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Running head: METHODS OF JOB SEARCH BY UNIVERSITY STUDENTS

Methods of Job Search: How University Students Search for Part-time Jobs

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Science in Applied Psychology (Industrial/Organizational)

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Table of Contents

Appendices.....	i
List of Tables and Figures.....	ii
Acknowledgements.....	ii
Abstract.....	iv
Introduction.....	1
Research on Part-time Employment	2
Methods of Job Search.....	6
Findings from Labour Market Studies.....	7
Populations Sampled	8
Looking for Work versus Finding Work	9
Formal and Informal Methods.....	10
Job Search Intensity	15
Determinants of Job Search	18
Personality and Job Search Methods Used.....	18
Personality and Job Search Intensity	20
Five-Factor Approach to Personality.....	20
Job Search Outcomes	23
Employment Quality.....	24
Employment Quality and Job Search Methods Used	24
Employment Quality and Job Search Intensity	26
Method	28
Participants and Procedures.....	28

Measures.....	28
Results.....	32
Exploratory Factor Analysis.....	32
Descriptive Statistics and Intercorrelations	34
Prediction of Job Search Intensity	35
Prediction of Employment Quality.....	36
Further Analyses.....	38
Discussion	40
Job Search Dimensions.....	40
Job Search and Personality	42
Job Search and Employment Quality	42
Limitations.....	44
Theoretical Implications	48
Practical Implications	50
Conclusion.....	52
References.....	53

Appendices

Appendix A: Methods of Job Search64

List of Tables and Figures

List of Tables

Table 1: Job Search Dimensions and Methods	30
Table 2: Factor Loadings and Methods of Job Search.....	34
Table 3: Descriptives and Intercorrelations of Study Variables	36
Table 4: Hierarchical Multiple Regression Analyses	38
Table 5: Intercorrelations of Job Search Methods, Personality Traits, and Job Search Outcomes	39

List of Figures

Figure 1: Scree plot of the eigenvalues obtained from the principal component analysis performed on the 17 methods of job search	33
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Methods of Job Search: How University Students Search for Part-time Jobs

Martin Royal

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Abstract

This study examined the job search process of 176 undergraduate students employed in part-time jobs. Specifically, the relationships between job search methods, job search intensity, and employment quality (as measured by job satisfaction and starting salary) were investigated. In addition, this study used the Big Five personality framework to explore the relationships between personality traits and individuals' tendencies to apply effort to various methods of job search. Factor analytic results suggested that a four-factor solution was appropriate to classify job search methods into groups (i.e., personal contacts, job ads, university-related methods, and direct applications). Using personal contacts and university-related methods were positively associated with greater levels of job satisfaction, and applying directly to employers was negatively related to job satisfaction. Regression analyses showed that using university-related methods and direct applications were the only methods that contributed to variability in job satisfaction. None of the five personality traits were associated with any of the job search methods. Findings revealed interrelations between the use of various methods of job search and have implications for further conceptualizations of job search.

Methods of Job Search: How University Students Search for Part-time Jobs

The topic of part-time employment among students has gained increasing attention in the literature. Higher costs of tuition and declining governmental financial support oblige many students to seek part-time jobs. Although existing research has primarily focused on the benefits and drawbacks of part-time employment for students, less progress has been made to understand how students find part-time work. In this study, the job search process of university students looking for part-time jobs was investigated. Specifically, this study examined the factors that influence the quality of part-time employment and the student characteristics that contribute to the choice of job search methods and effort applied to search.

Part-time employment among Canadian youth has significantly increased in the last two decades. Results from the 1995 School Leavers Follow-up Survey showed that 25% of youth aged 22 to 24 years old¹ are employed part-time in their main job (Marquardt, 1998). Among post-secondary students aged 22 to 24, 78% are employed part-time, and 15% are doing so involuntarily because they could not find full-time jobs. These figures largely contrasted with the 10% figure for part-time employment for the workforce aged 25 and above. Data from other countries also support a high percentage of students involved in part-time employment. In the United States, data from the 1995-96 National Post-secondary Student Aid Study suggested that 79% of undergraduates work while enrolled in post-secondary education (Horn & Berkthold, 1998). Sixty-three percent of

¹ The respondents of the 1991 School Leavers Survey were aged 18 and 20. Therefore, the respondents of the 1995 School Leavers Follow-up Survey conducted four years later (using the same group of young people) were aged 22 to 24 (Marquardt, 1998).

these student workers are considered as “students who work” because they reported working to help pay for their education. Similar findings have also been reported in various studies using samples of undergraduate students (see Canabal, 1998; Hood, Craig, & Ferguson, 1992; Kane, Healy, & Henson, 1992). Variation in percentage of employed students generally reflects geographical differences and disagreements about what constitutes part-time employment.

This increase in youth part-time employment parallels increasing costs of attending university and declining financial support from governments. In Canada, tuition fees increased from an averaged \$1,500 in 1990 to \$3,379 in 1999, a 125.9% change (Statistics Canada, 1999). Reductions in government funding have compelled universities to increase their tuition revenues. Between 1980 and 1996, Canadian universities saw the proportion of their operating revenue contributed by government funding decline from 74% to 58%. As an attempt to cope with rising university costs and reductions in financial aid, part-time employment has become necessary for an increasing number of students (Kane et al., 1992). Thus, at any given time, many university students must search for a part-time job to help finance their education (Hammes & Haller, 1983). Indeed, many first year students in American colleges and universities report that they would have to find a job to pay for school expenses (Astin, 1993).

Research on Part-time Employment

The prevalence of part-time employment among students has compelled many researchers to wonder about the impact of part-time work on academic performance and other aspects of student lives. Early evidence suggested that working does not affect academic performance (Anderson, 1966; Dickinson & Newbegin, 1960; Ehrenberg &

Sherman, 1987; Henry, 1967; Trueblood, 1957), whereas later evidence suggested that working does affect academic performance (Hay, 1969; Hay, Evans, & Lindsay, 1970; Ma & Wooster, 1979). These studies showed that undergraduate students who work more than 15 hours per week (Hay, Evans, & Lindsay, 1970), in non major-related jobs (Hay, 1969), or in blue collar jobs (Ma, 1984; Ma & Wooster, 1979) tend to earn lower grades. Other research demonstrated that working in non major-related jobs (Anderson, 1981), or off-campus jobs (Ehrenberg & Sherman, 1987) may negatively affect persistence in pursuing an academic program and likelihood of degree completion. Similarly, an analysis of the 1995–96 National Post-secondary Student Aid Study revealed a positive relationship between the number of hours worked per week and likelihood that students would indicate that working had a negative effect on their academic performance (Horn & Berkold, 1998). In contrast, recent studies supported evidence in favor of part-time employment. Student workers were found to have higher grades than non-workers (Canabal, 1998; Hammes & Haller, 1983), to earn more money in the years following graduation (Stern & Nakata, 1991), and to have more success in the labour market (Stern & Nakata, 1991). In fact, Pascarella, Bohr, Nora, Desler, and Zusman (1994) found little evidence suggesting that involvement in on-campus or off-campus employment affects student persistence in pursuing their education, educational attainment, or grades.

For the most part, studies on this subject examined whether part-time employment competed with school for time and energy invested by the student worker. Implicit to these studies is that work is believed to affect academic success because when time is spent working, academic activities (e.g., homework and other school-related activities) are displaced (Singh, 1998). However, other researchers have considered work as a

complement to school, and have emphasized the contribution of part-time employment on student lives. Literature on adolescents employment has long debated the consequences of part-time work on youth (see Mortimer & Finch, 1996). On one side of the debate, researchers concluded that adolescent work was beneficial and complemented school. Exposure to work could clarify work values and career interests, encourage time management, and provide opportunities to learn valuable work skills (Mortimer & Finch, 1996). On the other side of the debate, evidence suggested that teenage work during the school year was detrimental and compromised students' development (Mortimer & Finch, 1996). Youth employment could foster undesirable behaviours outside the workplace, hamper social relationships with friends and family, and provide time conflicts (Greenberger & Steinberg, 1986).

These approaches usually implied that part-time employment was a homogeneous experience and had either positive or negative consequences (Loughlin & Barling, 1998). However, recent studies provided evidence that employment quality mediates the consequences of part-time employment (Barling, Rogers, & Kelloway, 1995; Loughlin & Barling, 1998). In their study, Barling et al. (1995) showed that when quality of employment is low, amount of work was negatively related to school performance. When employment quality was moderate or high, no or small associations were observed between working hours and school performance. Other studies showed that employed students who have opportunities for advancement, feel they are well paid, and perceive little school/work conflicts also tend to have greater self-efficacy (Finch, Shanahan, Mortimer, & Ryu, 1991). Those who experience time pressure, role overload, and

conflicts may show more depressive affect over time (Shanahan, Finch, Mortimer, & Ryu, 1991).

Despite growing evidence that high quality employment is beneficial to young student workers, few studies examined the influence of employment quality on employment outcomes for university students. The experience of part-time employment is considered uniform and generally assumed to lead to positive outcomes (e.g., Casella & Brougham, 1995). The following statement exemplifies the favorable and homogenous assumptions behind part-time work experience (Casella & Brougham, 1995):

Any work experience has the potential to reap benefits for the student. Even when the work is not related to the student's field of study, an employed student is building networks, improving self-organization, establishing a greater sense of responsibility, expanding work skills, learning more about personal strengths and values, and is all the while gaining in self-confidence. (p. 24)

Empirical evidence linking the quality of part-time employment for undergraduate students to favourable outcomes suggested that student workers who are employed in higher status jobs tends to be more career mature and have higher academic grades (Healy, O'Shea, & Crook, 1985). Working in higher level jobs is also associated with lower levels of anxiety associated with career development and academic performance (Healy & Mourton, 1987). Finally, students employed in school-related jobs also experience greater levels of job satisfaction (Kane et al., 1992).

In summary, research has demonstrated the benefits of part-time work experience, especially high quality work experience. The increasing number of students in search of part-time jobs highlights the importance of understanding the factors that contribute to

finding a high quality job. Job search studies have shown that while millions of individuals are searching for jobs at any given time, not everyone is successful in finding employment (Caska, 1998). Some will take several months to find a new job, whereas others will secure employment within a few days. Some find jobs that offer poor work conditions and lower wages, others secure jobs that offer superior wages with attractive benefits.

The purpose of this study was to examine how students find part-time jobs and explore the relationships between job search and employment quality using a sample of university student workers. The methods of job search most likely to lead to quality part-time employment were examined. In addition, the question of whether student characteristics, namely personality traits, influence choice of job search methods and effort devoted to a particular method was investigated.

Methods of Job Search

Theoretical models of how people find work have been proposed by researchers from various disciplines such as economics, industrial relations, sociology, and psychology. According to Schwab, Rynes, and Aldag (1987), job seekers will seek to generate and evaluate job alternatives that will enable them to arrive at a decision to accept a new job, reject and renew the search, reject and withdraw from the labour force, or reject and retain the current job. Although the first and most obvious outcome of such an evaluation is whether or not employment is obtained, the quality of employment is also an important outcome. Drawing from empirical investigations of the functioning of labour market, Schwab et al.'s theoretical model suggested that job seekers will use various sources of labour market information (or methods of job search) to generate job offers. Likelihood

of getting a job is thus a function of the methods used to generate job vacancies and how much effort is devoted to these methods.

