Job search methods, job search outcomes, and job satisfaction of college graduates: a comparison of race and sex

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A nationally representative sample of college graduates (N = 11,152) were surveyed regarding their job-seeking behaviors and outcomes. Race and sex differences among the job search strategies used, number of job interviews, number of job offers, annual salary, and job satisfaction were examined. Results indicated significant race and sex differences in job search methods used. There were significant differences in underemployment and job satisfaction as a function of race, and in underemployment and annual salary as a function of sex. There were no significant differences in number of job interviews or job offers regardless of race or sex.

Job-seeking behaviors have been considered an important part of career development and have received increasing attention over this past decades (Huffman & Torres, 2001). Research has indicated that effective job search behavior relates to the number of job offers (Saks & Ashforth, 2000), job satisfaction with the position obtained (Steffy, Shaw, & Noe, 1989; Stumpf & Hartman, 1984), better job fit (Stumpf, Austin, & Hartman, 1984), decreased job withdrawal and turnover (Caldwell & O'Reilly, 1985). Despite the importance to the career development process, very little vocational research has focused on race and sex differences in the job search behaviors, and outcomes of college graduates.

The American workforce is becoming diverse. Minorities and women now account for more than 90% of all labor force growth (U.S. Department of Labor, 1998). They continue to face special obstacles in the workplace (McWhirter, 1997; Shaffer, Joplin, Bell, Lau, & Oguz, 2000). Minorities and women are concentrated in a restricted range of occupations, are likely to be unemployed, earn less, and consequently, are more likely to live in poverty than are White men (Arbono, 1990). Research has also shown that an individual's initial job placement is critical in determining status and earnings attainment in later career positions (Richards, 1984, Steffy et al., 1989). Given the increasingly competitive job market, diverse workforce, and the consequence of the initial job placement an understanding of job search behaviors and work experience of the major contributing workforce becomes critical.

The information channel individuals use to locale their first jobs can be roughly classified into two types. The first type is the structured job information market, where positions are listed through want ads and public and private employment agencies. The second is the hidden job information market, where positions are transmitted through informal contacts made by faculty, friends, and relatives and through direct application to employers of interest (Allen & Keaveny, 1980; Bowman, 1987). Various studies have been conducted comparing the use of the two types of information sources (e.g., Allen & Keaveny, 1980; Eby & Buch, 1994; Sagen, Dallam, & Laverty, 1999; Silliker, 1993; also see review by Schwab, Rynes, & Aldag, 1987). Their results generally indicated that networking or the use of informal job information sources was the most common method to find a new position. Informal sources allow individuals to locate jobs that might not be formally advertised and perhaps to talk directly to decision makers instead of individuals in personnel departments. Although networking has been suggested as the most effective job search method, very little is known about whether the strategy is effective or appropriate for minority job seekers. In fact, there is some evidence that job search methods lead to different outcomes for different racial and ethnic groups (Green, Tigges, & Diaz, 1999).

Studies on sex differences in job search strategies ( e.g., Drentea, 1998; Harris, Tanner, & Knouse, 1996; Straits, 1998) and the relationship between job search methods and job outcomes (Athey & Hautaluoma, 1994; Barnum, Liden, & DiTomaso, 1995; Huffman & Torres, 2001; Lichtenstein, 1996;
Melamed, 1995) have begun to show some patterns. For example, Straits found that men were more likely to obtain their recent jobs through personal contacts and slightly more likely to emphasize personal contacts in searching for a permanent position. Similarly, a recent study by Huffman and Torres (2001) found that men are more likely than women to use informal contacts. However, their findings indicate that job search methods account for little of the gender gap in earning.

Whereas considerable progress has been made in examining sex differences in job search and vocational experience, the same progress cannot be cited for racial/ethnic minority groups (Richardson, 1993). Studies (Lee, Campbell, & Miller, 1991; Oliver, 1988) on race have given uneven attention to different ethnic groups, with the least focus on Hispanic and Asian American groups. Moreover, previous job search studies of college graduates have been limited by small samples and tended to focus on a particular academic or occupational field. A multicultural workforce that values diversity must take into account the career experience and satisfaction of women, White, and non-White workers. Understanding racial and sex differences in job search behaviors and outcomes would enable counselors to tailor culturally relevant career services for individuals from diverse cultural backgrounds.

