Job Information Sources and Applicant Perceptions:

Antecedents, Correlates, and Outcomes

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Abstract

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The current research used three studies to examine recruitment source usage, job seeker perceptions of recruitment sources and the relationships between several recruitment sources' correlates. The relationship between recruitment sources, job information, expectations and outcome variables was also examined. Study One used archival data from a large employee and employer survey developed by Statistics Canada, the Workplace Environment Survey (WES) and looked at the change in recruitment source usage over time as well as several firm and individual differences predictors. Study Two utilized qualitative interviews to elicit job seeker perceptions of recruitment sources. Based on the first two studies, Study Three incorporated theoretical constructs such as recruitment source perceptions, expectations, job information gathered and received, self efficacy and affective commitment in order to extend and test the relationships between information and recruitment sources. Study One found a significant increase across time in the use of the internet as a recruitment source and a significant degree of stability in the usage levels of other sources. While individual differences in firms and job seekers were correlated with the types of recruitment sources used, the predictive power of these variables was weak. Study Two uncovered that recruitment sources fulfill multiple purposes; finding job openings, preparing for selection processes and determining perceived fit. A tendency to use multiple sources in job search was clear, contrary to the findings in Study One. Recruitment sources themselves were found to be perceived in ways which may be unintended by the recruiting organization. Study Three supported findings of non-neutral perceptions for various recruitment sources and indications that perceived informativeness did not necessarily follow the typical formal/informal divide proposed in past research. Study Three also found evidence that expectations, perceived fairness and affective commitment explained a significant amount of variance in turnover intensions and job satisfaction; however, recruitment sources themselves did not significantly contribute to the outcomes nor did job information. These findings suggest that further research on recruitment sources should focus on more proximal outcomes such as intention to apply, success in the selection process, quality of job applicants and ease of integration into the organization.

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This dissertation is dedicated to my Mom. She instilled two key values in me. These were: the importance of education, and the need for persistence. I grew up without realizing she would one day become the most courageous person I will likely ever know. Despite seemingly insurmountable obstacles in her life, she always kept her faith, refused to go quietly into that good night, and fought ovarian cancer head on until the very end. "Never give up" was her best and final life lesson. It has served me well.

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Chapter One

General Introduction

The manner in which recruitment is carried out can potentially broaden or restrict an organization's pool of candidates and subsequent selection options (Catano, Wiesner, Hackett & Methot, 2009). It is thus important for organizations to know what search techniques potential job candidates use to access employment opportunities. Companies should also know which recruitment sources are most effective in terms of attracting qualified employees. There are several reasons why this knowledge is essential to organizations, chief among these is cost. A substantial amount of money can be spent by an organization to recruit and select the right employees. Hiring just one individual can range on average from $4,500 to more than $15,000 U.S. (Davidson, 2001). Other less obvious costs include time to hire and train, as well as loss of corporate memory. Hiring the wrong employee could cost millions, yet good hiring is rarely assessed in practice (Grossman, 2006).

The high cost of recruiting is particularly evident with highly- skilled professionals or top managers, but even at lower or less highly-skilled levels recruiting the right people is essential. If the individual chosen at the outset is less than satisfactory, a tremendous amount of money may be spent repairing any damage to productivity or other losses to the company, as well as in terminating or re-training a poorly chosen

employee (Catano et al., 2009). In addition, from the job candidate's perspective, it is important to consider which job search techniques lead job seekers to successfully find employment. This knowledge is essential to help candidates make effective use of their time in the job search process. Recruitment is where the process begins and as such, an essential yet frequently-neglected aspect of human resource management. If the right applicants do not apply for a position, they cannot be assessed and selected into the organization (Catano, et al., 2009).

One challenge of recruitment research is in the definition of when recruitment begins and ends (Barber, 1998). Barber (1998) defined recruitment as "those practices and activities carried on by an organization with the primary purpose of identifying and attracting potential employees" (p.5). Other researchers (Breaugh, 1992; Rynes & Cable, 2003; Taylor & Gianantonio, 1993) have argued that recruitment and selection are inter-related and intertwined and recruitment persists well into selection. Breaugh (1992) has also argued that recruitment is any activity which affects the amount and type of applicants, and their acceptance of the job. These perspectives of recruitment while potentially more realistic, complicate and broaden the factors which could potentially affect recruitment processes. Further, this broad view of recruitment can lead to illogical or inappropriate conclusions regarding what constitutes recruitment and what does not (Barber, 1998). For instance Barber argued that under Breaugh's definition, the erroneous conclusion could be reached that an ineffective recruitment campaign was not recruitment since it did not affect outcomes. For the purposes of the current research,

Barber's definition of recruitment will provide a guiding principle although several other

factors will be included for consideration as recruitment results can be influenced by

issues outside recruitment itself (Barber, 1998).

According to Barber (1998), the "recruitment source" or "job information source"

used is the organization's first opportunity to make a "first impression" on potential

candidates and is as such a key aspect of recruitment. Although recruitment sources have

been studied fairly extensively, many questions remain unanswered (Barber, 1998;

Breaugh & Starke, 2000; Rynes, 1991). Questions regarding recruitment sources remain,

partially because of problems in defining what recruitment sources encompass; which

sources should be used?; how they should be classified? (Barber, 1998; Breaugh &

Starke, 2000; Rynes, 1991). Recruitment sources have been defined as any source leading

potential job seekers to find out about a job opportunity (Barber, 1998). Traditionally

these have included activities such newspaper advertising, career fairs, employee

referrals, and other sources which are sponsored and controlled by the organization.

Recently, some research has been conducted regarding the quality of sources and how

some sources of job information which are uncontrolled by the organization may impact

recruitment results (Van Hoye & Lievens, 2007; Van Hoye & Lievens, 2009).

As can be seen from the above discussion of the definition of recruitment in

general, recruitment is very broad and interconnected with other aspects of human

resource management. The main component of recruitment research which this research

will be addressing will be related to the gaps in the literature on "recruitment sources" or

"job information sources". Specifically, this research is centrally interested in how people

make contact to find their jobs, particularly the rates job information source usage and

how organizations find employees using recruitment sources. Within this, the focus will

be on recruitment source usage across industries and occupations and across a variety of

individual and firm characteristics. Therefore, several individual and firm differences in

recruitment source usage will be examined. As a secondary goal, some potential

outcomes related to recruitment source usage will be examined given that this has been a

common purpose in much of the prior body of recruitment source literature (see

Appendix A; Summary Table of Recruitment Source Outcome Studies, for a listing of

these studies). This specificity will best allow the research to address certain gaps

remaining in previous recruitment source research, in order to better advance knowledge

in this area. The reasons why this is necessary will become clearer in the remainder of

the introduction and throughout the literature review for Study One as the literature is

examined in greater detail.