Findings from Labour Market Studies

The methods of job search used by job seekers are very much contingent on the recruitment methods used by employers. From an employer's viewpoint, methods of job search are equivalent to employment channels used to recruit and select applicants. They are the social structures in place through which communication between employers and job seekers is possible. Early investigations of labour markets have identified a wide variety of job search methods used by job seekers. Mangum (1982) identified and reported 30 studies that examined how people look for work and how they find work. In general, the most popular methods tend to be contacting employers directly, sending out résumés and filling out applications, checking with public employment agency, contacting friends or relatives, and placing or answering job ads (Blau & Robins, 1999; Bortnick & Harrison Ports, 1992; Grenon 1998; Harrison Ports, 1993; Kuhn & Skuterud, 2000). The popularity of each method tends to vary across age groups, gender, ethnic origins, type of employment sought (full-time or part-time), reasons for unemployment (Harrison Port, 1993), or employment status (Blau & Robins, 1999). Longitudinal data also showed that the extent toward which job seekers used each method varies across time (Grenon, 1998; Kuhn & Skuterud, 2000). For instance, the use of a public employment agency to find work has declined sharply over the past 20 years, although contacting employers directly has remained the most common method (Grenon, 1998). More recently, the use of Internet in the job search was investigated (Kuhn & Skuterud, 2000). It was found that 15% of unemployed job seekers search for jobs online.

Populations Sampled

Typically, job search studies have been confined to specific labour force groups such as individuals entering the labour force for the first time (e.g., university graduates, school-leavers), individuals reentering the labor force after a period of absence (e.g., mothers with school-age children), those who have quit or been laid off by an employer, and those who are currently employed and seeking a new job. These studies generally focused on individuals seeking to enter the workforce on a full-time and permanent basis. For younger workforce entrants, research has focused on recent high-school, college, and university graduates, or drop-outs. Graduating or dropping out from high school, college, and university has been seen as an important transition to the world of work, and many studies have examined this school-to-work transition process (see Lewis, Stone III, Shipley, & Madzar, 1998, for a review of the literature). Conversely, few studies have explored the methods of job search used by students seeking part-time jobs.

As part of a study on part-time employment, Kane et al. (1992) asked 5,350 undergraduate students to report how they found their job. They showed that the most common methods of job search were asking friends, using campus placement services, applying directly to employer, reading newspaper ads, and asking parents or relatives. Other less common methods included asking referrals from professors and contacting private employment agencies. Similarly, results from the 1995 School Leavers Follow-up showed that among post-secondary students, 33% had found their job through friends, 21% had contacted the employer directly, 18% had sent their resume, 9% found it through relatives, and 8% through an employment agency.

Looking for Work versus Finding Work

Labour market studies have primarily addressed two labour market issues: how people search for work and how they find work (Mangum, 1982). In the first camp, researchers commonly asked respondents to report the methods used during their search. They were mostly interested in finding out about the popular methods used by job seekers. In the other camp, researchers typically asked respondents to report the one method that led them to their current job. The focus was on the organizational outcomes associated with the methods used. Inherent to this approach was that job seekers were users of one and only one job search method (Barber, Daly, Giannantonio, & Phillips, 1994). The early emphasis on the sources through which jobs were found may have led researchers to faulty findings because of respondents failing to report intermediate methods (Mangum, 1982). For example, someone could have read about a job opening at company XYZ, then talked to a friend working there about the opening, and finally directly applied in person. Which method led to employment? Which one is most likely to be reported? Intermediate methods could possibly influence the assessment of the method reported. In the previous example, direct application could possibly appear as an effective method but it would be mostly due to the fact that the person read and talk to someone about the job a priori.

This problem was addressed in later studies. Williams, Labig, and Stone (1993) pioneered the multiple source approach recruitment research and allowed respondents to report any sources through which they had obtained information about their job. Similarly, some job search studies asked respondents to report all the sources that they intended to use in their search (Barber et al., 1994; see also Ellis & Taylor, 1983; Saks &

Ashforth, 2000). In these studies, the emphasis was on the methods used by job seekers during their search. Method differences were assessed on the basis of their contribution to predict valuable employment outcomes, such as employment status, starting salary, and job satisfaction. In addition, this approach allowed researchers to investigate individual differences in methods used during the search. Despite its recent attention in job search literature, the use of multiple methods of job search had long been investigated in labour market studies (e.g., Blau & Robins, 1999; Bortnick & Harrison Ports, 1992; Grenon, 1998; Harrison Ports, 1993). The average number of sources used was considered as a rough measure of job search intensity. Estimates suggested that the average number of sources used ranges from 1.77 to 2 sources (Bortnick & Harrison Ports, 1992; Grenon, 1998). Other estimates suggested that younger job seekers tended to use fewer sources than other age groups (Blau & Robins, 1999). Existing data suggest that likelihood of getting a job increases slightly with each additional method (Bortnick & Harrison Ports, 1992). However, the probabilities of finding work tend to decrease when five or more methods are used. It appears that as effort is distributed over various methods, less effort is applied to each method. As a result, the odds of getting hired through a particular method are reduced.

Formal and Informal Methods

Most researchers typically categorized job search methods as either formal (e.g. newspaper ads, private employment agencies, employment services) or informal (e.g. friends and relatives, teachers). The distinction was established to differentiate the type of intermediary involved (Sagen, Dallam, & Lavery, 1999). The main difference was that formal sources rely on external organizations to establish contact between employers and

job seekers. In some studies, direct application to the employer has also been considered as a third category (e.g., Allen & Keaveny, 1980; Ellis & Taylor, 1983; Granovetter, 1974). This classification of job search methods according to their characteristics (i.e., labour market intermediary involved) poses conceptual and methodological problems that have not been well addressed in past research.

First, it assumes that observed differences in employment outcomes (i.e., salary, job satisfaction, turnover, etc.) are solely due to the common characteristics of the methods within each group, e.g., the nature of the labour market intermediary involved (or lack of). Past studies have showed that the use of formal or informal methods was associated with variable labour market experiences (e.g., Allen & Keaveny, 1980). For example, negative labour market experiences have generally been associated with the use of formal methods of job search. Such findings presumed that the use of any methods within a group would lead to similar outcomes because they share comparable characteristics. However, research that examined the effect of using various job search methods on organizational outcomes have showed that method differences do exist within formal or informal methods. Breugh (1981) provided some evidence for differences in job quality between employees recruited through professional journal ads and newspaper ads, two formal methods often cited in the literature. In fact, employees recruited through newspaper ads had lower job quality ratings in comparison to those recruited through professional journal ads. However, they had higher ratings than those recruited through self-initiated applications, a method often considered as informal. Similarly, Caldwell and Spivey (1983) showed that employees recruited through media announcements displayed greater job performance than those recruited through an employment agency. More

recently, Green, Tigges, and Diaz (1999) found that job seekers were more likely to have found their job through friends and relatives as opposed to other acquaintances. Indeed, research on job seekers' social networks (see Beggs & Hurlbert, 1997; Silliker, 1993) has long proposed differences between those who use weak ties (e.g., friends of friends, acquaintances) and those who use strong ties (e.g., close friends, relatives).

These findings suggested that the choice of methods used to operationalize informal or formal groups will have a major effect on the results attributed to method differences. If someone were to use only the most ineffective formal methods and the most effective informal methods of job search, it is likely that a difference in effectiveness would be observed. Evidence that the major groups have been operationalized in different ways abound in the literature. Although researchers generally agree on what constitutes a formal or an informal source, the number of sources used to operationalize each major group varies greatly across studies. For example, Barber et al. (1994) reported four formal sources and two informal sources, Saks and Ashforth (2000) reported six formal sources and five informal sources, Ellis and Taylor (1983) reported three formal sources and one informal source, Allen and Keavenly (1980) reported four formal sources and one informal source, and Drentea (1998) reported four formal methods and five informal methods. In addition, researchers also disagree on the specification of each method. Some are general (e.g., asking personal contacts, reading newspaper ads), while others are more specific (e.g., asking a current or former employee of an organization versus asking friends who work at an organization, reading local newspapers versus reading non-local newspapers). Also, the exact methods used to operationalize the major groups also vary across studies. For example, studies using college graduates are more likely to include

methods of job search such as ‘talking to a professor’ or ‘using school placement services’ (e.g., Green et al., 1999; Saks & Ashforth, 2000). In contrast, studies using older professional job seekers are more likely to report ‘reading professional or trade journals’ (e.g., Bretz Jr., Boudreau, & Judge, 1994). Similarly, some researchers considered direct applications as an informal method (Drentea, 1998) although others considered it as a separate group. The implications of these differences in operationalizing methods of job search have been summarized by Blau (1994) who concluded that a different mix of sources within a job search scale could lead to different job search outcomes.

A second problem associated with the traditional classification of job search methods concerns the existing links between the use of various job search methods. The classification of job search methods to major groups on the basis of their characteristics does not provide any information about the relationships between the methods. For example, the use of certain formal methods may not be related to the use of other methods. Some studies have provided some evidence that job search behaviours may be interrelated (e.g., Linnehan & Blau, 1998; Schneider & Stevens, 1971). For instance, Linnehan and Blau (1998) showed that job seekers engaged in search activities that either required greater emotional involvement or less (i.e., amount of personal contact). In their study on recruitment sources, Barber and Wesson (1999) asked employers to rate the extent to which they had used various sources to recruit college graduates on a 5-point scale ranging from “we do not use this source at all” to “we use this source on a regular basis”. They further factor analyzed the sources to obtain composites. Three groups of sources were identified: campus recruiting (3 items, $\alpha = .70$), internal networking (2

items, $r = .72$) and external networking (2 items, $r = .48$). Other single item sources were also used in the study (e.g., advertising, walk-ins and direct applications). Barber and Wesson's study provides some evidence for a possible underlying structure behind the use of various job search methods. A study of interrelationships between methods used would provide a better understanding of the effectiveness of various methods of job search to achieve favorable work outcomes. It would also help to understand the factors determining the use of these methods by job seekers.

On the basis of Wanberg et al. (2000), and Barber and Wesson (1999) research, a review of the job search literature suggested that a number of job search methods previously used in past studies could be expected to interrelated together and form unique dimensions. In addition to Wanberg et al.'s (2000) dimension of networking, five groups of job search methods were identified using examples from the literature. For instance, sending out unsolicited resumes, contacting employers directly, or filling out job application forms (e.g., Linnehan & Blau, 1998) could be expected to be interrelated because they are all an attempt to reach an employer without intermediate persons or services. In addition, these methods share a similar characteristic, namely that the job seeker is unlikely to know of any specific job opening at the organization before contact with the employer is established. Another possible grouping of job search methods concerns the use of services that advertise job openings. Two of the most popular job search methods cited in almost all job search studies are newspapers and magazines, and government employment agencies. They both offer to employers a media to advertise job openings and reach job seekers. A fourth group of job search methods could consist of organizations (e.g. temporary employment agencies, labour unions, private employment

agencies) which facilitate communication between employers and job seekers in various ways (Barber & Wesson, 1999). These methods offer more pro-active services because job seekers may have to register with the organization to learn about job leads. In addition, these organizations generally pre-screen applicants whereas job listing services do not (Barber & Wesson, 1999). Specific to the population in this study, university-related sources of job information would be expected to cluster together (see Barber & Wesson, 1999). It is plausible to expect that someone who speaks to professors about potential job leads may also be more likely to seek on-campus job postings or to use the university placement service. Finally, the development of Internet as a source of job information suggests that an Internet-related group of job search methods is needed. A computer-related job search method was first explored by Wanberg et al. (2000), as part of a general job search intensity scale. However its effectiveness remains unknown. The characteristics of the job search methods referring to the Internet (i.e., they require a computer, computer skills, Internet access, and some knowledge of Internet applications) are sufficiently unique to these methods that it is reasonable to expect a cluster of Internet-related job search methods.