The purpose of this study was to examine race and sex differences in job search behaviors and work experiences of college graduates. Specifically, we examined (a) the job search methods graduates used to find a job, (b) job search outcomes (the number of jobs interviewed for and jobs offered), (c) employment equity (annual salary and degree of under-employment), and (d) job satisfaction. This study advances the literature on job search methods and employment outcomes in several ways. First, unlike many studies that have used a small sample or have focused on specific occupational types or college majors, we used a nationally representative sample of young adults who were graduates of various academic disciplines. Second, the large sample enabled us to compare four subgroups from diverse racial backgrounds (i.e., White, African American, Hispanic American, and Asian American).

**METHOD**

**Sample**

The sample was composed of 9,245 White Americans, 663 African Americans, 587 Hispanic Americans, and 437 Asian Americans. The median age of study participants was 22, with a standard deviation of 6.63. Data were based on The Baccalaureate and Beyond Longitudinal Study (B&B) sponsored by the National Center for Educational Statistics. The B&B sample is a subsample of the students selected for the National Postsecondary Student Aid Study (NPSAS; U.S. Department of Education, 1996; N = 79,269). The NPSAS study used a stratified multistage sample design with postsecondary institutions (colleges and universities) as the first-stage units and students within the selected colleges and universities as the second-stage units. The institution sample was stratified by school type (public vs. private), highest degree offered, size of enrollment, and number of bachelor's degrees awarded in education. A total of 1,386 institutions were included in the sampling design. About 11,152 students (male= 4,821; female= 6,331) who participated in the NPSAS completed their degree in the 1992-1993 academic year, were included in the first B&B follow-up and were interviewed by telephone in 1994. Detailed information on the NPSAS sampling procedure is given in the NPSAS:93 (US Department of Education, 1996).

**Variables**

**Job search methods.** Students responded to the question "What did you do to find a job?" The response categories were (a) sent out resume, (b) went to campus job placement office, (c) looked through want ads, (d) asked friends/family members/professors, (e) attended recruiting fairs, (f) did volunteer work in field, (g) looked at job boards in unemployment office, (h) contacted “head hunters,” employment agency, professional recruiter, (i) placed own want ads, and (j) subscribed to trade journals.
**Number of job interviews.** The survey question was phrased as "We're interested in the job search strategies used by college graduates to find employment. As a result of trying to obtain a new job upon the completion of your degree, how many jobs did you interview for?"

**Number of job offers.** The survey question was phrased as "How many full-time job offers resulted from your job search efforts?"

**Annual salary.** Respondents’ annual salary based on their current job was computed. This composite was constructed by multiplying the sum of the salary per pay period by the number of pay periods per year.

**Underemployment.** This measure is a composite score of four indicators including degree not required for the job, working part-time, working multiple jobs, and not much career potential. Scores ranged from 0 to 5 with 5 as the highest estimate of underemployment.

**Job satisfaction.** This measure is a composite of nine satisfaction factors: pay, employment benefit, job challenge, working condition, opportunities for promotion, job security, supervisor, coworkers, and educational benefits. The response format for each factor was (3) very satisfied, (2) satisfied, and (1) dissatisfied. Scores ranged from 1 to 27 with 27 as the greatest indication of satisfaction.

**RESULTS**

Table 1 displays the primary methods students used to find their jobs as a function of race and sex. Data represent the percentage of students by race and job-search methods. Overall, the majority (52%) of job-seekers used resumes as the primary method to secure their jobs, regardless of their race or sex. Looking through want ads (13.4%) and networking with family, friends, and professor (11.9%) were the next two most often cited methods. Less than 10% of the participants reported that they obtained their job through any other search methods. Chi-square analyses showed significant differences in the methods used for finding a new job as a function of race, $X^2(30) = 71.88, p = .001$, and sex, $X^2(10) = 31.72, p = .001$. Consequently, we examined race and sex differences in each of the top three approaches to obtaining a job. White participants (52.2%) were more likely than other groups to use resumes to obtain their jobs. More so than other groups, Asian Americans (15.9%) looked through want ads to obtain their jobs. Compared with other groups, Hispanic Americans (12.9%) were more likely to use networking with family, friends, or professor to obtain jobs. Men (52.9%) were more likely to obtain jobs using a resume as compared with women (50.6%), whereas female participants (14.2%) used want ads more than their male counterparts (12.6%). However, male participants (12.1%) did not differ much from female participants (11.8%) in using networking to obtain jobs.