Organizations need to know what types of recruitment sources lead to larger;

better pools of candidates. Conversely, applicants need to know what types of job

information sources will lead them to successfully finding a job. At its essence, the

purpose of the present research is to examine which job information sources are used by

applicants to find their jobs, why these sources of information are used, how the sources

used inform job applicants about the job in their view, and how applicants perceive

various information sources and make sense of these in the job search process. One of the

most fundamental questions regarding recruitment sources is basic usage rates.

Unfortunately, up until now usage rates of recruitment sources have been studied

piecemeal (Breaugh & Starke, 2000; Rynes, 1991). This has lead to little in the way of a

general level of knowledge about the incidence of recruitment source usage rates among

successfully employed individuals in a representative sample. The key general conclusion

from all of these studies has been that informal sources are generally found to have been

used more frequently (Breaugh & Starke 2000; Zottoli & Wanous, 2000). No analysis of

recruitment source usage rates over several years and across a variety of industries and

occupations has been conducted in a large sample previously. The lack of an analysis of

this type is a gap in the literature which provides an incomplete picture of overall

recruitment source usage. Knowledge of recruitment source usage in job searches is an

important practical contribution to the literature because which can be useful to

organizations and researchers alike. For instance, if research has found the use of the help

wanted ads as a recruitment source is associated with highly performing, low turnover,

highly satisfied employees, but very few employees have actually used it in the real

world to successfully find their job, this finding is of little clinical and practical

significance to practitioners and researchers except in the small population under study.

However, if this recruitment source is widely used, that finding may be of utmost

importance. In addition, knowing whether recruitment source usage is stable or whether it

changes and evolves over time and which sources are evolving is also of practical use to

recruiters, job seekers and researchers specializing in this area of recruitment.

Organizations want to know: "Which recruitment sources are more frequently used by job seekers?" and "Which sources lead to better coverage and generate a larger number of applicants?" These are important questions which have remained unanswered over the last 50 years of recruitment source research and which have substantial practical implications for practitioners and researchers alike. For instance, if a particular recruitment source such as on-campus recruitment is found to be related to lower turnover but is almost never used by job seekers, there may be no practical impact on employee turnover or other outcomes for organizations. Conversely, if certain sources — for instance, informal sources such as employee referrals —result in more efficient employees and these are frequently used by job seekers, this could have significant real-world applications (Zottoli & Wanous, 2000). Thus recruitment source usage rates have important theoretical and practical implications.

At this juncture, it should be noted that as a researcher, I deliberately decided to study employed individuals' job search behaviors because unemployment involves a number of detrimental effects and confounding elements (Paul & Moser, 2009; Van Hooft & Nordzij, 2009) which I wanted to exclude from the current study. For instance, meta-analytical results have shown that there are significant mental health impairments associated with unemployment including; anxiety, depression, stress and psychosomatic illness, which are moderated by demographic differences (Paul & Moser, 2009).

The research in Study One utilizes a large sample representative of employed individuals and of industries in Canada in order to assess recruitment source usage rates

among those who are successfully employed. As evidenced by Appendix A (Summary

Table of Recruitment Source Outcome Studies), this is the largest and most

representative sample study of this kind examining recruitment source usage rates

comprehensively and provides an important contribution to the field in terms of

understanding which sources are used.

For many years, researchers have found differences in job applicant and

organizational outcomes which have been attributed to the use of various types of job

information sources, also referred to as recruitment sources. The discrepancies found to

be associated with the use of various types of recruitment sources have included

differences in turnover, tenure, performance, absenteeism, job attitudes, perceived

accuracy of information, job satisfaction, organizational commitment, applicant quality,

met expectations, as well as intent to apply for and to accept a job to name a few (Allen,

Mahto & Otondo, 2007; Blau, 1990; Breaugh, 1981; Decker & Cornelius, 1979; Gannon,

1971; Hill, 1970; Kirnan, Farley & Geiseinger, 1989; Latham & Leddy, 1987; Moser,

2005; Quaglieri, 1982; Reid, 1972; Saks, 1994; Ullman, 1966; Weller, Holtom, Matiaske

& Mellewigt, 2009; Zottoli & Wannous, 2000).

Despite the fact that several researchers have found differences in outcomes

related to different recruitment sources used, due to the wide variety of differences, lack

of consistency of effects, and the discrepancies in differences found in different

populations, other researchers have questioned whether the differences found are true

differences and whether the type of recruitment source used to find a job is actually

associated with different outcome variables (Barber, 1998; Breaugh, 1992; Breaugh &

Starke, 2000). Those who have conducted meta-analyses of recruitment source outcomes

have in contrast concluded that there is a small but consistent recruitment source effect

(Conard & Ashworth, 1986; Wanous, 1992; Zottoli & Wanous, 2000). These studies

have concluded that informal sources (excluding walk-ins) are the most effective

recruitment sources overall (Zottoli & Wanous, 2000).

Common critiques of recruitment source studies are that many of them use small,

organization specific, industry specific, job specific samples and different assessments of

outcomes (Breaugh & Starke, 2000; Zottoli & Wanous, 2000). The summary Table of

recruitment source studies (Appendix A) illustrates the various samples sizes and

population characteristics examined. It also further supports previous assessments

regarding sample size and representativeness as well as the variety of outcome variables

examined. Given the various differences in outcomes which have been related to the job

information sources used by applicants and the various conflicting results which have

been found, a secondary purpose of my research is to determine whether correlations

between different types of recruitment sources used and associated outcomes would also

be found in some consistent way on a broader scale in a large representative sample with

multiple occupations and industries.

In the current research project, I conducted three complementary studies to examine the recruitment process in greater detail. As discussed, the first study empirically examined the frequency with which various recruitment sources were used by successfully employed respondents. This data set came from a large representative sample of workers in Canada, which was collected by Statistics Canada as part of the Workplace and Employee Survey (WES) in 1999, 2001, 2003, and 2005. This multi-year data is rich in that it is representative of the Canadian population. It also comprises data that links the responses of employees and employers. This allows the examination of a variety of variables —both organizational and individual— which may be related to the type of job source used to successfully find a job, as well as tracking changes over time.

Study One examines the question of the degree to which various recruitment sources are used. This research also provides information regarding the correlates of recruitment source use such as firm size and industry as well as a number of demographic variables. This research is exploratory in nature, because of contradictory findings in earlier research and the previous use of small unrepresentative samples. The design of Study One does not answer deeper questions such as how candidates perceive recruitment sources, why they use certain recruitment sources or how certain aspects of recruitment are perceived from the candidate's point of view.

