options, working with ideas and the ability to avoid pressure, were not included in a specific group for analysis as fewer than 3% of the total student group chose these values. For data analysis purposes, students were then placed into one of these four groups depending on which work value they deemed most important to their career choice. Each year, test-retest reliability of scores for this instrument was gathered from a sample of 100 participants. The average 2-week test-retest reliability for all 10 years was estimated at .83.

Status in choosing a major. Students' status regarding their progress in choosing a college major was measured by the item, "Which of the following best describes your current status regarding your major?" Students were asked to pick from four possible responses: a major in mind and am sure I will not change it, decided on a major after considering several possibilities, a couple of general areas of interest but have not decided on a major, absolutely no idea what I would like to study/major in. This item was also author developed as a way to gain a general understanding of where students were in their major decision-making process. Data from this item were collected from 1999 to 2004.

Results

After converting responses into four work value groups, chi-square analyses were used to determine group differences by cohort year, gender, race/culture, and major status. Significant differences were found with each group with varying effect sizes: cohort year ($\chi^2 = 92.01, p < .001, \sigma^2 = .126$), gender ($\chi^2 = 568.97, p < .001, \sigma^2 = .149$), race ($\chi^2 = 334.83, p < .001, \sigma^2 = .128$), and status in choosing a major ($\chi^2 = 36.1, p < .001, \sigma^2 = .052$). Considering the large sample size, the effect sizes are of particular importance and were interpreted according to Cohen's (1988) framework. From 1995 to 2004, intrinsic values moderately increased, and extrinsic and prestige values moderately decreased (Figure 1). Also, year-to-year differences in work values were significant for

Figure 1
Work Value Trends Overall for Each Cohort Year from 1995 to 2004



seven of the nine time periods, with moderate differences occurring between the years of 2001 and 2002 and 2002 and 2003 (Table 1). Males and females were equally distributed in intrinsic and prestige values groups; however, males were much more likely to report extrinsic work values and females were much more likely to report social work values (Figure 2). Racial/cultural group differences were evident as White students reported significantly greater intrinsic work values and significantly less prestige work values than students of color. Also, African Americans and Asian Americans reported similar trends in terms of work values, which included higher extrinsic work values than White or Latino/Latina students (Figure 3). Finally, though chi-square analyses found significant differences, there appears to be no differences of note in terms of how decided students were in their major choice (Figure 4).

Discussion

Results of the current study partially confirm our hypotheses because men reported significantly more extrinsic work values than women, women reported

Table 1
Percentage of Students in Each Work Values Group Across 10-Year
Period and Degree of Percentage Change From Year to Year

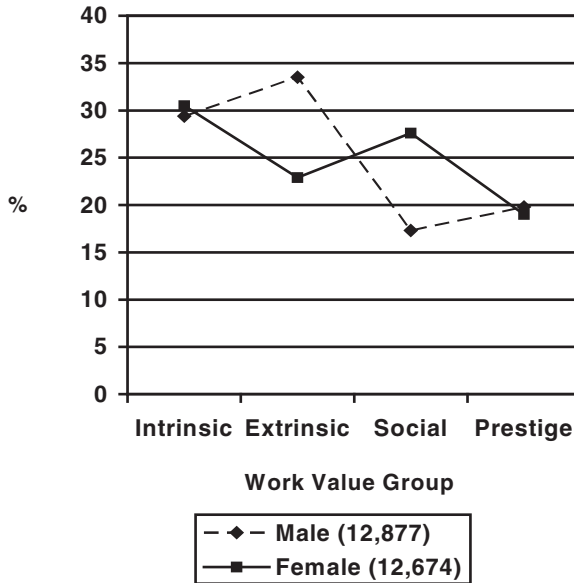
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 1995 to 2004 |
|-------------------|------|---------|---------|---------|---------|------|------|---------|---------|------|-----------------|
| Intrinsic | 22.6 | 27.6 | 31.9 | 30.2 | 29.7 | 29.4 | 26.7 | 31.8 | 34.9 | 33.8 | 30 |
| Social | 23.4 | 23.7 | 21.6 | 25.6 | 21.3 | 20.5 | 20.3 | 21.7 | 25.1 | 22.6 | 22.4 |
| Prestige | 23.9 | 21 | 20.6 | 17.6 | 19.4 | 17.7 | 18.9 | 18.3 | 17.5 | 18.6 | 19.4 |
| Extrinsic | 30.1 | 27.7 | 25.9 | 26.5 | 29.6 | 32.4 | 34.1 | 28.3 | 22.6 | 24.9 | 28.3 |
| χ^2 | | 18.00** | 13.02** | 15.42** | 15.13** | 6.34 | 6.08 | 23.73** | 21.78** | 7.8* | 92.01** |
| σ^2 change | | .062 | .049 | .055 | .057 | .033 | .032 | .070 | .072 | .037 | .126 |