Because most people use multiple methods to find jobs, differences for race and sex in the number of different search methods were also analyzed. Results indicated that there were no significant differences as a function of race or sex. On the average, students used 1.88 methods to find their jobs: Asian Americans ($M = 1.74, SD = 1.33$), Hispanic Americans ($M = 1.76, SD = 1.63$), African Americans ($M = 2.05, SD = 1.56$), Whites ($M = 1.89, SD = 1.58$), men ($M = 1.81, SD = 1.91$), and women ($M = 1.90, SD = 1.93$). Number of job search methods used is significantly associated with number of job interviews ($r = .16, p < .01$).

A multivariate analysis of variance (MANOVA) was used to examine race and sex differences in job search outcomes, job equity, and job satisfaction. A summary of these findings is presented in the Table 2. Listwise case selection resulted in a total of 5,596 (2,419 men, 3,177 women) cases for the MANOVAs. Cases were weighted using a weigh variable computed by NCES to adjusted nonresponses. Results of MANOVA suggested a significant difference as a function of race, $F(15, 15415) = 1.98, p = .013$, and sex, $F(5, 5584) = 2.65, p = .022$. There were no significant race by sex interactions. Subsequent analyses indicated significant differences in underemployment, $F(3, 5588) = 4.68, p = .003$, and job satisfaction, $F(3, 5588) = 3.46, p = .016$, as a function of race; and in annual salary, $F(1, 5588) = 6.90, p = .009$, and underemployment, $F(1, 5588) = 3.98, p = .046$, as a function of sex. There were no significant
differences in number of job interviews and number of job offers. On the average, college graduates had 5.5 job interviews (SD=7.4) and 1.7 job offers (SD=2.0). Scheffe follow-up tests showed that African Americans were significantly higher on underemployment than other groups. African Americans as well as Asian Americans scored significantly lower than White and Hispanic Americans in job satisfaction. Follow-up tests also suggested that male students, on the average, had significantly higher annual salaries than did female students. Female students were more significantly underemployed than were male students.

### TABLE 1

**Percentage of Students by Race and Sex Using Job Search Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Asian American</th>
<th>African American</th>
<th>Hispanic American</th>
<th>White</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Résumés</td>
<td>49.2</td>
<td>51.7</td>
<td>46.3</td>
<td>52.2</td>
<td>52.9</td>
<td>50.6</td>
</tr>
<tr>
<td>Job placement office</td>
<td>11.9</td>
<td>6.8</td>
<td>7.4</td>
<td>9.0</td>
<td>9.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Want ads</td>
<td>15.9</td>
<td>13.9</td>
<td>15.0</td>
<td>13.1</td>
<td>12.6</td>
<td>14.2</td>
</tr>
<tr>
<td>Family/friend/professor</td>
<td>11.9</td>
<td>9.2</td>
<td>12.9</td>
<td>12.1</td>
<td>12.1</td>
<td>11.8</td>
</tr>
<tr>
<td>Interview</td>
<td>2.7</td>
<td>8.4</td>
<td>3.1</td>
<td>4.0</td>
<td>4.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Recruiting fair</td>
<td>2.7</td>
<td>1.6</td>
<td>3.1</td>
<td>2.0</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Volunteer/internship</td>
<td>2.4</td>
<td>1.6</td>
<td>4.9</td>
<td>2.1</td>
<td>1.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Unemployment office</td>
<td>0.7</td>
<td>2.9</td>
<td>2.8</td>
<td>1.0</td>
<td>0.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Employment agency</td>
<td>1.4</td>
<td>3.4</td>
<td>3.7</td>
<td>3.5</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Own want ad</td>
<td>1.0</td>
<td>0.5</td>
<td>0.6</td>
<td>0.9</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Trade journals</td>
<td>0.3</td>
<td>0.0</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Note. M = men, W = women.*