Given the poor state of recruitment source research, prior to attempting to develop any new hypotheses related to recruitment source usage; it is important to find out what sources are used by job seekers and to what degree. Given researchers' inability to answer this question until now, this is an important initial step for Study One. Study Two thus plays an important role in determining the 'why' behind the different results in Study One. Asking why certain sources are used more frequently by candidates and how they are perceived by candidates may help to explain recruitment source usage. How applicants perceive different recruitment sources is not a question which has been considered in the past, with the exception of some studies which have examined perceptions of websites and recruiters (Allen, Mahto & Otondo, 2007; Anderson, 2003; Braddy, Meade, Micheal & Fleenor, 2009; Harris & Fink, 2003).

Breaugh and Starke (2000) argue that despite a large number of studies, a plethora of questions regarding recruitment remain and few definitive answers have been obtained. One reason for these results is the focus on small quantitative studies to the exclusion of qualitative examinations of the process as a whole, or larger more all encompassing examinations with multiple industries and occupations so that a more complete picture of recruitment can emerge. Searching for and finding a job is a complex process with a variety of factors which come to bear on the final outcomes. One of the problems with recruitment research thus far is the failure of many researchers to take these complexities into account and the desire to compartmentalize recruitment issues without taking a step back to consider the overall recruitment picture. Study Two uses a

qualitative approach to study the question of how job seekers view recruitment sources,

how recruitment sources are used by them, and why they are used in this manner.

Qualitative research as seldom been used in recruitment research (for exceptions see

Rynes, Bretz & Gerhart, 1991 and Stafsudd & Colin, 1999). Some surprising things were

uncovered during Study Two which point to a new direction in recruitment source

research, which had not been previously considered or demonstrated systematically.

Specifically, it was found that respondents utilize recruitment sources during their job

search to make inferences about the hiring organization while a variety of different uses

have been suggested by Horvath (2010) in his literature review; these have not been

examined empirically.

The results of Studies One and Two then formed the basis for the survey on

recruitment for Study Three. This study integrates and extends previous research

findings from Study One and Study Two and presents information which may shed light

on underlying explanations of recruitment source usage related to outcomes which was

not measurable in Study One. Conducting recruitment source research is challenging

because in addition to problems of definition, there are problems of sampling and

measurement (Barber, 1998; Breaugh, 2008; Zottoli & Wanous, 2000). For instance,

using a recruitment source or not using it is inherently dichotomous and those who have

developed ordinal recruitment source questions by assessing the extent of recruitment

source usage have found their data to be skewed either positively or negatively depending

on the sources respondents actually used (Horvath, Millard & Dickinson, 2010, under

review). The dichotomous nature of source usage data restricts the nature of analyses

which can be conducted. In addition, although there is a relatively small body of literature

directly pertaining to recruitment sources, the theories underlying recruitment sources'

effects on outcomes are poorly specified and diffuse in that they touch on several issues

of interest to Human Resources (Barber, 1998; Breaugh, 2008, Rynes, 1991; Zottoli &

Wanous, 2000).

Prior to describing the methodology used in each of these studies, I will discuss

relevant literature for each study and empirical findings in recruitment source usage as

well as recruitment in general, which inform my research and build on the previous study.

Two primary areas of study, recruitment source research and applicant reaction research,

have influenced the current project. Recruitment source research is of particular interest

to Study One, but is also essential to the two subsequent studies. Applicant reaction

research informs Study Two and Three to a greater extent. Study Two examines

applicants' perceptions of certain distinct components or portions of the recruitment

sources. Study Three provides an opportunity to test empirically some of the findings of

Study Two and to extend the research in Study One by including variables which underlie

the main ideas which have been used to explain the outcomes which have been related to

types of recruitment source usage such as organizational commitment, perceived fairness,

job satisfaction, perceived informativeness and job expectations. The research concludes

with directions for future research based on these new findings. The reader may find that

this dissertation answers some basic questions about recruitment sources usage and

relationships. However it is important to note that these questions have not been closely

examined in the past and without this basic foundation on recruitment sources such as

overall recruitment source usage rates and information gathering and how it relates to

outcomes more conceptual research could quite possibly be based on inappropriate

assumptions and foundations. For an illustration of the underlying structure of the

research and key variables please see Appendix B; "Simplified illustration of the

relationship between Recruitment Sources, Information, Job Expectancies and

Outcomes."

Chapter Two

Literature Review —Study One

A substantial body of research has developed in the area of recruitment sources (Breaugh & Starke, 2000; Horvath, 2010; Rynes, 1991; Rynes & Cable 2003; Ryan, Hovarth & Kriska, 2005; Zottoli & Wannous, 2000). Despite this, a number of questions remain as do substantial difficulties in analyzing and comparing the results of various studies (Barber, 1998; Breaugh & Starke, 2000). These difficulties are both qualitative and quantitative in nature (Barber, 1998; Rynes, 1991; Zottoli & Wanous, 2000). As indicated in the general introduction, quantitative and qualitative reviews of recruitment sources differ in their conclusions regarding whether informal recruitment sources predict more positive organizational outcomes (Breaugh, 2008; Zottoli & Wanous, 2000).

2.1 Formal and Informal Sources

Most of the recruitment source research has segmented recruitment sources into two broad categories, "informal sources" and "formal sources" (Barber, 1998; Rynes, 1991, Horvath, 2010). Informal sources are typically information received from word-of-mouth from family or friends, employee referrals, and walk-ins. Formal sources include newspaper ads and employment agencies (Ullman, 1966; Kirnan, Farley & Geisinger, 1989; Rynes, 1991). In contrast, Zottoli and Wanous (2000) segment source types into "inside sources" vs. "outside sources" categories. Inside sources are similar to "informal

sources" but exclude walk-ins from the analysis and include rehires. "Outside" sources would include formal sources but also informal sources not originating from within the organization. Different studies have categorized sources as formal vs. informal but examined slightly different groups of sources making comparisons difficult and inconsistent (Breaugh, 2008; Rynes, 1991, Zottoli & Wanous, 2000).

For the purposes of this research, in some cases sources were examined independently, and combined to compare formal vs. informal source usage in others. Although I use the more common "informal" and "formal" sources terminology, like Zottoli and Wanous (2000), I excluded walk-ins from the analysis in consideration of the reasoning which has been put forward to explain the relation between the use of certain types of recruitment sources and outcomes. I have done this in line with the ideas presented by Zottoli and Wanous (2000) regarding the underlying assumptions for the reasons source effects have been found, this will be explained further near the end of this chapter. Much of the recruitment source research compares formal and informal sources, and the underlying ideas used to explain effects are based on these two dichotomies of recruitment sources (Barber, 1998, Zottoli & Wanous, 2000). Therefore, given that this research has drawn conclusions which impact on other areas of recruitment, it is important in this study to design research along the same lines in an empirical fashion, in an attempt to reproduce and extend previous research in a large representative sample to determine if the earlier conclusions regarding recruitment sources hold.