Hypothesis 1: Six clusters of job search methods are distinguishable: contacts, direct applications, job ads, employment services, university-related methods, and Internet-related methods.

Job Search Intensity

The second major element of Schwab et al.'s (1987) job search model concerns the effort applied to generating job alternatives. Job search intensity has been studied in numerous studies and operationalized in many ways. Typically, researchers have used

measures of job search intensity emphasizing general effort spent looking for work (e.g., Feather & O'Brien, 1986; Wanberg, 1997) and measures focusing on specific job search activities (e.g., Bretz Jr., Boudreau, & Judge, 1994; Kanfer & Hulin, 1985; Kopelman, Rovenpor, & Millsap, 1992). Participants have been asked to report the number of times they engaged in various job seeking activities (e.g., Vinokur & Caplan, 1987; Wiener, Oei, & Creed, 1999), whether or not they used various job search methods in a given period (e.g., Kanfer & Hulin, 1985; Kopelman, Rovenpor, & Millsap, 1992), how often they performed each task in a set of search activities (Blau, 1993; Caska, 1998; Saks & Ashforth, 1999), how many hours they spent using search methods, and how many applications were sent during the job search (Taris, Heesink, & Feij, 1994). Blau (1993) maintained that scales emphasizing effort and time were less effective to explain subsequent search outcomes (i.e., turnover) because they did not measure what people were specifically doing. Blau recommended the use of behavioral measures to operationalize job search intensity because behaviours best translate how time and effort are spent in various job search activities. Blau (1993) further improved upon other job search intensity measures and designed a 12-item scale to measure the intensity at which individuals engage in job search behaviours. The scale was subsequently refined in more recent studies to include new and relevant job search methods, such as conducting information interviews to find out about careers and jobs, analyzing one's own interests and abilities to determine the best job for self (e.g., Saks & Ashforth, 1999) and using the World-Wide Web or other computer services to locate job openings (e.g., Wanberg et al., 2000).

Search intensity has generally been studied at the aggregate level (Wanberg et al., 2000). Few studies examined the effort applied to specific job search methods. Researchers typically distinguished job search intensity from job sources (e.g., Barber et al., 1994; Saks & Ashforth, 2000). In their theoretical conceptualization, Schwab et al. (1987) operationalized intensity as the effort applied to methods of job search, yet researchers have rarely examined how effort is allocated to various methods of job search. For the most part, the extent to which job seekers use formal or informal sources has been defined by the number of sources used in each major group (Barber et al., 1994; Saks & Ashforth, 1997, 2000). In general, current job search scales cannot prescribe the extent to which intensity applied to different behaviours is related to finding a job (Blau, 1994). Recently, Wanberg et al. (2000) examined the intensity applied to a specific method, networking. They found, for instance, that networking intensity was a viable construct distinct from general job search intensity. They showed that individuals who were more comfortable with the idea of networking were more likely to network intensively. In contrast, networking comfort was not significantly related to general job search intensity.

In their study, Wanberg et al. (2000) compared the effort applied to one particular method of job search to the general effort applied to search for work. Yet, the question of whether applying effort to one method will result in a different outcome from applying effort to another method remains unresolved. It is possible that applying more effort to a less effective method may result in similar search outcome as applying less effort to a more effective method. To date, no studies have examined how the effort applied to a job search method interact with the effectiveness of the method to influence search outcomes.

Integrating the literature on job sources and job search intensity, the focus of this study was to explore how the effort devoted to specific methods of job search may influence search outcomes such as job satisfaction and starting salary.

Determinants of Job Search

Most job search studies have focused on the job search process and its associated outcomes (Wanberg, Watt, & Rumsey, 1996). Researchers have been primarily interested in the factors that contribute to finding a job. In contrast, less progress has been made to understand the extent to which individual difference variables are related to job seekers' use of various methods of job search and effort applied to search. An increasing body of research in organizational behaviour has demonstrated a connection between personality characteristics and individuals' work behaviours and attitudes. Personality traits affect employee performance (Barrick & Mount, 1991), job satisfaction, and organizational satisfaction (Korman, 1976). In comparison, fewer studies have examined the relationship of personality to methods of job search, a group of activities of importance to both individuals and employers.

Personality and Job Search Methods Used

Early research has provided some evidence that dispositional variables may play a role in individuals' success in the labour market (e.g., Schneider & Stevens, 1971; Stevens, 1973). One set of studies has examined how individual factors were related to different patterns of job search, whereas a second set of studies has examined how personal factors contribute to job search intensity. Schneider and Stevens (1971) examined how personality characteristics were associated to different patterns of job search behaviours. They reported that different levels of placement readiness were

associated with different personality traits. Placement readiness was defined as "the individual's degree of specification, crystallization, exploration, confusion, and passivity in identifying the job-goals sought in the labour market"(p. 195). In a prior study, placement readiness had been associated with success (or lack of) in getting desired jobs. High placement readiness was related to success in obtaining jobs, and suggested that individuals express crystallized and specific job goals. Scheider and Stevens found that individuals with characteristics of high placement readiness were dominant, tough-minded, and less neurotic; whereas low placement readiness was associated to submissiveness, sensitivity, and greater neuroticism. In contrast, depression and anxiety were not associated with placement readiness.

More recent studies have showed that self-esteem was related to time spent using job sources (Ellis & Taylor, 1983). Individuals with lower self-esteem tend to use formal sources more often, and those with higher self-esteem use informal sources and direct applications more frequently. Extraversion has also been associated with more interactive job search behaviours (Linnehan & Blau, 1998). Extroverted students favour more interactive behaviours such as walking into the organization and applying for a job, contacting someone, and asking previous employers. In contrast, introverted students are more likely to read a book or articles on job search. Linnehan and Blau (1998) suggested that it may be important to examine the interaction between personality and type of job search behavior chosen on the effectiveness of the search. This may lead to more effective job search strategies for younger workers conducting a job search. Furthermore, given that some search strategies may be more effective and may lead to quicker re-

employment, higher salaries, and greater job satisfaction, it is important to examine how personality traits influence the choice of successful job search behaviours.

Personality and Job Search Intensity

Another large body of literature has examined the role played by dispositional variables in job search intensity. Frequent and intensive job search behaviours have been associated with higher levels of self-esteem (Ellis & Taylor, 1983; Saks & Ashforth, 1999), job-seeking self-efficacy (Kanfer & Hulin, 1985, Saks & Ashforth, 1999), employment commitment (Rowley & Feather, 1987), conscientiousness (Wanberg, Watt, & Rumsey, 1996), and perceived control (Saks & Ashforth, 1999). Similarly, Steffy, Shaw, and Noe (1989) found that job seekers who scored higher on Type A personality also tended to display greater levels of job search intensity. Finally, the extent to which students engage in using information sources has been related to vocational locus of control (Friedrich, 1987). Friedrich found that students scoring higher on external locus of control were inclined to use fewer sources of job information.

Five-Factor Approach to Personality

The development of the five-factor approach to personality to predict job-related behaviours and organizational outcomes has encouraged job search researchers to explore the relationships between the Big Five personality dimensions, job search behaviour, and employment outcomes. According to the Big Five personality framework, the core dimensions of personality are agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience. Costa and McCrae (1992) defined agreeable persons as fundamentally altruistic. They are eager to help others, and believe that others will be helpful to them. Antagonistic individuals are more egocentric, skeptical of others'

intentions, and more competitive. The conscientious individual is purposeful, strong-willed, and determined. They have an ability to resist impulses and temptations. High scorers are scrupulous, punctual, and reliable. Extraverts prefer large groups and gathering. They are more assertive, active, and talkative. They are energetic and optimistic. In contrast, introverts are more reserved, prefer to work alone, and do not show the high spirits of extraverts. Individuals high in Neuroticism will have a tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt, and disgust. It suggests that disruptive emotions interfere with coping and adaptation. The elements of Openness to Experience include active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity. Open individuals are willing to entertain new ideas and unconventional values.

Recent studies have examined the influence of the Big Five personality traits on job search. For example, Schmit, Amel, and Ryan (1993) showed that greater levels of assertive job search behaviours were associated with high Conscientiousness, high Agreeableness, high Openness to Experience, and low Neuroticism. Wanberg et al. (1996) revealed that Conscientiousness was associated with job search intensity. Similarly, the Big Five personality dimensions have been found to correlate with individuals degree of preparation to job interviews (Caldwell & Burger, 1998). Caldwell and Burger identified two dimensions contributing to the preparation to employment interviews: Social and Background preparation. Social preparation consisted of items that involved contacting individuals and Background preparation involved items related to the amount of research and readings conducted. The results of their study showed that Conscientiousness was positively correlated to Social Preparation and Background

Preparation. Extroverted individuals were more likely to use Social Preparation than introverted individuals. Finally, individuals who scored high on Openness to Experience were also high on Social Preparation. Caldwell and Burger's (1998) research provided support for the evidence that personality traits influence the choice of job search methods. They showed that students high in Extraversion and Openness to Experience tended to get involved in Social Preparation while student high in Conscientiousness and low in Neuroticism were more involved in Background Preparation. More recently, Wanberg et al. (2000) showed that personality traits were related to involvement in a specific job search activity, namely networking. As expected, they found that Extraversion, Openness to Experience, Agreeableness, and Conscientiousness positively correlated with networking intensity while Neuroticism was negatively correlated. Using a multivariate approach, only Extraversion and Conscientiousness were related to networking intensity. Wanberg et al. (2000) also showed that Extraversion and Conscientiousness were related to general job search intensity.

Overall, the literature provides support for a relationship between personality factors, the use of specific methods of job search, and the effort applied to using these methods. In the present study, it was proposed that individuals high on Conscientiousness and Openness to Experience will display higher levels of intensity for each job search groups. Conscientious individuals were expected to be responsible, motivated, persistent, and more likely to rely to a greater extent on various methods of job search. Individuals high on Openness to Experience were expected to be flexible and open to try various methods of job search. In addition, it was proposed that individuals high on Extraversion and Agreeableness will be more likely to display greater levels of intensity on informal

methods of job search. Extrovert individuals generally prefer the company of others and were expected to seek the help of others more frequently in their search. Agreeable individuals are known to have warm relationships with others and believe that others can help them. They were also expected to rely more often on personal contacts during their search.

Hypothesis 2a: Higher levels of Conscientiousness and Openness to Experience are positively associated with higher levels of intensity for each job search dimensions.

Hypothesis 2b: Higher levels of Agreeableness and Extraversion are positively associated with higher levels of intensity for informal methods of job search (i.e., personal contacts).