### TABLE 2

**Job Search Outcomes and Job Satisfaction by Race and Sex**

<table>
<thead>
<tr>
<th>Item</th>
<th>Asian American</th>
<th>African American</th>
<th>Hispanic American</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>5.98</td>
<td>5.36</td>
<td>6.20</td>
<td>6.22</td>
<td>5.58</td>
</tr>
<tr>
<td>SD</td>
<td>6.82</td>
<td>11.37</td>
<td>6.87</td>
<td>8.21</td>
<td>6.66</td>
</tr>
<tr>
<td>Number of offers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.81</td>
<td>1.57</td>
<td>1.70</td>
<td>1.65</td>
<td>1.40</td>
</tr>
<tr>
<td>SD</td>
<td>1.81</td>
<td>1.41</td>
<td>1.41</td>
<td>1.66</td>
<td>1.57</td>
</tr>
<tr>
<td>Underemployment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.94</td>
<td>1.13</td>
<td>1.27</td>
<td>1.50</td>
<td>1.12</td>
</tr>
<tr>
<td>SD</td>
<td>1.27</td>
<td>1.28</td>
<td>1.38</td>
<td>1.34</td>
<td>1.23</td>
</tr>
<tr>
<td>Annual salary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>24,882</td>
<td>23,679</td>
<td>21,448</td>
<td>20,583</td>
<td>22,869</td>
</tr>
<tr>
<td>SD</td>
<td>9,261</td>
<td>11,035</td>
<td>10,392</td>
<td>20,648</td>
<td>9,537</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>18.24</td>
<td>17.92</td>
<td>18.34</td>
<td>18.68</td>
<td>18.14</td>
</tr>
<tr>
<td>SD</td>
<td>3.08</td>
<td>3.25</td>
<td>3.45</td>
<td>3.85</td>
<td>3.79</td>
</tr>
</tbody>
</table>

*Note. M = men, W = women.*
DISCUSSION

In this study, we examined the job search methods and job-search outcomes among various race and sex groups among college students. Our findings suggest that the resume was the most often reported method for obtaining a job. Although most literature indicated that the most effective job search method for white-collar workers is informal contact through networking, the present study showed that the formal approach through the use of resumes and want ads seemed to be the most common job search method for college graduates. This finding extended the findings of previous studies (Ports, 1993; Sagen et al., 1999; Young, 1974) that more formal methods are most effective for college graduates and professional level employment. In many markets for professionals, the normal hiring procedure is to invite written applications for job openings advertised in newspapers, journals and periodicals, or in the universities through job placement offices. Thus, resumes have become the most common venue for securing a professional job. In fact, every student is expected to use resumes regardless of the method of job contact. Given the fact that most college graduates obtained their jobs by submitting resumes to interested employers, teaching effective resume writing becomes essential.

Although the use of a resume is considered a primary job search method for college graduates, significant numbers of participants also used networking, want ads, and the job placement office as their secondary methods for job search. The use of multiple methods to obtain employment has also been documented in other studies (e.g., Holzer, 1987; Jensen & Westegard-Nielsen, 1987; Sagen et al., 1999). The present study provides further evidence of the advantages of using multiple job search methods. The significant correlation between the number of job search methods used and the number of interviews found in this study suggests that students should be encouraged to use a variety of job search methods rather than rely on a single method. It is also important to know the different job search methods used by different race and sex groups. Employers who are actively recruiting underrepresented minorities should be aware of the different job search methods that individuals use in obtaining their desired jobs. It is necessary for employers to know which methods are being used to search the population needed for the job qualifications.

It is interesting that the present study did not find significant race or sex differences in job search outcomes, despite significant differences in their job search methods. The lack of significant differences seems to suggest that the initial employment opportunities for women and minority college graduates may be similar to those available to their White male counterparts. However, when underemployment and annual salary were considered, we found that women and minority college graduates lagged behind their White male counterparts. In other words, although the employment opportunities gap may have been narrowing for women and minority college graduates, job equity remains a concern.