2.2.1 Source Findings and Gaps in the Research

Obtaining large-scale studies of sources using a wide variety of types of sources

has proven difficult (Horvath, 2010; Zottoli & Wanous, 2000). Research on recruitment

source effectiveness has frequently lacked the advantage of large sampling procedures

(Zottoli & Wanous, 2000; Rynes & Cable, 2003). In addition, studies which would allow

the development of an overriding understanding of recruitment source usage by sampling

a variety of occupational groups and industries have been lacking (for an exception see

Vecchio, 1995 and more recently, Weller, Holtom, Matiske & Mellewigt, 2009). While

these gaps are no doubt due to the time and expense involved in conducting

comprehensive cross-occupational and national surveys, researchers do not have a

comprehensive notion of the actual use of various job sources by applicants that lead to

their employment (Breaugh, 2008; Rynes, 1991). Taylor (1994) argues that there are few

comprehensive empirical studies on recruitment source usage and effectiveness. More

recently, Breaugh and Starke (2000) have also argued that there is a dearth of recent

research on the frequency of use of recruitment sources. The lack of understanding of the

overall incidence rates may contribute to some difficulties in determining the

effectiveness of certain sources in recruitment, and to contradictory findings.

Although many recruitment source studies include some reporting on source

usage rates, these reports have usually been based on small samples. These studies have

also frequently been industry specific or occupation specific samples (Rynes, 1991;

Zottoli & Wannous 2000). These studies have resulted in inconclusive contradictory

findings (see Appendix A —Summary Table of Recruitment Source Outcome Studies to

further illustrate and support the main points above). As alluded to earlier, most of these

studies have, in addition to using small samples, studied single occupational groups that

are unrepresentative of the entire population in the labour market; this may be one reason

for the conflicting reports on source use and their related findings (Taylor, 1994;

Horvath, 2010; Zottoli & Wanous, 2000).

Despite its lack of availability, there is substantial interest in this information

from practitioners. In their examination of 49 U.S. companies, Crispin and Mehler (2008)

reported that in 2006, print ads were used as a recruitment source for 6.9% of external

hires up from 4.6% in 2005. According to Schwab, Rynes and Aldag (1987) most job

hunters use Informal recruitment sources as opposed to Formal recruitment sources.

Stevens (as cited in Schwab et al., 1987) found that 34% of the time, friends and

acquaintances were the primary source of information; direct application was the second

primary source at 32% and the third most important source of job information were

employment services. Schwab et al. (1987) cautioned, however, that this study was

conducted using blue-collar workers only and this sampling bias may have influenced

results. Other research using samples of managerial and professional employees

(Rosenfeld; as cited in Schwab et al., 1987[1]) found that approximately half of employees

in these types of occupations found their current employment using either friends and

acquaintances or direct applications. Research examining recruitment sources used by

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[1] The researcher was unable to obtain original sources due to the nature of the reports. However, since there is little research on recruitment sources using these groups, this secondary citation was included.

truck drivers in seeking and finding employment have also found a substantial use of

informal sources (Taylor, 1994). Kirnan et al. (1989) concluded that applicants referred

by current employees and those who applied directly performed better and were more

likely to receive a job offer than those recruited by employment agencies, newspaper ads

or school placement counselors. Breaugh, Greising, Taggart and Chen (2003) also found

that employee referrals and direct applicants were more likely to receive job offers than

those using other recruitment methods. Rafaeli, Hadomi and Simmonds (2005) examined

the yield ratio, ratio of hires to applicants for employee referrals as compared to

geographically focused newspaper ads and non-geographically focused ads. Rafaeli et al.

(2005) found that employee referrals were more likely to receive a job offer followed by

geographically focused ads.

Taylor's (1994) survey of 812 truck drivers found that 27.7% used employee

referrals, 22.4% used help-wanted ads, 20.4 % were recruited from driving school and

16.6 % were recruited from job fairs, billboard advertising and numbers posted on the

backs of trucks. Much of the research has shown this trend. However, the trend to use

informal sources seems to be more or less salient depending on the occupational group.

For instance, in their study of technical salespeople, Swaroff, Barclay and Bass (1985)

reported that approximately 26.1% of employees found their positions using informal

sources whereas approximately 73.9 % found their jobs using formal information

sources. Schwab et al. (1987) argue that most research on recruitment sources has shown

that informal sources are used most often by job hunters. In contrast, Williams, Labig and

Stone (1993) found approximately equal proportions of applicants and new recruits used each type of source in their population of nurses. Kirnan et al. (1989) found newspaper ads were the most frequently used recruitment source for all demographic groups of applicants to an insurance agent job. Thus, there may be occupation group differences in source usage but the details as to how these might differ are unclear and have not been examined in the past. Based on the rather limited data presented above, it could tentatively be hypothesized that more production oriented and technical occupations would use more informal sources than more administrative and professional positions given that reported rates of informal recruitment source usage appear to have been comparatively higher in those studies which examined more higher in more production and technical oriented jobs than in more administrative and professional and managerial positions.

Some recruitment source types have not been studied as extensively as others. For example, until recently few studies of recruiting sources have empirically examined the incidence of Internet recruiting from the perspective of the number of job hunters who successfully use the Internet to find a job. One Ipsos-Reid poll (2002) on this issue reported that 480 of 1000 individuals polled had conducted some job search activities on-line; 80 % of these individuals had looked on-line at job posting websites, 51 % had responded to an on-line job posting and 43% had signed up to receive job postings by email. Ipsos-Reid stated these results were accurate to within 3.1%, 19 times out of 20. Based on this information and numerous practitioner articles there is an anecdotal belief

that Internet recruitment is used extensively, other than the information above however,

there are few empirical studies to support this belief.

Overall there has been little empirical research representative of the population

of interest on the actual incidence of Internet sources usage as a job source. There has in

particular been little research on the use of Internet job boards (Breaugh, 2008; Van Hoye

& Lievens, 2007). A Human Resources consulting firm survey of recruitment sources for

49 large U.S. companies indicated that these organizations reported that 25.7% of their

hires were from job boards including company websites (Crispin & Mehler, 2008)

Despite the lack of empirical work on Internet usage as a job source, for the last ten years

practitioner publications have asserted that on-line recruiting is becoming increasingly

popular with employers, and can give organizations a competitive advantage (Zall, 2000;

Arthur, 2001). There have also been a plethora of popular advertisements which indicate

that Internet recruiting is the "best way to find a job" such as radio and television ads

presented by organizations such as Monster.com and Novascotiajobshop.com. Bingham,

Ilg, and Davidson (2002) argue that recruiting on-line is much faster and cheaper than

many other recruiting techniques and that recruiting on-line can also provide a good way

to pre-screen and pre-test candidates. They further argue that Internet recruiting is

currently quite popular in public organizations. The popular press has also argued that

the Internet is commonly used as a job source. Steel (2007) reported that in 2007, Career

Builder's site received 20.2 million visits, that Monster.Com received 16.3 million visits,

and that on-line recruitment advertising generated over $5.9 billion in revenue. Steel

(2007) further reported that larger generic sites like Monster and Career Builder were starting to lose market share to more targeted, specialized sites. Using the number and variety of job websites and the number of visits to job board websites to determine the use of the Internet as a recruitment source may not give a complete picture of actual usage of the Internet to find a job.