Job Search Outcomes

The main goal of engaging in job search activities during a job search is to find a job, and preferably a good one (Wanberg et al., 2000). Typically, researchers aimed at predicting employment status (Kanfer & Hulin, 1985; Taris, Heesink, & Feij, 1999; Saks & Ashforth, 1999; Vuori & Vesalainen, 1999; Wanberg, Watt, Rumsey, 1996, Wanberg, Kanfer, & Rotundo, 1999), but also several other search outcome variables. These include intention to turnover (Wanberg et al., 1999), job satisfaction (Steffy et al., 1989; Wanberg et al., 1999), match between educational qualifications and job requirements (Allen & Keaveny, 1980), mental health (Wanberg, 1997, Wiener, Oei, & Creed, 1999; Vinokur & Caplan, 1987), number of job interviews (Stumpf, Austin, & Hartman, 1984, Newsome, 1998), number of job offers (Steffy et al., 1989), salary (Granovetter, 1974), search duration (Dyer, 1973), and turnover (Blau, 1993).

Employment Quality

To date, job search literature has primarily examined the predictors of employment status after a given period of time. The nature of the job obtained has been overlooked for the most part. It is only until recently that researchers have given some attention to the quality of employment (e.g., Saks, 1997; Wanberg et al., 2000). In a strong economy, quality of employment may be a more important criterion for measuring job search success (Wanberg et al., 2000). Zvonkovic (as cited in Feldman, 1996) explained that politicians and the popular press have reinforced the idea of a low unemployment rate as a decisive criterion of economic well-being for North American families. However, the economic and emotional problems of those who are underemployed in lower quality jobs have generally been largely ignored (Newman, 1988). For the student worker, the quality of their part-time job may have a significant impact on their career development and academic performance. Students who worked in higher quality jobs tend to have higher levels of career maturity and higher grade point average (Healy et al., 1985). Quality jobs also provide students with opportunities for learning, developing social skills, and exercising responsibility (Greenberger, Steinberg, & Ruggiero, 1982).

Employment Quality and Job Search Methods Used

The effect of the job search methods used on employment quality has been documented in previous studies. Early studies demonstrated that job seekers who used personal contacts tended to secure better jobs (Granovetter, 1974). Using recent university graduates, Allen and Keavenly (1980) found that those who used formal methods (i.e., employment services) perceived a closer match between their educational qualifications and their job. In addition, those who used informal methods tended to

obtain blue-collar positions while those who used formal methods were initially employed in white-collar jobs. Saks and Ashforth (1997) found similar results and showed that the use of formal methods was positively associated with greater perception of fit. Studies on recruitment sources examined how source used was related to employee retention, performance, absenteeism, and work attitudes (see Rynes, 1991, for a review of the literature). Breugh (1981) found that scientists recruited through college placement services exhibited lower satisfaction with supervision than scientists recruited through other means. Similarly, employees who use referrals tend to report higher levels of job satisfaction than those who use newspaper ads or direct applications (Latham & Leddy: cited in Rynes, 1991). In a similar study, Saks (1994) found a source difference in job tenure, but not in job satisfaction. Rynes (1991) suggested that inconclusive findings in the source literature were the results of important differences (i.e., sources used, outcome variables, operationalizations, statistical power, populations sampled, job types, and duration of study) across studies. As proposed by Saks (1994), source effects may be indirectly and directly related to various work outcomes. Saks's model suggested that source of information is directly linked to job expectations. In turn, job expectations relate to job satisfaction, followed by intentions to turnover.

Two hypotheses have been proposed to explain differences in sources used on work outcomes. The first hypothesis suggested that sources provide more or less in-depth information about jobs and employers (Williams, Labig, Jr., & Stone, 1993). For example, friends and family members can generally provide more information about the company they work for. Thus, with more accurate information, the applicant is able to evaluate the job for possible fit. The second hypothesis for source effects on

organizational outcomes suggest existing differences in applicant populations (Williams et al., 1993). Applicants recruited from different sources are expected to differ on important job-relevant characteristics. As such, informal sources, especially referrals, would be expected to yield better workers because friends and family members would do a better job at pre-screening the applicants. Evidence for the two hypotheses has remained inconclusive because the precise informational differences and individual differences have not been well established (Rynes, 1991).

For the present study, it was hypothesized that relying on contacts would result in higher employment quality. In agreement with the differential information hypothesis, relying on contacts was expected to lead to more accurate information about jobs and to increase person-job fit. Similarly, relying on university-related methods was expected to relate to greater levels of employment quality. It was anticipated that these methods would tap into a pool of occupations that closely matches student characteristics.

Hypothesis 3: The use of contacts and university-related methods will be positively associated with greater levels of employment quality.

Employment Quality and Job Search Intensity

Feldman (1996) predicted that students who start looking for work early and spend the most effort in the job search would be less likely to become underemployed. An early and active job search would increase the number of interesting job offers to be considered. In his early study on American youth, Dayton (1981) concluded that employment success and satisfaction were related to persistence in searching for work. Similarly, Schwab et al. (1987) stated that an intensive job search will generate more job options to choose from, and thus job seekers will have better opportunities for selecting a

satisfying job. However, if the individual settles on the first job offer obtained, job satisfaction may tend to decrease in the long run. Steffy et al. (1989) reported that college graduates who engaged more intensively in investigating careers and job leads were more satisfied with their jobs. Wanberg (1997) also found that unemployed individuals who displayed higher levels of job search behaviours were more satisfied once re-employed. More recent studies revealed null findings between job search intensity and job satisfaction. Wanberg et al. (1999) did not find any relationships between job search intensity and reemployment quality, as measured by job satisfaction, job improvement, and intentions to turnover. In a later study, Wanberg et al. (2000) showed that individuals who found their jobs through networking did not report higher levels of job satisfaction or lower levels of intentions to turnover. Although general job search intensity may not predict job quality, other factors such as a person's job search strategy maybe more important (Wanberg et al., 1999). This study proposed to explore the link between the intensity applied to various methods of job search and the quality of the job obtained. Specifically, it was hypothesized that increasing effort applied to each method of job search will be related to greater levels of employment quality. It was expected that greater levels of effort in the job search would generate more information about jobs and employers and allow the job seeker to obtain a better job.

Hypothesis 4: Higher levels of effort applied to each group of job search methods will be positively associated with greater levels of employment quality.

Method

Participants and Procedures

Undergraduate students attending a medium-sized university located in Atlantic Canada were recruited through on-campus postings and announcements made in a number of undergraduate psychology courses. Students currently employed were asked to complete a 6-page survey and were given a bonus point for participation in the study.

A total of 181 surveys were administered and 176 usable surveys were retained in the study. Forty-six (26%) participants were male and 130 (74%) were female. The age of the participants ranged from 17 to 47 years old ($M = 21.8$, $SD = 4.7$). The participants were enrolled in various degrees, 67.5% in a B.A., 16.0% in a B.Sc., and 16.6% in a B.Com. The participants worked between 3.5 and 52 hours a week ($M = 17.8$, $SD = 8.9$) and worked for an average 3.1 days per week ($SD = 1.3$). The mean hourly wages (upon hiring) reported was \$7.64 per hour ($SD = \2.94) and ranged from \$3.00 to \$28.67. Seventy-five percent of the respondents were employed part-time (less than 20 hours/week). On average, respondents had been employed for 16.9 months ($SD = 17.2$) with their current employer.

Measures

Personality. Personality characteristics were assessed using the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992). The NEO-FFI measures the Big Five markers of Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness on five 12-item scales. The Cronbach's alpha reliability coefficients for these scales ranged from .65 to .86 in this study and were comparable to those obtained in other studies.

Methods of job search and job search intensity. Six dimensions of job search were provisionally defined as shown in Table 1. Seventeen methods of job search were identified from previous measures of job sources and job search behaviour (e.g., Allen & Keavenly, 1980; Barber & Wesson, 1999; Green et al., 1999; Linnehan & Blau, 1998; Wanber et al., 2000). Three methods were added because they had not been investigated before and were highly relevant to the study. They included “On-campus job postings”, “Internet job postings”, and “Posting copies of your resume on the Internet”. The former method was used because it was expected to be a popular method of job search among university students. The other methods reflected the two most important job services available to job seekers on the Internet. Recent interest in the use of electronic technology for job searches (e.g., Bratina & Bratina, 1998) suggested that the use of Internet, as a job search method, has become more popular among job seekers, especially young people (Kuhn & Skuterud, 2000). Participants were asked to rate the extent to which they relied on each of the 17 recruitment sources to find their present employment on a 5-point scale, where 1 = Never; 2 = Slightly; 3 = Moderately; 4 = Strongly; and 5 = Heavily (see Appendix A for details). A frequency range was used under the assumption that participants would better recall a subjective evaluation of how much effort was devoted to each method versus an exact number of times each method was actually used (Blau, 1993). Table 1 shows the methods of job search that were expected to represent the six dimensions.

Table 1

Job Search Dimensions and Methods

Dimension	Methods
Contacts	Contacting close friends. Contacting previous employers. Contacting family members or relatives. Contacting other personal acquaintances.
Job ads	Reading newspapers or magazines. Using governmental employment agencies (e.g., HRDC Job Bank).
Direct applications	Contacting employers directly (in person, by email, or by phone). Filling out job application forms at employers site. Sending resumes to the employer (by mail, email, fax, or in person).
University-related methods	Contacting professors. Browsing on-campus job postings. Contacting the university placement service.
Internet-related methods	Posting copies of your resume on the Internet. Browsing Internet job postings.
Employment services	Using other private employment agencies. Contacting labour unions. Contacting temporary placement agencies.

Job satisfaction. Two dimensions of employment quality were assessed: job satisfaction and starting salary. First, job satisfaction was assessed using the short form of the Minnesota Job Satisfaction Questionnaire (MSQ) designed by Weiss, Dawis, Eagland, and Lofquist (1967). The participants were asked to respond to items considering their current and main job. The MSQ has been used in many studies and is well regarded as a measure of job satisfaction. The short form consisted of 20 items on which respondents indicate their degree of relative satisfaction for a number of job facets, using a 5-point scale (1 = very dissatisfied and 5 = very satisfied). In this study, the sub-scale of general job satisfaction was used, a composite of all the 20 job satisfaction facets. The MSQ manual also suggested that the job satisfaction scale underlied two factors, extrinsic satisfaction and intrinsic satisfaction. A median reliability coefficient of .90 for the general job satisfaction scale has been previously reported (Weiss et al., 1967). Alpha coefficient for the job satisfaction scale in this study was .89.

Starting salary. The second dimension of employment quality, starting salary, was assessed by asking participants to report their hourly wages upon hiring. Salary has been used in many studies as an objective measure of job quality (Brasher & Chen, 1999). Among the student population, 48% of students consider that a well paid job is a positive quality of employment (Hammes & Haller, 1983). Control variables. Age and current salary were considered as control variables for some of the analyses. These control variables were selected for their potential contribution to the outcome variables. Numerous studies have demonstrated the relationship between pay and job satisfaction (e.g., Rice, Phillips, & McFarlin, 1990). In this study, the influence that participants' current pay may have had on the level of job satisfaction reported was statistically

controlled. Also, age was expected to play a role on individuals' initial pay. Older students were hypothesized to possess more work experience, and in turn obtained jobs with better pay. Work experience has been cited by several researchers as an important mediating variable in new employee's starting salary.