* $p > .05$. ** $p > .01$.

significantly more social work values than men, and White students reported significantly greater intrinsic work values than students from minority groups. However, though African Americans and Asian Americans reported higher extrinsic work values than White students, Latino/Latina students did not. The differences found among gender and racial/cultural groups suggest that group membership may influence what students' value in making their career decisions. Consistent with prior research, males may be more likely to value such factors as high salary and available job openings, perhaps because of societal pressure to find stable and financially rewarding careers (Abu-Saad & Isralowitz, 1997). In a similar vein, women may have a greater desire to work with and help others, which is consistent with employment research that finds socially based careers are consistently held by women (Betz, 2005). Finally, more research is needed to understand the role of race/culture in determining work values, especially considering that the effect size differences were only moderate that suggests that racial/cultural groups may be much more similar than different.

Two additional groupings were compared for work values differences that, to date, had received little research attention. First, work values were assessed in terms of their relationship with a student's status in choosing a major. Although chi-square analyses found significant differences in work value membership, likely due to the large sample size, the effect size of these differences was small, and work value groupings appeared to have no clinically significant relationship on how decided students were in choosing a major. Thus, regardless of what work value group a student was in, they were equally distributed across the spectrum from completely decided to having no idea at all. This is an important finding as the degree to which students are decided

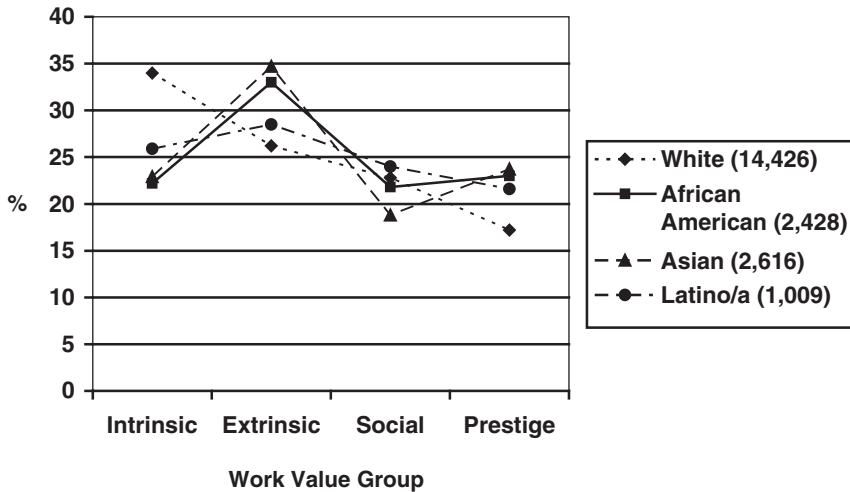
Figure 2
Overall Work Value Differences by Gender



in their major choice and career choice has been a critical variable in the vocational literature and is related to a host of other career outcomes (Osipow, 1999).

Differences in preferences for specific work values were also analyzed across a 10-year period from 1995 to 2004. Before discussing the findings, it is important to note that for one work value group to “gain” membership, or percentage of students reporting it as most important, another must lose membership. Thus, if the social work value group saw a 5% increase in membership from 1996 to 1997, this would mean that there must be a total of a 5% drop in another group or groups. Also, students were only assigned to one work value group as they were asked which was most important to their long-term career choice; it is very likely that students actually would endorse a variety of value at different degrees. With this in mind, there were significant work value differences found over the 10-year period, and a number of points can be made regarding the changes over time. First, as seen in Figure 1, over the 10-year period, students reported a 10% increase in the selection of intrinsic values, a 5% decrease in selection of extrinsic values, and a 5% decrease in

Figure 3
Overall Work Value Differences by Race/Culture

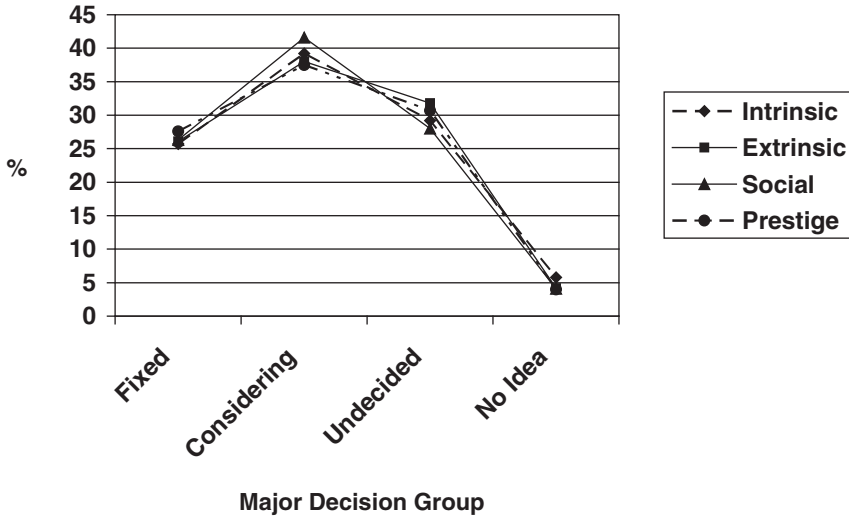


selection of prestige values. This suggests that students may be placing more emphasis on intrinsic interest and autonomy in their career choice and less emphasis on making money and finding prestigious careers.