One prime example of the increase in Internet recruiting is the Federal Government of Canada. It conducts its external recruitment almost exclusively on-line and has on-line application blanks available on the Public Service Commission's website. According to Cullen (2001), on-line recruiting is also driving improvements and integration of other human resources functions such as electronic application processing, screening and assessment. In sum, if one pays attention to media advertising of career websites, the Internet is the best place to find jobs and employees, and has been for the last ten years or more. Capelli (2002) argues that one day Internet recruiting will be the only job hunting source. Most information thus far regarding internet recruitment has been anecdotal, with little research on usage rates in representative samples or the effectiveness of Internet postings in assisting matches between potential employees and employers. From the employer and recruiter side of source usage, Chapman and Webster (2003) conducted a web-based survey of human resources professionals regarding their use of technology in recruitment and selection. They found that most organizations currently use a mixture of traditional and electronic-based selection and recruitment methods and expect greater use of electronic methods in the future. For the most part,

when recruiting electronically, these organizations simply advertised on their own

websites (Chapman & Webster, 2003). Ioannides and Datcher-Loury (2004) asserted that:

"Research on the impact of the information technology revolution on the job market is

only just beginning" (p.1085). Further research in this area should prove fascinating,

based on practitioner reports and the rather limited previous research; I would expect a

substantial and increasing use of the Internet as a recruitment source among recent hires,

similar and equivalent to the use of newspaper ads, given the written formal nature of the

Internet ad and the increasing popularity of this medium. I would also expect an increase

in Internet ad use as a job source over time, as younger more technologically savvy

individuals who have always been exposed to computers and the Internet enter the job

market. If one takes a generational view to computer and internet usage, it is likely that

those hired recently and those who are more computer literate and experienced will be

more likely to use the Internet to find their jobs. Veenhof, Clermont and Sciadas (2005)

demonstrated a number of correlates between younger Canadians and higher levels of

computer use and it is anticipated this would extend to job search as well.

A recent dissertation examined the utility of Internet source usage compared to

other recruitment sources. Marr (2007) found that the quality of applicants generated by

Internet recruitment was similar to or lower than that of other recruitment sources. Marr

(2007) concluded that the Internet was not the most effective recruitment source in that it

did not lead to the highest quality applicants. McManus & Ferguson (2003) found that

Internet recruits were higher on certain aspects of candidate quality and personality

measures than personal or impersonal recruitments, such as persistence, achievement

drive, initiative and persuasion. Hausdorf & Duncan, (2004) also found correlations

between firm size and Internet usage for organizations. With some exceptions (Marr,

2007; McManus & Ferguson, 2003) research on the Internet as a recruitment source has

mostly focused on applicant reactions to company websites and on-line applicants, rather

than usage or usage outcomes (Allen, Mahto & Otondo, 2007). This will be discussed in

the literature review for Study Two when applicant reactions are discussed.

Another rarely-studied recruitment source is on-campus visits by companies.

Rynes and Boudreau (1986) argued that on-campus recruiting is used to hire a substantial

number of entry-level managers and professionals. Rynes and Boudreau (1986) sampled

Fortune 1000 companies and found that most campus recruiters for these companies have

minimal, if any, training and mostly use generic company brochures in recruiting

activities. The authors also found almost all companies, 95.5%, reported that they were

successful in filling vacancies set aside for college recruits. Unfortunately, the study fails

to specify the average number of vacancies per company or the ratio of schools visited

per successfully recruited candidate. In conclusion, Rynes and Boudreau (1986) argued

that, in general, these organizations do not seem to regard college recruiting as an

important organizational process.

Most of the research on recruitment sources was conducted nearly 10 years ago

and in many cases 20 to 30 years ago. The research was also mainly conducted using

fairly small, non-representative samples and is typically occupation group and industry

specific. In addition, I have not found any studies which compared various types of

occupations or industries and their use of various recruitment sources.

Objective 1: One of the primary purposes of Study One is to use a large representative sample in order to determine the incidence of recruitment source usage across a wide variety of industries.

2.2 Types of Recruitment Sources: Correlates, Antecedents and Outcomes

Numerous studies have included correlates, antecedents and outcomes of the use

of formal vs. informal or internal vs. external sources. The results and information

garnered is unfortunately confusing and difficult to tease out. The main antecedents and

correlates examined are demographic differences in recruitment source usage.

Demographics have often been included as correlates in studies. Few studies in the

literature on recruitment sources have looked closely at demographics for source usage,

possibly because of the frequent use of single industry, single occupation small sample

studies with few interpretable demographic differences (This was demonstrated in

Appendix A, Summary Table of Recruitment Source Outcome Studies, as referred to

previously). Studies which have looked at demographic differences in source use have

yielded contradictory findings and are most likely to be found in labour economics

research with much of it over 20 years old (Ioannides & Datcher Loury, 2004). As a

result, these studies do not include many of the more recent job sources such as the use of

the Internet. Further, it is difficult to develop specific hypotheses on source usage as a result of the state of the literature in this area which did not specify many key aspects one would typically expect from explanatory theories.