Results

Exploratory Factor Analysis

An exploratory factor analysis (EFA) was performed on the 17 methods of job search to analyze their interrelationships. The guiding theory suggested six dimensions of job search, and hence, a principal component analysis (PCA) was used to impose a six-factor solution. The scree test performed on the PCA indicated that a four-factor solution was the most appropriate (see Figure 1). A second PCA was computed with orthogonal rotation because correlations between the factors were less than .32 (Tabachnick & Fidell, 1996). To ensure that each method of job search represented the construct underlying each dimension, a factor weight of .32 was used, as the minimum cutoff (Tabachnick & Fidell, 1996). Second, each item was required to be clearly defined by only one factor and, thus, a maximum loading of .32 on other factors was used as a cutoff. Three items were dropped because they did not meet the second criterion. Upon further investigations, the three excluded items did not influence the interpretability of the results because they were expected to load on a separate factor, which appeared unreliable. Thus, a four-factor solution was deemed the most interpretable, and accounted for 56.75% of the total item variance. As shown by Table 2, an examination of the pattern of loadings revealed that most items were loading high on the intended factor and low on other factors ($< .32$).

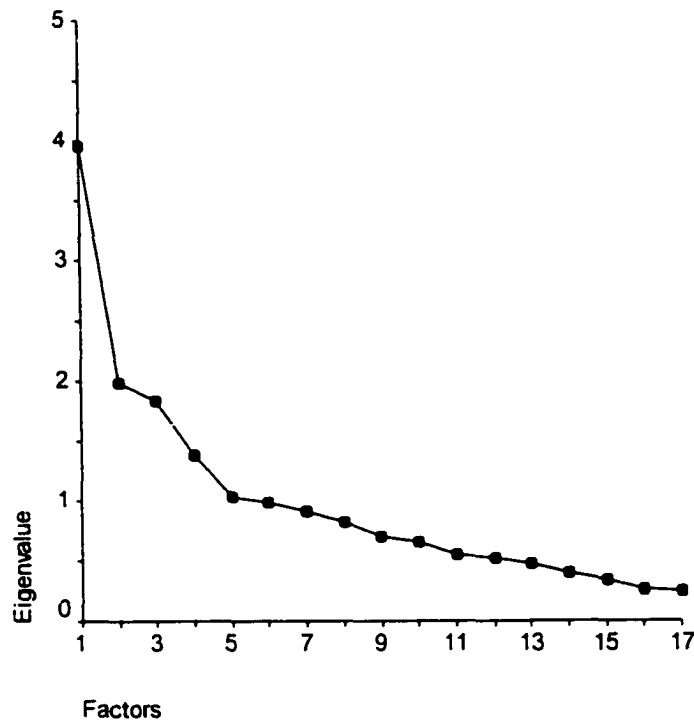


Figure 1. Scree plot of the eigenvalues obtained from the principal component analysis performed on the 17 methods of job search.

Results from the principal component factor analysis showed that Factor 1 reflected methods of job search that used job listing services. The four items of Factor 1 had factor loadings higher than .65 (e.g., “browsing Internet job postings, reading newspapers and magazines”), and the factor was labeled “Job Ads”.

Factor 2 reflected methods of job search specific to the university context (e.g., “contacting professors, browsing on-campus job postings”) and comprised 3 items. This factor was named “University-Related Methods”. The four items that loaded on Factor 3 accentuated the use of personal contacts in the job search (e.g., “asking close friends, contacting family members and relatives”). Factor 3 was labeled “Personal Contacts”.

Table 2

Factor Loadings and Methods of Job Search

Methods of Job Search	Factor 1	Factor 2	Factor 3	Factor 4
Internet Job Postings	.79	-	-	-
Newspapers and Magazines	.69	-	-	-
Governmental Employment Agencies	.69	-	-	-
Internet Resume Posting	.69	-	-	-
University Placement Service	-	.82	-	-
On-Campus Job Postings	-	.81	-	-
Professors	-	.71	-	-
Close Friends	-	-	.82	-
Other Personal Acquaintances	-	-	.71	-
Previous Employers	-	-	.55	-
Family Members and Relatives	-	-	.51	-
Unsolicited Resumes	-	-	-	.79
Direct Application	-	-	-	.75
Job Application Forms	-	-	-	.68
Eigenvalue	2.86	1.92	1.80	1.37
Cumulative variance explained	20.42%	34.11%	46.99%	56.75%

Note. Factor loadings (< .32) are not reported. Factor 1 = Job Ads; Factor 2 = University-Related Methods; Factor 3 = Personal Contacts; Factor 4 = Direct Applications.

The items loading on Factor 4 reflected a direct approach to employers, with no intermediary. This factor, named “Direct Applications”, had three items loading higher than .65 (e.g., contacting employers directly, sending unsolicited resumes to the employer). An average score for the total number of sources for each of the four dimensions was calculated. These aggregate scores were used for further analyses.

Descriptive Statistics and Intercorrelations

Table 3 presents the means, standard deviations, coefficients alpha, and correlations among the variables used in this study. Intercorrelations between the six job search dimensions suggested that increasing reliance on job ads was associated with increasing reliance on university-related methods ($r = .28$) and direct applications ($r = .16$). The significant intercorrelations between the five personality traits ranged from .19 between Agreeableness and Openness to Experience, to -.41 between Neuroticism and Extraversion. Respondents tended to rely the most on direct applications ($M = 3.40$, $SD = 1.19$) and the least on university-related methods ($M = 1.52$, $SD = .82$).

Prediction of Job Search Intensity

Hypotheses 2a and 2b addressed the relationships between personality and intensity applied to various methods of job search. Contrary to the hypotheses, none of the five personality traits correlated with any of the five job search dimensions (See Table 3). Since the variables were found to be uncorrelated, no further multivariate analyses were performed.

Prediction of Employment Quality

An examination of the correlation matrix (see Table 3) reveals positive correlations between job satisfaction and university-related methods ($r = .17$, $p < .05$), personal contacts ($r = .14$, $p < .05$), and a negative correlation with direct applications ($r = -.17$, $p < .01$). Starting salary was associated with personal contacts ($r = .13$, $p < .05$), and direct applications ($r = -.13$, $p < .05$).

Table 3

Descriptives and Intercorrelations of Study Variables

Variable	<u>M</u>	<u>SD</u>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	21.75	4.70	-												
2. Current Salary	7.64	2.94	.35**	-											
3. Neuroticism	2.88	.68	-.09	.03	(.86)										
4. Extraversion	3.67	.48	.01	.03	-.41**	(.76)									
5. Openness to Experience	3.33	.46	.14*	.08	.04	-.09	(.65)								
6. Agreeableness	3.62	.46	.14*	-.04	-.27**	.20**	.19***	(.73)							
7. Conscientiousness	3.69	.57	.18**	.06	-.38**	.09	-.04	.27**	(.85)						
8. Job Ads	1.57	.78	.04	-.01	.07	-.04	-.06	-.04	.06	(.70)					
9. University-Related	1.54	.82	.00	.02	-.03	-.04	.00	.01	.01	.28**	(.68)				
10. Direct Applications	3.40	1.19	-.13*	-.17*	.03	.04	.03	.09	-.03	.16*	-.05	(.64)			
11. Personal Contacts	2.74	.95	.06	.15*	-.06	.02	-.05	-.07	.12	.05	.04	.03	(.55)		
12. Starting Salary	6.88	2.52	.49**	.76**	.01	.01	.08	.02	.11	.05	.01	-.13*	.13*	-	
13. General Satisfaction	3.50	.67	.15*	.21**	-.16*	.28**	-.03	.17*	.19**	.07	.17*	-.18**	.14*	.18**	(.89)

Note. Alpha reliability coefficients are in parentheses on the diagonal.

* $p < .05$, one-tailed; ** $p < .01$, one-tailed.

Hierarchical multiple regressions were used to examine the combined contributions of age, current salary, personality, and each of the six job search dimensions on job satisfaction and starting salary. For job satisfaction, variables were entered into the regression procedure in three steps (Step 1 = current salary, Step 2 = personality traits, and Step 3 = job search dimensions). Table 4 shows regression coefficients from each step of the hierarchical analysis. Current salary and personality acted as control variables because they were expected to correlate with job satisfaction. For starting salary, age was entered on the first step as a control variable, followed by the five job search dimensions.

As shown in Table 4, the equations explained significant amounts of variance in job satisfaction ($R^2 = .22, p < .01$) and starting salary ($R^2 = .26, p < .01$). The addition of personality variables to the job satisfaction model explained more variance in the outcome variable, ($\Delta R^2 = .11, p < .01$). Adding dimensions of job search in both equations explain more variance in the job satisfaction equation only ($\Delta R^2 = .06, p < .05$). The regression coefficients in the job satisfaction equation suggested that current salary ($\beta = .16, p < .05$), Extraversion ($\beta = .26, p < .01$), university-related methods ($\beta = .14, p < .05$), and direct applications ($\beta = -.17, p < .05$) were related to job satisfaction. For the starting salary equation, only age was related to starting salary ($\beta = .48, p < .01$). Hypothesis 3 and 4 were partially supported. Individuals who relied less on direct applications and more often on university-related methods tended to display greater levels of job satisfaction.

Table 4

Hierarchical Multiple Regression Analyses^a

	Job Satisfaction			Starting Salary	
	Step 1	Step 2	Step 3	Step 1	Step 2
Step 1					
Current Salary	.21**	.21**	.16*		
Age				.49**	.48**
Step 2					
Neuroticism		.06	.03		
Extraversion		.24**	.26**		
Openness to Experience		-.04	-.03		
Agreeableness		.11	.13		
Conscientiousness		.14	.12		
Step 3					
Job Ads			.06		.05
University-Related			.14*		-.01
Direct Applications			-.17*		-.07
Contacts			.09		.10
Multiple R ²	.05**	.16**	.22**	.24**	.26**
R ² change	.05**	.11**	.06*	.24**	.02

^a Entries are standardized regression coefficients.

* $p < .05$; ** $p < .01$.

Further Analyses

Further analyses were performed to examine the relationships between the five personality traits, the 17 methods of job search, job satisfaction, and starting salary (See Table 5). Although none of the personality traits correlated with the dimensions of job search, the analyses at the item-level showed that respondents who scored higher on Openness to Experience tended to rely less on previous employers ($r = -.17$, $p < .05$).

Table 5

Intercorrelations of Job Search Methods, Personality Traits, and Job Search Outcomes

Job Search Method	N ^a	E ^a	O ^a	A ^a	C ^a	Satisfaction	Starting Salary
1. Newspapers and Magazines	.00	.04	-.05	.07	.06	.04	.07
2. Close Friends	-.08	.09	.02	-.06	.02	.15*	.10
3. Previous Employers	.00	-.01	-.17*	-.07	.02	.12	.04
4. Governmental Employment Agencies	.05	-.03	-.01	-.07	.09	.03	.07
5. Family Members and Relatives	-.06	.03	-.11	-.12	.21**	.03	.15*
6. Professors	.04	-.01	-.11	.04	.04	.08	-.03
7. Other Personal Acquaintances	.02	-.04	.08	.08	.02	.09	.03
8. Direct Application	-.04	.05	.07	.02	-.02	-.03	-.08
9. On-Campus Job Postings	-.06	-.03	.07	-.01	-.02	.18*	.04
10. Internet Resume Posting	.11	.01	-.02	-.10	-.02	.08	-.03
11. Job Application Forms	.01	.07	-.05	.10	-.01	-.11	-.10
12. Unsolicited Resumes	.08	-.01	.01	.02	.00	-.16*	-.15*
13. University Placement Service	-.01	-.09	-.02	-.01	.01	.14*	-.02
14. Internet Job Postings	.07	-.07	-.05	-.05	.05	.09	-.01

^a N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness

* $p < .05$, one-tailed; ** $p < .01$, one-tailed.