Not surprisingly, in this study we found significant sex differences in underemployment and annual salary. Previous studies on employment equity have consistently shown that women continue to be segregated in occupations that pay lower wages than those of their male counterparts (Lichtenstein, 1996; U.S. Department of Labor, 1998). A contributing factor to the discrepancies in salary and underemployment may be that college majors chosen by women and minority graduates were not in a high demand job market. African Americans are shown to choose majors in the fields of social science, education, and health (Herr & Cramer, 1996). These fields of study tend to lead to occupations that do not pay as high as those in hard science and business majors, which are dominated by White men. Research has shown that pay for women is still less than for other groups (Blau & Kahn, 1992). Although many studies (Koretz, 1990; National Center for Educational Statistics, 1994) have indicated that the gap in wages and occupations is narrowing for well-educated women, it seems that women are still having to prove themselves in male-dominated environments (Melamed, 1995). There are some salary advantages for women with a college degree. Generally, the earnings advantage of college graduates has been greater for women than for men; that is, the percentage differences between earnings of college graduates and high school graduates has been greater for women than for men.
The cultural factor may have played a significant role in affecting the underemployment issue. Underemployment was defined by four indicators: degree not required for the job, working part time, working multiple jobs, and poor career potential. According to Lichter (1988), women and minorities, especially African Americans, tend to have a number of part-time jobs. These part-time jobs are likely to be dead-end or without advancement opportunities. More than 50% of young African American men were unemployed in the 1980s and either worked in part-time jobs or earned wages at the poverty level. The present study shows that the condition remained unchanged for women and African Americans after a decade.

Job satisfaction was defined by nine factors: pay, employment benefits, job challenge, working conditions, opportunities for promotion, job security, supervisor, coworkers, and educational benefits. The present study shows that both Asian and African Americans scored significantly lower than other groups in job satisfaction. According to Moss and Tilly (1996), employers indicated that they based their views of African Americans on experiences they have had with employees and applicants in the past and present, along with general impressions from the media. Discrimination or perceived discrimination by an employee can affect work attitudes, values, and behaviors (Herr & Cramer. 1996), possibly influencing job satisfaction ratings (Shaffer et al., 2000). Studies (e.g., Biwt & Goldman, 1993; Gottfredson & Holland, 1990; Kane, Healy, & Hensen, 1992) have suggested that interest congruence is closely linked with job satisfaction. According to Tang, Fouad, and Smith (1999), Asian Americans may ignore their true personal interests and attitudes to pursue an occupational field to satisfy their parents' expectations. Others (e.g., Rounds, 1990) suggest that work value correspondence accounted for a significant portion of difference in job satisfaction. Leong (1991) suggested that Asian Americans also tend to emphasize prestige and security over other job values, which may have contributed to relatively lower job satisfaction ratings for them than other groups. Asian Americans have been found to be more represented in the fields of engineering and physics than any other groups. These occupational fields, although high in prestige and pay, do not provide other sources of satisfaction that Asian Americans would like to have. This factor, however, correlates with our study showing that Asian Americans, on the average, have the highest annual salary.

The present study is limited in several ways. First, the findings of this study relied on the accuracy and truthfulness of students' responses to the interview questions. Information provided by the participants required that they recall the job search process that had occurred months ago, therefore, cognitive distortions may have been presented during their recall. Second, because most students used multiple job search sources, it may be difficult for participants to attribute success to a single source. Third, generalizations of the present findings to a non-college population is cautioned. Job search methods and outcomes of college graduates are likely to differ from other non-college populations.

In summary, the present study indicated that mere are significant differences in job-search methods among race and sex groups. Although no significant differences for race and sex were found in job search outcomes, employment inequity is still present among minority and women college graduates. Counselors need to be aware of these differences to help multicultural students more effectively in their job search process and maximize their job experience. Further research is needed to determine race and sex differences in job search methods to gain a better understanding of students' satisfaction with and outcomes of their job experiences.

REFERENCES