Ports (1993) found higher use of friends and relatives to find jobs among job seekers over 45 years of age. Other researchers (Marsden & Campbell, 1990) have reported less use of informal sources with age and work experience. In her United States specific research, Ports (1993) also generally found only small differences in informal source usage between non visible minorities and African Americans (23.9% vs. 21.5%) compared with the use of informal sources by Hispanics (32.8 %) in data from 1970 to 1992. In 1991 data on unemployed U.S. job seekers, Bortnick & Ports (1992) reported findings indicating that successfully re-employed non visible minorities were more likely to use friends and family as a job source (24.2 %) than African Americans (15.3%) but rates for other visible minorities were only slightly lower than rates for other non-visible minorities (23.1%). In contrast, Holzer (1987) only found a 2% higher use of informal sources by young white job seekers than young African American job seekers. In their research examining applicants for life insurance agent positions, Kirnan et al. (1989) found that men, non-minorities (57.6% and 52.9% respectively) and applicants over 40 years of age (52.1%) were more likely to use informal sources than women (46.4%); Hispanics (51.8%); African Americans (39.2%); and younger applicants (51.2%). These differences were significant for women and African Americans who used significantly less informal sources. For each group examined, newspaper ads were the most frequently

used source in the life insurance sample (Kirnan et al., 1989). Bortnick and Ports (1992)

also found higher use of informal source family and friends among employed men than

women (23.7% vs. 20.8%) the rates for use of newspaper ads were also slightly higher for

employed men than women (23.4% vs. 21.3%). In their research Bortnick and Ports

(1992) found that the most commonly-reported job search method was directly contacting

the employer. In addition, they found that unemployed individuals were most likely to

find a job if they contacted an employer directly and if they answered an ad for a job

opening (Bortnick & Ports, 1992). Vecchio (1995) indicated that more males tended to

report using referrals from relatives whereas females reported using walk-ins and

advertising more. In addition, he indicated that visible minority hires occurred more

frequently through recruiters compared to agencies and walk-ins. The most recent

reviews of literature on recruitment concluded that white men have easier access to

informal sources such has referrals (Dineen & Soltis, 2010; Rynes & Cable, 2003).

Based on this, it could be tentatively expected that non-designated group members and

men would be more likely to use informal sources than visible minorities and women.

Research has typically only looked at individual differences in applicants who

respond to recruiting efforts. One of the aims of Study One is to examine whether these

firm factors were also related to recruiting sources, in order to extend the original work of

Barber et al. (1999) that implied there may be a connection between the characteristics of

the firm and recruiting techniques used. According to Barber et al. (1999), there may also

be a connection between the characteristics of the applicants who are interested in

different types of firms and the type of position they are seeking, to the extent that the connection is related to the applicants' job search techniques. Many practitioner texts and magazines also assert that different sources target different types of applicants and different types of occupational groups (Arthur, 2001). Theorists have also hypothesized that different recruiting methods best reach different types of candidates (Taylor & Schmidt, 1983). Hausdorf and Duncan (2004) for instance, found that Internet recruitment was less likely to be used for higher managerial-level occupations.

Those who have conducted research on demographic differences have found equivocal results regarding whether demographic differences are correlated with the use of certain recruiting sources. Breaugh (1981) and Swaroff, et al. (1985) among others, have empirically examined whether demographic variables and personal characteristics of employees are related to the type of source from which they were recruited. Breaugh (1981) found no significant differences in demographics. However, Breaugh (1981) found significant differences in outcome variables such as absenteeism, attitudes toward work, and performance in a recruitment sample of research scientists. In this study, Breaugh (1981) found that newspapers and college placement offices were less effective recruitment sources than networking or journal and convention advertising. These results may have been affected by the occupational population examined. It may be the case that when recruiting research scientists, networking, journal and conventional advertising are the best methods to get maximum coverage of the target market of high performing

research scientists. This may be simply because participation in these activities is a good indicator of on the job behaviour.

In contrast to Breaugh's (1981) research, Swaroff et al. (1985) in their study of the recruitment of technical sales employees, found no correlation between recruitment source and turnover or performance, but they did find relationships between demographic variables by source. One reason for these divergent findings may be differences in the degree of participant diversity in the two occupational groups. There may be more diversity for instance in demographic variables among retail workers than research scientists. Outcomes of recruitment source seem to be studied more often and in greater depth than antecedents, even among those examining antecedents. Outcomes are often also included and frequently given prominence, as can be from the research presented in Appendix A. Of those empirical studies which have looked at recruitment source outcomes, the most common outcome variables are retention measures such as tenure and turnover. Other commonly-assessed outcome measures are performance, absenteeism and work attitudes (Wanous & Collela, 1989; Rynes, 1991).

Looking at individual differences in candidates, there has been little or no empirical research regarding the use of recruitment sources and designated groups. Some researchers have expressed concern that heavy usage of friends and family referrals may lead to a homogeneous organization and may limit the possibility of employment equity hiring (Barber, 1998; Barber et al. 1999). In light of the requirement in many

organizations to comply with employee equity legislation, it is important to determine whether certain types of sources may lead to the hiring of a less diverse workforce. Avery and McKay (2006) have argued that despite practitioner efforts to increase employee diversity and findings indicating different factors related to job attractiveness for more diverse populations, few empirical approaches to recruiting these individuals have been developed. Based on previous research (Barber 1998), I propose that more informal recruitment sources will be related to recruiting less diverse candidates. One key finding in examining what attracts diverse candidates is the necessity that an organization demonstrate that it values diversity and fairness (Highhouse, Stierwalt, Bachiochi, Elder & Fisher, 1999; Mor Barak, Cherin, & Berkman, 1998).

As discussed earlier, one key objective of Study One is to rectify the omissions and to bring clarity and order by uncovering more comprehensive and recent rates of job source use, as well as some correlates of choice of job source using a large representative sample. Establishing base rates of job source use will constitute the first step to developing a better understanding of employee recruitment related to the use of various sources. This step will help researchers in recruitment make better sense of antecedents and outcomes correlated with the use of certain recruitment sources and attempt to determine why certain sources may be used more frequently in certain cases. Recruitment sources have been examined from a number of perspectives. Correlates and outcomes of different sources have been examined in small specific samples or occupational groups from a variety of perspectives.   While individual differences in

candidates have been examined fairly closely as correlates, organizational differences have received little attention in recruitment source research overall.

Firm differences

Although Rynes and Cable (2003) have called for greater inclusion of firm characteristics in recruitment source research, I have found little to no research on firm differences as related to recruitment sources, with the exception of firm size. A wide variety of potential antecedents to the use of recruitment sources by firms could be examined: firm size, type of industry, firm reputation, type of job and the type of labour market. The economy than the levels of supply and demand in the labour market could potentially have an impact on the type of recruitment sources used by organizations and job seekers in the recruitment process. Rynes and Barber (1990) argued that the importance of recruitment would increase due to labour shortages in the year 2000. While these issues are recognized in practitioner and theoretical discussions (Rynes & Barber, 1990; Arthur, 2001; Thaler-Carter, 2001; Catano et al., 2001), little empirical work has examined organizational correlates of source use in a comprehensive way. Sommerville (1996) found different organizations yielded different results for different sources. For instance, when he examined three construction companies, although he found overall better results for referrals, he also found that one company recruiting based on professional trade journal ads had lower turnover and greater tenure overall.