Those who were more conscientious tended to rely more often on family members and relatives ($r = .21, p < .01$). Greater levels of job satisfaction were associated with increased reliance on close friends ($r = .15, p < .05$), on-campus job postings ($r = .18, p < .05$), university placement service ($r = .14, p < .05$), and decreased reliance on sending unsolicited resumes ($r = -.16, p < .05$). Higher starting salaries were related to greater reliance on family and relatives ($r = .15, p < .05$), and less reliance on unsolicited resumes ($r = -.15, p < .05$).

Discussion

The purpose of this study was threefold. First, the interrelationships between the use of various methods of job search were examined for the presence of higher order method clusters. It was hypothesized that the methods used in this study would cluster into six groups of methods. Second, this study investigated the relationships between the Big Five personality traits, tendencies for using certain methods of job search, and the effort applied to using each method. The third objective of this study was to explore the effect of job search methods on job quality, as measured by job satisfaction and starting salary.

Job Search Dimensions

The results of this study provide some evidence that higher order dimensions could be extracted from the intercorrelations between the job search methods used. A four-factor solution was deemed the most interpretable and retained in this study. There are two explanations that accounted for the choice of a four-factor solution over a six-factor solution. The three items that were excluded from further analyses because of cross-loadings on two or three factors shared a similar characteristic: they involved the use of employment agencies that establish contacts between employers and job seekers. The

removal of these items expected to load on a unique factor reduced the hypothesized solution to five factors. Contrary to the hypothesis, a four-factor solution better explained the interrelationships between the remaining items. Three factors (direct applications, personal contacts, and university-related methods) emerged as hypothesized. The fourth factor “job ads” had two additional methods loading highly on the factor: “posting one’s resume on the Internet” and “searching Internet job postings”.

It was hypothesized that Internet-related methods would cluster together because of their shared attribute that would sufficiently differentiate them from other methods. The clustering of the four methods loading on the “job ads” factor may be accounted for by a characteristic common to each method. In some labour market studies, merely reading newspaper ads has been considered as a passive method of job search (Grenon, 1998). As opposed to applying to newspaper job ads considered an active method. Similarly, relying on governmental employment agencies could also be considered a passive method because job seekers using the method may simply be browsing through the job openings offered by the agencies. Indeed, one of the main service offered to individuals seeking jobs by Human Resources Development Canada is the Job Bank, a service listing job openings throughout the country. Relying on Internet job postings could also be an indicator of passive methods. In contrast to newspaper ads or governmental employment agencies, the search media of Internet-related method is different but the common characteristic remains similar. Finally, the reliance on posted copies of one’s resume on the Internet shares a similar characteristic to the other three methods in a reversed form. The “search” is not performed by the job seeker but by the employer seeking applicants. In this case, the service offered is of resume postings as opposed to job postings.

Job Search and Personality

This study found no support for the hypotheses that personality traits would influence the choice of job search methods used and the extent to which effort was applied to individual methods. None of the Big Five personality factors correlated with any of the four dimensions of job search. These findings were surprising given the recent interest by job search researchers to explore the links between the Big Five factors and job search behaviours (e.g., Caldwell & Burger, 1998; Schmit, Amel, & Ryan, 1993; Wanberg et al., 2000). The assumption behind the hypothesized relationships between personality and job search was that personality traits influence individuals' tendencies to engage in certain behaviours. Applied to job search, it was assumed that the use of certain methods would be related to personality traits because of the characteristics of each method. For example, the use of personal contacts in the job search is characterized by job seekers' involvement in social interactions with others to gather job information. A relationship between Extraversion and personal contacts would be expected because extroverted individuals prefer the company of others and seek out social contacts (Costa & McCrae, 1992).

Job Search and Employment Quality

The results of this study provide some evidence that increasing levels of job satisfaction were associated with increasing reliance on personal contacts and university-related methods, and decreasing reliance on direct applications. According to the differential information hypothesis, job seekers who rely more frequently on personal contacts are expected to acquire more accurate and realistic information about jobs and employers. This information is believed to function as a job preview (Wanous, 1980). It allows applicants to (a) "self-select" themselves out of a position they feel would not be

satisfying, (b) lower their expectations about the jobs and thus increase their satisfaction with the job, (c) increase their level of organizational commitment because the job offer was accepted without strong inducement, and (d) augment their ability to cope with unpleasant job demands. The same hypothesis provides an explanation for the negative relationship observed between direct applications and job satisfaction. In contrast to using personal contacts, applying directly to employers to find out about job openings involves minimal knowledge of the job or employer. This is the typical door-to-door or cold call approach in which the job seeker proceed to the employer directly to find out about potential job leads. The effort is spent contacting employers instead of acquiring information about jobs and employers. Upon receiving a job offer, the decision to accept it is based on less information and may result in further person-job misfit.

The relationship between reliance on university-related methods and job satisfaction may be accounted for by the individual differences hypothesis. This hypothesis proposes that methods vary in effectiveness because they reach applicants from different populations (Schwab, 1982). Accordingly, respondents who relied on university-related methods may have had access to a pool of jobs that were more closely related to their major. It is reasonable to assume that employers who use university-related methods to recruit employees are interested in hiring university students. In turn, the hiring of university students may suggest that employers believe that this student population offers a better fit for the jobs advertised. Thus, the overall perceived job quality by respondents who relied more often on university-related methods may be an indicator of better person-job fit.

The regression results are somewhat different. After controlling for the influence of pay and personality, reliance on direct applications and university-related methods were the only methods related to job satisfaction. The differences between the bi-variate and regression results illustrate the complexity between the use of multiple methods of job search and search outcomes. It is possible that relying on multiple methods may have a differential effect on job search outcomes. For example, time spent searching for work distributed over multiple groups of methods may not be as effective as putting one's eggs in one basket and using a single group of job search methods. Labour market studies showed that using up to five methods of job search was associated with faster re-employment (Harrison Ports, 1992). However, if five or more methods were used, likelihood of getting a job decreased.

Limitations

Frequency scales. There are a number of additional points that must be addressed in the interpretation of these findings. The first of these relates to the measurement scales used to operationalize job search intensity. For the most part, past studies typically asked participants to report the methods used and aggregated scores were used to measure the extent that individuals had used formal or informal methods. However, Blau (1994) pointed out that dichotomous "Yes/No" response scale were less precise and recommended the use of frequency scales. Following Blau's recommendation, this study asked participants to report their involvement in various methods on a 5-point frequency scale. In this study, it was expected that the extent to which participants relied on each method would influence the search outcomes. Although this approach improved upon previous studies, it was at the expense of a serious statistical concern.

The measurement of job search intensity pre-supposed that for a given method, some individuals will hardly rely on it, some will rely on it frequently, and many will rely on it to a moderate extent. Measuring intensity would be assumed to yield a set of data that is close to being normally distributed. However, labour market studies have often pointed out that job seekers have preferences for certain methods (e.g., Grenon, 1998). In fact, most job seekers will generally use a set of four or five methods. The other methods that are infrequently used are often omitted in many studies. It should be noted that a method's popularity is not necessarily related to its effectiveness to predict favorable search outcomes. In this study, method's popularity posed a serious problem because some methods were used by less than 15% of the respondents. For popular methods, the tendency was moderately reversed. Popular methods tended to be overly relied on. Some of the null findings in this study could be attributed to the failure to meet the assumption of normality for some job search variables (i.e., asking professors, using university placement services, and using Internet-related methods). In addition, starting salaries for university students also tended to pile up near the obligatory minimum wages and artificially skewed the data.

Although some of the methods of job search failed to meet the assumption of normality, this problem has also been noted elsewhere. In their study, Barber and Wesson (1999) asked college graduates to indicate the information sources used by checking those that applied from a list of 10 sources. They found that 16% to 32% used some form of personal contacts, 20% used placement services, 18% used newspaper ads, 11% used an employment agency, 10% walked in without prior knowledge of an opening, and less than 1% relied on some form of advertisement. Researchers interested

in examining the effort applied to individual methods of job search are advised to consider the possibility of using experimental designs to ensure that a sufficient number of subjects per group is represented at each level of job search intensity. For example, one could compare job seekers who used Internet-related methods and those who did not to determine whether using Internet in the job search has an impact on subsequent employment quality. In correlational studies, it is expected that unpopular methods will display highly skewed distributions. However, this problem can be resolved if one has enough subjects that used the method infrequently, often, or very frequently. The effect of intensity applied to the unpopular method can thus be investigated thoroughly. Although such design would definitely improve the measurement of intensity applied to individual methods, it is very challenging for researchers because it may require a very large sample size. The lack of relationships between various groups of job search methods suggested that one may have enough respondents to assess the effect of one method but may need other sets of respondents to measure the effect of other methods.

Effect of time. Respondents were asked to recall the effort applied to various methods when looking for their current job. This approach relied mostly on the respondent's ability to remember past events. Allen and Kavenly (1980) maintained that such an approach is unlikely to affect the quality of the data. While this may not pose a problem for those who were recently employed, it may be different for those who had been on the job for a longer period. This issue has been addressed in previous studies (e.g., Allen & Keavenly, 1980; Brasher & Chen, 1999). People can retrospectively underestimate or overestimate factual events (Brasher & Chen, 1999) and these underestimation and overestimation are likely to affect the statistical relationships. In the present study,

problems of estimation were expected to affect reports of reliance on various methods of job search. Although respondents were not asked to report specific incidence of behaviours, it is possible that problems of estimation influenced their perception of how much effort was applied to each method. The design of this study prevents from estimating or controlling the amount of underestimation or overestimation of job search intensity. Further research could provide additional support for the relationships expected (or found) among the study variables.

Sample. This study primarily focused on the job search process of university students working in part-time jobs. As previous research showed, the sampling of different groups of job seekers may influence the results obtained. The results obtained in this study are focused on the student population who is currently attending a university program. As such, this may limit the generalizability of the findings to the present sampled population. As an example, university-related methods were included in the study because they were expected to be used by the respondents. However, these methods may be inaccessible for other populations of job seekers and any positive findings cannot be generalized to these other groups of job seekers.

Perhaps more important to this study, the size of the sample may affect the factor analysis solutions in this study. Tabachnick and Fidell (1996) recommended to have at least 300 cases as a general guideline for factor analysis, although 150 cases may be sufficient if the solutions have several high loadings ($> .80$). In this study, sample size guidelines of $(N \geq 50 + 8\underline{m})$, where \underline{m} is the number of independent variables) for multiple

regression analyses were far exceeded in this study. This was especially important considering that some of the variables were not normally distributed.