Second, it appears that there is a unique relationship between membership in intrinsic value and extrinsic value groupings. For example, as more students report intrinsic values from 1996 to 1997, fewer students report extrinsic values; this trend continues in both directions over the 10-year span. What this suggests is that as values change over time, students as a whole switch from favoring intrinsic to extrinsic values, and the reverse. The reciprocal nature of these values, combined with the fact that over the 10-year period their importance varies greatly, speaks to the notion that the cohort year may relate to how students view their long-term career decisions. Perhaps based on the milieu of the time and the countries' economic status, students' values may adapt accordingly.

Finally, as seen in Table 1, the most dramatic changes in work values during the 10-year period occurred between the years of 2001 and 2003. Over this 3-year period, students reported an 8% increase in intrinsic values, a 5% increase in social values, and a 12% decrease in extrinsic values. The 2002 and 2003 cohort groups clearly placed a greater value on choosing work in line with

Figure 4
Overall Work Value Differences by Major Decision Status



their interests and that serves others, over and above extrinsic rewards. This finding may not be surprising considering that students in the 2001 cohort took the survey shortly before the September 11th attacks. Although in no way do these results imply a causal relationship, it is possible that because of an increase in concern for society in general combined with a struggling economy, students entering in the classes of 2002 and 2003 were likely to forgo their extrinsically related career tendencies. Although one study found that the September 11th attacks influenced college students' career plans in terms of job location and importance of security (Bosco & Harvey, 2003), this is the first study that found differences in work values during that time period.

Counseling Implications

A number of counseling suggestions can be explored based on the findings in the current study. First, counselors are encouraged to continue to recognize the general importance of work values in counseling students and are encouraged to help students understand how values can be used in conjunction with vocational interests and skills during the decision-making process. Combining

these variables has been supported by numerous vocational theorists, though work values have yet to achieve nearly the level of assessment as vocational interests (Dawis, 2001; Miller & Brown, 2005; Rounds & Armstrong, 2005). Second, findings with regard to gender and racial/cultural differences suggest that counselors seriously consider these influences when working with specific clients. Especially working with males who desire extrinsic rewards and females who value working with others, it is important to recognize that these values may be very influential in terms of their career choices and that there may be societal pressure to decide in such a way. One useful technique may be to directly address with clients any role they see their gender or race/culture playing in their decision making. By recognizing and voicing any connections, this may open the door for counselors to explore if these factors are viewed as supports or barriers and their level of salience in conjunction with other choice determinants. Finally, it is recommended that counselors be aware of general world events and be open to these having an effect on how students make their long-term career choices. Work values seem to evolve over time, and because these changes are not consistent, counselors need to be aware of potential shifts in students' career decision priorities.

Limitations

The findings in the current study provide an important contribution to research and practice in college student work values. However, there are a number of limitations that temper the strength of the results. First, data were collected from students immediately prior to entering college, and it is clear that students' work values can change over time as they become more certain with their major and have more experience in the world of work. Also, the sample was composed of a very large group of students that increases the chances of significant findings, which may or may not be meaningful. Second, a major limitation is in the work values instrument itself, which was author developed for the purpose of gaining a snapshot of students' primary career motivation and consisted of four, two-item categories. Thus, participants were only asked one question that was used to determine their work values that undoubtedly did not touch on all the factors that influence individuals' career choice, as students are likely to endorse a variety of values at varying degrees. Furthermore, no options such as "undecided" or "unknown" were presented on this instrument, which may have forced students who have little knowledge of their career to choose a certain option.

Third, only between-group cultural comparisons were explored and, given the data collected, within-group cultural differences were unable to be assessed. For example, as socioeconomic or age differences were not analyzed, it is impossible to know if the racial/cultural differences that were found can be tied explicitly to race or culture. Also, as aspects of gender and racial/ethnic identity were not measured, the degree to which each student found these groups salient to his or her personal identity was unknown. Fourth, the instrument used to measure the status in choosing a major construct was author developed because of time and space constraints on the survey, and the choices themselves may not be mutually exclusive. Although this instrument was based on pertinent literature, in no way did it grasp the complexity of a student's major decision-making process. Finally, no other career constructs were present within the study, such as career self-efficacy, career maturity, or career exploration, which would have allowed for work value comparisons to factors that are especially important to college students.

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