Firm size is one antecedent of job source which has been studied empirically. Barber, Wesson, Roberson and Taylor (1999) argued that different recruitment practices

are a function of firm size. Specifically, Barber et al. found that larger firms are more likely to use formal sources and smaller firms are more likely to use informal sources. Barber et al. (1999) also found that potential candidates vary their search tactics depending on whether or not they are interested in employment in a small or a large firm. Therefore, firm size could be an important variable in determining which recruitment sources are used. More recently, Hausdorf and Duncan (2004) found that larger firms were more likely to advertise job openings on their corporate websites and use their websites for recruiting. The use of word-of-mouth and friends and family may also be important if management assumes this will help them recruit like-minded individuals. Larger companies may also have more funds at their disposal in order to use more expensive, targeted, and specialized recruiting techniques such as on-campus or job fair recruiting. The size of the firm is also related to the size of the human resources function within an organization. Size of the human resources department could also be related to the use of more formalized, expensive and time consuming techniques. If a person or a group of people is dedicated to this function full-time, they would, no doubt, have more time to allocate to recruitment and to formalize its processes. In fact, in one study, Cohen and Pfeffer (1986) found that the presence of a human resources department and an internal labour market is related to formal hiring. This result may extend more specifically to more formal recruitment source usage.

Whether or not a firm is unionized could also potentially relate to the use of various sources, unionized workers may demand more fair and transparent recruiting methods than non-unionized workers (Kirton & Green, 2006). For instance, one study by

Koch and Hundley (1997) found that unionism was related to the use of fewer

recruitment sources; this data also suggested that unionism increases the use of more

formal selection methods. None of the proposed individual differences in firms seems to

have been closely or systematically examined.

Many other potential antecedents to recruitment source use have not been

considered in much of the academic recruitment source research currently available.

Industry differences in recruitment practices may be of interest. However, much of the

research in recruitment sources has focused on a single industry or a single occupation

within an industry. For instance, nurses, truck drivers, retail employees and scientific

researchers are some examples of single occupations which have been studied and this

has lead to sometimes similar and sometimes quite divergent findings. These differences

in findings may indicate different recruitment practices across industries and occupations.

Given that the use of recruitment source starts at the level of the firm, where the

firm determines which type of recruitment source will be used, it is plausible that firm

characteristics would be related to the type of recruitment source from which applicants

can locate the job. As stated earlier there is some evidence that characteristics such as

firm size are associated with type of recruitment source used. Further, given that where

someone looks for a job has been found to be related to some demographic characteristics

of individuals, it would be highly likely that individual and firm characteristics would

both be related to the type of recruitment source used to find a job. In addition, the

combination of the two should be more highly associated with the type of recruitment

source used than either one individually.

Objective 2: Based on previous research, objective 2 is to find out what role individual and firm differences play in recruitment source usage. Specifically, what relationship exists between individual and firm differences and the Internet as a recruitment source?

Outcomes

Recruitment source research has focused on outcomes based on the underlying

assumption that different types of sources are superior to each other (Marr, 2007).

Specifically, informal sources are generally believed to be superior to formal sources

(Barber, 1998; Rynes, 1991; Zottoli & Wanous, 2000). Outcomes studied have included

attitudinal variables such as job satisfaction and commitment, performance, turnover,

tenure, turnover intentions, applicant quality, and absenteeism (Breaugh, 2008, Barber,

1998, Horvath, 2010; Rynes 1991; Zottoli & Wanous, 2000). For a summary of the

variety of outcomes studied and resulting findings see Appendix A, Summary of

Recruitment Source Outcome Studies). Despite the general assumption that informal

sources are superior, many of the findings of these studies on outcomes for sources have

also been contradictory depending on the way this has been assessed and the type of

sample used (Marr, 2007).

The earliest work on recruitment source outcomes concluded that informal

recruitment sources were superior (Ullman, 1966; Hill, 1970; Gannon, 1971; Reid, 1972).

In contrast other researchers, Allen and Keaveny (1980) Caldwell and Spivey (1983)

indicated that formal advertising led to better quality employees. Caldwell and Spivey (1983) conducted their research within retail sales and concluded newspaper ads were most effective. In contrast Breaugh (1981) found that performance was lower and absenteeism was higher among scientists hired through newspaper advertising. Decker and Cornelius (1979) also concluded that newspaper ads were, along with recruiting firms, the poorest source of potential candidates from a sample of bank, insurance and abstracting service companies. Allen and Keaveny (1980) conducted their research with a sample of engineers and business students and concluded campus placements and other formal sources were most effective in obtaining higher level jobs, salaries and positions more related to education. More recently, Saks (2006) found that use of informal sources was positively related to job offers and successful employment in his sample of business students. Swaroff, Barclay and Bass (1985) in turn found no performance-related differences for any recruiting source in their research examining performance and turnover in a sample of technical salespeople.   In his representative sample of different employed individuals in the United States, Vecchio (1995) found that when demographic variables such as age, sex, education, race and income were controlled for, recruitment source was not significantly correlated with turnover.

Wanous and Colella (1989) argued that referrals are regarded as one of the most effective recruiting sources and were associated with lower turnover in their sample of bank tellers. Conard and Ashworth (1986) and other researchers such as Zottoli and Wanous (2000) have in their meta-analyses concluded that informal sources are better

overall and associated with less turnover. Taylor (1994) found that employees who were recruited by referral of current employees remained with the organization longer than employees recruited using other sources. Unfortunately, Taylor (1994) did not find any significant effects for job performance or attitudes toward the employing organization. A number of studies have found that referrals from current employees are correlated with lower turnover and quit rates (Ullman, 1966; Gannon, 1971; Reid, 1972; Decker & Cornelius, 1979, Zottoli & Wanous, 2000). Recent research (Marr 2007; Van Hoye & Lievens, 2009) has continued to support this finding.

Latham and Leddy (1987), in their study examining car dealership employees, reported that candidates recruited by referrals were more likely to have high job satisfaction, high organizational commitment and high job involvement than those recruited using newspaper ads. Vecchio (1995) in contrast, concluded that recruitment source was not related to attitudes toward the job once demographics were controlled. Whereas Griffith et al. (1997) found that recruitment sources impacted on job satisfaction directly and indirectly. Empirical studies of source effectiveness which considered more variables have found more complex relationships between recruitment sources and organizational outcomes (Breaugh, 1981; Breaugh, 2008). For instance, Breaugh (1981) in his study of research scientists found that those recruited thorough college placements were rated lower on quality and dependability and that these recruits were less satisfied with their supervisors and less involved with their jobs. He also found that candidates recruited through the newspaper had higher absenteeism rates. In contrast, Caldwell and

Spivey (1983) found store clerks recruited using more formal sources were more likely to perform well on the job. Conversely, Breaugh and Mann (1984) in their study of social workers found no differences in turnover by source. They did find however that high performance was correlated with direct applications for employment. Breaugh and Mann (1984) found that walk-ins were better performers than those hired through other sources. Allen and Keaveny (1980) found that use of formal sources resulted in higher level jobs and salaries for engineering and business students. Pellizarri (2010) on the other hand found varying results for wages for informal versus formal sources. She attributed her equivocal results to the amount of labour market information available and efficiency of different labour markets.