Individual methods. The correlations obtained between each 17 methods of job search and the two outcome measures suggested that method differences do exist. Within university-related methods, relying on university placement service and on-campus job postings were the only two methods associated with job satisfaction. Similarly, relying on sending unsolicited resumes was the only method negatively related to job satisfaction. These findings provide further evidence that the mix of sources comprising the operationalization of a job search dimension could lead to different outcomes (Blau, 1994). Additionally, these results demonstrate the complex interrelationships involved between the various methods of job search.

Theoretical Implications

Number of factors. Despite these limitations, this study helps to understand the different ways people look for work. Previous categorizations of job search methods into major groups have mainly focused on the few characteristics that distinguish any methods into two or three categories. Taking a closer look at the methods of job search, one can identify the common characteristics of various methods and expect these methods to cluster into distinct groups. The assumption was that individuals who use a certain job search method will be more likely to use other methods that closely resemble the original method. Research on social network provides an excellent example of how well-known informal methods can be differentiated into “strong-ties” and “weak-ties”. Using strong-ties refers to asking personal contacts that are more intimately related whereas while using weak-ties refers to asking friends of friends and distant acquaintances. The findings

of this study suggested that four common characteristics could be identified: personal contacts, passive methods, direct contacts with employers, and methods endemic to the university context. Further research should aim at identifying method attributes that suggest potential clusters of job search methods. The possibilities are limitless if the methods of job search are detailed to a greater extent. For example, contacting friends and relatives could be further categorized into friends living in same geographical area and those living in another geographical area. Researchers need to consider the number of job search groups that would fully illustrate the various job searches conducted by different groups of job seekers. In this study, it was argued that the traditional groups were insufficient and a closer look at the factor structure of certain job search methods was warranted.

Effort applied to individual methods. Another important issue addressed in study was the differential effect of applying effort to different methods of job search, as proposed by Schwab et al. (1987). Wanberg et al. (2000) proposed a measure of networking intensity and demonstrated the usefulness of assessing the effort allocated to specific job search behaviours. The first objective of this study was to examine the potential factor structure underlying the methods used to identify dimensions of job search, such as Wanberg et al. (2000) networking dimension. Although the findings support some evidence for methods clustering, the operationalization of the dimensions proposed in this study needs to be further developed. The addition of items sampling a more complete range of behaviours involved would help to crystallize the construct of effort applied to the dimensions of interest.

Further studies should examine how the determinants of general job search intensity may help to understand intensity applied to individual methods. Past research has supported the application of Ajzen's (1985) theory of planned behaviours to job search models (e.g., Caplan, Vinokur, Price, & van Ryn, 1989; Caska, 1998; Vinokur & Caplan, 1987). The theory suggested that motivation to engage in job search behaviours is a function of one's belief that successful performance of behaviours will lead to desired outcomes, and that those outcomes are valued. Caska (1998) demonstrated that perceived behavioural control and cognitive appraisals would influence intentions to engage in job seeking activities, which in turn would influence the actual level of engagement in those activities. Applied to the proposed measurement of individual job search intensities, further research should explore the "specific beliefs that engaging in a particular method is expected to lead to desired outcomes", as potential determinants of intensity applied to individual methods. In addition, it is advised that future research considers the links between personality traits and job search intentions. Although personality traits are expected to influence individuals' tendencies to engage in certain behaviours, other known variables (e.g. financial need, employment commitment) may confound the relationships between personality and search behaviours. Personality may prove to be a better predictor of intentions rather than actual behaviours.

Practical Implications

One of the main reasons why this study was conducted was to examine the determinants of employment quality for university students working in part-time jobs. Although data suggested that a large number of university students work in part-time jobs, it does not provide information about the quality of that employment. Reasons for

seeking high quality jobs have been proposed in previous studies. The present study offers some insights for students seeking high quality part-time jobs.

Direct applications are generally considered the most popular method of job search among job seekers (Grenon, 1998). In comparison to older job seekers, young people (aged 15 to 24) tend to rely on direct applications the most. In addition, applying directly to employers has been found to be the most successful job finding method in several studies (Mangum, 1982). While direct contacts with employers may be effective in finding a job fast, it may do so at the expense of employment quality. This study provides the strongest evidence that relying on direct applications is associated with lower levels of job satisfaction. One plausible explanation is that job seekers who spend less time on gathering information about jobs and employers may jeopardize their decision-making ability upon receiving a job offer. They may accept a job offer on the basis of the information available and hoping it will lead to satisfaction with the job. Similarly, the partial findings suggesting a link between reliance on university-related methods and job satisfaction indicate that certain methods may be targeted toward certain groups of job seekers, i.e. university students. Student job seekers who rely on university-related methods may be more likely to tap into jobs that offer a better match with their qualifications.

There is no doubt that high quality jobs are important for students working part-time while attending university, however it is important to clearly define what is meant by quality of employment. Job search studies have only recently begun to explore the pre-employment determinants of job quality (e.g., Wanberg et al., 2000). Further improvement in this area includes the refining of the success criteria and what is

considered “quality”. For example, research on youth underemployment has demonstrated that objective and subjective criteria must be considered to fully assess the construct of lower quality employment (Feldman & Turnley, 1995). Moreover, it is important to evaluate the success criteria as seen by university students. Satisfying jobs may not necessarily be what students are looking for. The characteristics of employment sought may influence how one searches for a job. Students who value pay may use a different approach to find high paying jobs than students who prefer jobs that offer many learning opportunities. In addition, further research should examine the recruitment sources used by employers to find applicants for the positions typically filled by university students. It would help to understand the popular employment channels used by employers and allow students to use these more effectively.

Conclusion

This study combined various segments of the literature on job search, recruitment, part-time employment, job quality, and personality into a coherent framework to better understand the process by which individuals search for work. The results indicate that student job seekers are involved in multiple job searches and that how they go about looking for work may influence the quality of jobs obtained. In favorable economic climates, who gets the jobs is not so much important as what kinds of jobs are obtained. Findings of this study shed some insight into the factors that determine the quality of jobs obtained.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhland & J. Beckman (Eds.), Action-control: From cognition to behavior (pp. 11-39). Heidelberg, Germany: Springer.
- Allen, R. E., & Keaveny, T. J. (1980). The relative effectiveness of alternative job sources. Journal of Vocational Behavior, 16, 18-32.
- Anderson, B. O. (1966). The academic load of the employed students. Journal of College Student Personnel, 7, 23-26.
- Anderson, K. (1981). Post-high school experiences and college attrition. Sociology of Education, 54, 1-15.
- Astin, A. (1993). What matters in college. San Francisco: Jossey-Bass.
- Barber, A. E., Daly, C. L., Giannantonio, C. M., & Phillips, J. M. (1994). Job search activities: An examination of changes over time. Personnel Psychology, 47, 739-765.
- Barber, A. E., & Wesson, M. J. (1999). A tale of two job markets: Organizational size and its effects on hiring practices and job search behavior. Personnel Psychology, 52(4), 841-867.
- Barling, J., Rogers, K.-A., & Kelloway, K. (1995). Some effects of teenagers' part-time employment: The quantity and quality of work make the difference. Journal of Organizational Behavior, 16, 143-154.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance. Personnel Psychology, 44, 1-26.

Beggs, J. J., & Hurlbert, J. S. (1997). The social context of men's and women's job search ties: Membership in voluntary organizations, social resources and job search outcomes. Sociological Perspectives, 40(4), 601-624.

Blau, D. M., & Robins, P. K. (1998). Job search outcomes for the employed and unemployed. The Journal of Political Economy, 98(3), 637-655.

Blau, G. (1993). Further exploring the relationship between job search and voluntary individual turnover. Personnel Psychology, 46, 313-330.

Blau, G. (1994). Testing a two-dimensional measure of job search behavior. Organizational Behavior and Human Decision Processes, 59, 288-312.

Bortnick, S. M., & Harrison Ports, M. (1992). Job search methods and results: Tracking the unemployed, 1991. Monthly Labor Review, 115(12), 29-35.

Brasher, E. E., & Chen, P. Y. (1999). Evaluation of success criteria in job search: A process perspective. Journal of Occupational and Organizational Psychology, 72, 57-70.

Bratina, T. G., & Bratina, T. A. (1998). Electronic career search. Journal of Employment Counseling, 35, 17-25.

Breaugh, J. A. (1981). Relationships between recruiting sources and employee performance, absenteeism, and work attitudes. Academy of Management Journal, 24(1), 142-147.

Bretz Jr., R. D., Boudreau, J. W., & Judge, T. A. (1994). Job search behavior of employed managers. Personnel Psychology, 47, 275-301.

Caldwell, D. F., & Burger, J. M. (1998). Personality characteristics of job applicants and success in screening interviews. Personnel Psychology, 51, 119-135.

Caldwell, D. F., & Spivey, W. A. (1983). The relationship between recruiting source and employee success: An analysis by race. Personnel Psychology, 36, 67-72.

Canabal, M. E. (1998). College student degree of participation in the labor force: Determinants and relationship to school performance. College Student Journal, 32(4), 597-605.

Caplan, R. D., Vinokur, A. D., Price, R. H., & van Ryn, M. (1989). Job seeking, reemployment, and mental health: A randomized field experiment in coping with job loss. Journal of Applied Psychology, 74, 759-769.

Casella, D. A., & Brougham, C. E. (1995). Work works: Student jobs open front doors to careers. Journal of Career Planning & Employment, 55(4), 24.

Caska, B. A. (1998). The search for employment: Motivation to engage in a coping behavior. Journal of Applied Social Psychology, 28(3), 206-224.

Costa, Jr., P. T., & McCrae, R. R. (1992). Manual for the Revised NEO Five-Factor Inventory (NEO-FFI). Odessa, FL: Psychological Assessment Resources.

Dayton, C. W. (1981). The young person's job search: Insights from a study. Journal of Counseling Psychology, 28(4), 321-333.

Dickinson, A., & Newbegin, B. (1960). Can work and college mix? Personnel and Guidance Journal, 38, 314-317.

Drentea, P. (1998). Consequences of women's formal and informal job search methods for employment in female-dominated jobs. Gender and Society, 12(3), 321-338.

Dyer, L. (1973). Job search success of middle-aged managers and engineers. Industrial and Labor Relations Review, 26, 969-979.

Ehrenberg, R., & Sherman, D. (1987). Employment while in college, academic achievement, and postcollege outcomes: A summary of results. Journal of Human Resources, 22, 1-23.

Ellis, R. A., & Taylor, M. S. (1983). Role of self-esteem within the job search process. Journal of Applied Psychology, 68(4), 632-640.

Feather, N. T., & O'Brien, G. E. (1986). A longitudinal analysis of the effects of different patterns of employment and unemployment on school-leavers. British Journal of Psychology, 77, 459-479.

Feldman, D. C. (1996). The nature, antecedents and consequences of underemployment. Journal of Management, 22(3), 385-407.

Feldman, D. C., & Turnley, W. H. (1995). Underemployment among recent business college graduates. Journal of Organizational Behavior, 16, 691-706.

Finch, M. D., Shanahan, M. J., Mortimer, J. T., & Ryu, S. (1991). Work experience and control orientation in adolescence. American Sociological Review, 56, 597-611.

Friedrich, J. R. (1987). Perceived control and decision making in a job hunting context. Basic and Applied Social Psychology, 8, 163-176.

Granovetter, M. S. (1974). Getting a job. Cambridge, MA: Harvard University Press.

Green, G. P., Tigges, L. M., & Diaz, D. (1999). Racial and ethnic differences in job-search strategies in Atlanta, Boston, and Los Angeles. Social Science Quarterly, 80(2), 263-278.

Greenberger, E., & Steinberg, L. D. (1986). When teenagers work: The psychological and social costs of adolescent employment. New York: Basic Books.

Greenberger, E., Steinberg, L. D., & Ruggiero, M. (1982). A job is a job is a job... or is it? Work and Occupations, 9, 79-96.

Grenon, L. (1998). Looking for work. Perspectives, 22-25.

Hammes, J. F., & Haller, E. J. (1983). Making ends meet: Some of the consequences of part-time work for college students. Journal of College Student Personnel, 24(6), 529-535.

Harrison Ports, M. (1993). Trends in job search methods, 1970-92. Monthly Labor Review, 116(10), 63-67.

Hay, J. E. (1969). How part-time work affects academic performance. Journal of College Placement, 29, 104.

Hay, J. E., Evans, K., & Lindsay, C. A. (1970). Student part-time job: Relevant or nonrelevant. Vocational Guidance Quarterly, 19, 113-118.

Healy, C. C., & Mourtou, D. C. (1987). The relationship of career exploration, college jobs, and grade point average. Journal of College Student Personnel, 28, 28-34.

Healy, C. C., O'Shea, D., & Crook, R. H. (1985). Relation of career attitudes to age and progress during college. Journal of Counseling Psychology, 32, 239-244.

Henry, J. B. (1967). Part-time employment and academic performance of freshmen. Journal of College Student Personnel, 8, 257-260.

Hood, A. B., Craig, A. F., & Ferguson, B. W. (1992). The impact of athletics, part-time employment, and other activities on academic achievement. Journal of College Student Development, 33, 447-453.

Horn, L. J., & Berkthold, J. (1998). Profile of undergraduates in U.S. postsecondary education institutions: 1995-96. (NCES 98-084). Washington, DC: U.S. Department of Education. National Center for Education Statistics.

Kane, S. T., Healy, C. C., & Henson, J. (1992). College students and their part-time jobs: Job congruency, satisfaction, and quality. Journal of Employment Counseling, 29, 138-144.

Kanfer, R., & Hulin, C. L. (1985). Individual differences in successful job searches following lay-off. Personnel Psychology, 38, 835-847.

Kopelman, R. E., Rovenpor, J. L., & Millsap, R. E. (1992). Rationale and construct validity evidence for the Job Search Behavior Index: Because intentions (and New Year's resolutions) often come to naught. Journal of Vocational Behavior, 40, 269-287.

Korman, A. K. (1976). Hypothesis of work behavior revisited and an extension. Academy of Management Review, 1, 50-63.

Kuhn, P., & Skuterud, M. (2000). Job search methods: Internet versus traditional. Monthly Labor Review, 123(10), 3-11.

Lewis, T., Stone III, J., Shipley, W., & Madzar, S. (1998). The transition from school to work: An examination of the literature. Youth and Society, 29(3), 259-292.

Linnehan, F., & Blau, G. (1998). Exploring the emotional side of job search behavior for younger workforce entrants. Journal of Employment Counseling, 35, 98-113.

Loughlin, C. A., & Barling, J. (1998). Teenagers' part-time employment and their work-related attitudes and aspirations. Journal of Organizational Behavior, 19, 197-207.

Ma, L., & Wooster, R. A. (1979). The effect of unemployment on the college student's academic performance. College Student Journal, 13, 12-20.

Ma, L.-C. (1984). Employment characteristics, course satisfaction and academic performance of college students. Psychological Reports, 54, 943-946.

Mangum, S. L. (1982). Job search: A review of the literature. Washington, DC: U.S. Department of Labor. Employment and Training Administration. Office of Research and Development.

Marquardt, R. (1998). High school may not be enough: An analysis of results from the School Leavers Follow-up Survey, 1995. (SP-105-05-98E). Ottawa, ON: Human Resources Development Canada.

Mortimer, J. T., & Finch, M. D. (1996). Adolescents, work, and family. Thousand Oaks, CA: Sage Publications.

Newman, K. S. (1988). Falling from grace. New York: Free Press.

Newsome, S (1998). A longitudinal examination of the reemployment process. Dissertation Abstracts International, 58(7-B), 3953.

Pascarella, E., Bohr, L., Nora, A., Desler, M., & Zusman, B. (1994). Impacts of on-campus and off-campus work on first year cognitive outcomes. Journal of College Student Development, 35, 364-370.

Pascarella, E., & Terenzini, P. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.

Rice, R. W., Phillips, S. M., & McFarlin, D. B. (1990). Multiple discrepancies and pay satisfaction. Journal of Applied Psychology, 75, 386-393.

Rynes, S. L. (1991). Recruitment, job choice and post-hire consequences: A call for new research directions. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of

Industrial and Organizational Psychology, 2nd ed (pp. 399-444). Palo Alto, CA:

Consulting Psychologists' Press.

Sagen, H. B., Dallam, J. W., & Lavery, J. R. (1999). Job search techniques as employment channels: Differential effects on the initial employment success of college graduates. The Career Development Quarterly, 48, 74-85.

Saks, A. M. (1994). A psychological process investigation for the effects of recruitment source and organization information on job survival. Journal of Organizational Behavior, 15, 225-244.

Saks, A. M., & Ashforth, B. E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. Personnel Psychology, 50(2), 395-426.

Saks, A. M., & Ashforth, B. E. (1999). Effects of individual differences and job search behaviors on the employment status of recent university graduates. Journal of Vocational Behavior, 54, 335-349.

Saks, A. M., & Ashforth, B. E. (2000). Change in job search behaviors and employment outcomes. Journal of Vocational Behavior, 56, 277-287.

Schmit, M. J., Amel, E. L., & Ryan, A. M. (1993). Self-reported assertive job-seeking behaviors of minimally educated job hunters. Personnel Psychology, 46, 105-124.

Schneider, L. R., & Stevens, N. D. (1971). Personality characteristics associated with job-seeking behavior patterns. Vocational Guidance Quarterly, 3, 194-200.

Schwab, D. P. (1982). Organizational recruiting and the decision to participate. In K. M. Rowland, & G. R. Ferris (Eds.), Personnel management. Boston: Allyn and Bacon.

Schwab, D. P., Rynes, S. L., & Aldag, R. J. (1987). Theories and research on job search and choice. Research in Personnel and Human Resources Management, 5, 129-166.

Shanahan, M. J., Finch, M. D., Mortimer, J. T., & Ryu, S. (1991). Adolescent work experience and depressive affect. Social Psychology Quarterly, 54, 299-317.

Silliker, S. A. (1993). The role of social contacts in the successful job search. Journal of Employment Counseling, 30, 25-33.

Singh, K. (1998). Part-time employment in high school and its effect on academic achievement. Journal of Educational Research, 91(3), 131-139.

Statistics Canada (1999, August 25). University tuition fees. The Daily. Retrieved April 17, 2001, from the World Wide Web:
<http://www.statcan.ca/Daily/English/990825/d990825a.htm>.

Steffy, B. D., Shaw, K. N., & Noe, A. W. (1989). Antecedents and consequences of job search behaviors. Journal of Vocational Behavior, 35, 254-269.

Stern, D., & Nakata, Y. (1991). Paid employment among college students: Trends, effects, and possible causes. Journal of Higher Education, 62(1), 25-43.

Stevens, N. D. (1973). Job-seeking behavior: A segment of vocational development. Journal of Vocational Behavior, 3, 209-219.

Straits, B. C. (1998). Occupational sex segregation: The role of personal ties. Journal of Vocational Behavior, 52, 191-207.

Stumpf, S. A., Austin, E. J., & Hartman, K. (1984). The impact of career exploration and interview readiness on interview performance and outcomes. Journal of Vocational Behavior, 24, 221-235.

Tabachnick, B. G., & Fidell, L. S. (1996). Using Multivariate Statistics (3rd ed.). New York: HarperCollins College Publishers.

Taris, T. W., Heesink, J. A. M., & Feij, J. A. (1994). The evaluation of unemployment and job-searching behavior: A longitudinal study. The Journal of Psychology, 129(3), 301-314.

Trueblood, D. L. (1957). Effects of unemployment on academic achievement. Personnel and Guidance Journal, 36, 112-115.

Vinokur, A., & Caplan, R. D. (1987). Attitudes and social support: Determinants of job-seeking behavior and well-being among the unemployed. Journal of Applied Social Psychology, 17(12), 1007-1024.

Vuori, J., & Vesalainen, J. (1999). Labour market interventions as predictors of re-employment, job seeking activity and psychological distress among the unemployed. Journal of Occupational and Organizational Psychology, 72, 523-538.

Wanberg, C. R. (1997). Antecedents and outcomes of coping behaviors among unemployed and reemployed individuals. Journal of Applied Psychology, 82(5), 731-744.

Wanberg, C. R., Kanfer, R., & Banas, J. T. (2000). Predictors and outcomes of networking intensity among unemployed job seekers. Journal of Applied Psychology, 85(4), 491-503.

Wanberg, C. R., Kanfer, R., & Rotundo, M. (1999). Unemployed individuals: Motives, job-search competencies, and job-search constraints as predictors of job seeking and reemployment. Journal of Applied Psychology, 84(6), 897-910.

Wanberg, C. R., Watt, J. D., & Rumsey, D. J. (1996). Individuals without jobs: An empirical study of job-seeking behavior and reemployment. Journal of Applied Psychology, 81(1), 76-87.

Wanous, J. P. (1980). Organizational entry: Recruitment, selection and socialization of new comers. Reading, MA: Addison-Wesley Publishing Co.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis, MN: University of Minnesota. Industrial Relations Center.

Wiener, K. K. K., Oei, T. P. S., & Creed, P. A. (1999). Predicting job seeking frequency and psychological well-being in the unemployed. Journal of Employment Counseling, 36, 67-81.

Williams, C. R., Labig Jr., C. E., & Stone, T. H. (1993). Recruitment sources and posthire outcomes for job applicants and new hires: A test of two hypotheses. Journal of Applied Psychology, 78(2), 163-172.

Appendix A

Methods of Job Search

Instructions
We would like you to think back about how you found your current job and answer the following question. Indicate the degree to which you relied on the following sources to find your present job. Use the following 5-point scale: 1 = Never; 2 = Slightly; 3 = Moderately; 4 = Strongly; 5 = Heavily.
Sources
<ol style="list-style-type: none"> 1. Reading newspapers or magazines 2. Contacting close friends 3. Contacting previous employers 4. Governmental employment agencies (e.g., HRDC Job Bank) 5. Contacting family members or relatives 6. Contacting professors 7. Other private employment agencies 8. Contacting other personal acquaintances 9. Contacting employers directly (in person, by email, or by phone) 10. On-campus job postings 11. Posting copies of your resume on the Internet 12. Contacting labor unions 13. Filling out job application forms at employers site 14. Contacting temporary placement agencies 15. Sending resumes to the employer (by mail, email, fax, or in person) 16. Contacting the university placement service 17. Internet job postings