Frequently the aim of recruitment source studies has been to find out whether one form of recruiting produces better quality employees than another. Employees who are better performers will work for the organization longer, be more satisfied, less absent. Moser (2005) indicated that one reason for contradictory or equivocal findings of recruitment sources may be due to the fact that many of the outcomes studied are not proximal to the hiring activity, for example; tenure, absenteeism, performance. Moser (2005) argued that more proximal job attitudinal outcomes, e.g., expectations, commitment and satisfaction, would be more strongly correlated with the types of sources used. Weller et al. (2009) found that more recent hires from informal recruitment sources exhibited lower turnover rates than hires with greater tenure. This finding indicates that when it makes sense to do so there may be value in examining more recent

hires for recruitment source effects as the effects may be stronger sooner after the

recruitment source has been used to find a job. They found the recruitment source effect

weakened particularly after two years with the effect size being equivocal after three and

one third years. This study is of particular interest because it is one of the few utilizing a

broader representative sample (a German socio-economic panel with 2706 employed

respondents from 1993 to 2001) and because this research is one of the few recruitment

source studies which considered the underlying theories of turnover.

Despite the large number of studies indicating recruitment source effects, some

researchers have proposed that due to the contradictory and conflicting findings there

may not in fact be a recruitment source effect (Barber, 1998; Breaugh & Starke 2000;

Breaugh, 2008; Rynes, 1991). Zottolli and Wanous (2000) have argued, however, that

these researchers have primarily reached this conclusion as a result of narrative reviews

not empirical studies. They argued that studies based on meta-analyses have in contrast

indicated a recruitment source effect for outcome variables such as turnover/withdrawal

and performance. Zottolli and Wanous (2000) found effect sizes of .18 for withdrawal

and .08 for performance in their meta-analysis examination using 21 studies, 25 effect

sizes and a sample size of 34, 871 for turnover, and they used 10 studies, 14 effect sizes

and a sample of 16,102 for performance. In addition the most recent research on

recruitment sources outcomes has continued to show source effects with informal sources

being deemed as most effective (McManus & Ferguson, 2003; Rafaeli et al. 2005, Saks,

2006, Weller et al. 2009).

2.3 Why would different recruitment sources used be related to outcomes?

Realistic Information

There are two main hypotheses related to the underlying reasons why researchers have found differences in the candidates based on source type: the realistic information and the individual differences hypotheses (Barber, 1998; Rynes, 1991; Zottoli & Wanous, 2000). Although these concepts are labeled theories and hypotheses, neither of these explanations nor any of the less popular explanations for the outcome effects are well defined. Many of the explanations for the results other researchers have found have been the result of after the fact postulating. Horvath (2010) indicated that Zottoli and Wanous (2000) have provided the best explanation of underlying explanations of recruitment source outcomes to date. Rynes (1991) also indicated that the main two explanations are not mutually exclusive; therefore both could be operating in tandem.

In Study One, only individual differences variables can be included; in contrast Study Three will allow the inclusion of realistic information variables which will allow a better examination of some of the mechanisms underlying the realistic information hypothesis. According to Marr (2007), the underlying concept of self-selection is closely linked to both of these two main theories. The realistic information hypothesis is that certain source types provide applicants with more accurate information about the job, thus better preparing them for the job (Reid, 1972). The realistic information hypothesis should not be confounded with Realistic Job Previews (RJPs) which will be discussed in

the Chapter Six, Literature Review for Study Three, as these are entirely different, if

related, concepts. Although the realistic information hypothesis indicates that certain

recruitment sources will provide better information about a job, and specifically that

informal sources are the ones which provide the most and best information, the

mechanisms through which this occurs have not been well defined in the literature

(Horvath, 2010). Furthermore, it is not always clear what "information" refers to, nor

how this information is more likely to be conveyed in informal sources. Ullman (1966)

also believed informal source provided more information to applicants and also that there

was a pre-screening effect for recruitment sources. Particularly in relation to referrals,

Ullman (1966) argued that referees would pre-screen referrals and would not refer

applicants whom they did not believe would do well in the organization, indicating that

prescreening could operate by allowing applicants to learn more about the information in

order to ensure organization and job fit. This idea of fit and self selection was also

present in Hill's (1970) explanations of how recruitment source would affect outcome

variables. Reid's (1972) realistic information hypothesis proposed similarly that

applicants would have more accurate information about the job as a result of using

informal sources. Because of this realistic information, their expectations would be

aligned with the realities of the job. As such, they would be more likely to be satisfied

with their job and less likely to quit. Various researchers have found support for the

realistic information hypothesis in recruitment source outcomes (Breaugh & Mann, 1984;

Griffeth et al., 1997; Moser, 2005; Quaglieri, 1982; Saks, 2006; Saks, 1994; Williams et

al, 1993). In Saks' (1994) examination of the differences between formal and informal

sources of recruitment, he found that those recruited through informal sources were more likely to stay with their employer longer and claimed that they had received more accurate information about the job prior to hire (Saks, 1994). Saks' (1994) results lend support to the realistic information hypothesis, that employee referrals provide more realistic information about the job, thus leading to longer tenure on the job and better understanding of the job. Several other researchers' results (e.g. Wanous, 1980; Breaugh & Mann, 1984) also support the realistic information hypothesis. Wanous (1980) hypothesized that information obtained through informal recruitment sources was likely to be perceived as more accurate than formal recruitment source information.

Given the premise of the realistic information hypothesis, it would be expected that realistic job previews (RJPs) would have been found to have a significant effect on applicant expectations and subsequently employee turnover results. Unfortunately, findings have been equivocal (Philips, 1998). Breaugh (2008) has argued, however, that these conclusions may be a result of improper application of the theory, failure to consider various types of realistic job previews and the small number of studies Philips included in the meta-analysis. Thus Philips (1998) concluded that further research is required.

In addition, recent research on recruiting sources has postulated and tested the hypothesis that met expectations mediate the relationship between recruiting sources and outcomes (Moser, 2005). Moser (2005) found that those who entered the organization through internal recruitment sources were less likely to have unmet expectations. Moser's

(2005) research demonstrated this mediation effect in the prediction of job satisfaction

and organizational commitment. Expectations have also been recommended for inclusion

in organizational justice research and in particular research on applicant reactions (Bell,

Ryan and Wiechmann, 2004). Bell et al. (2004) argued that expectations influence

individuals' attitudes, information processing, and behavior in organizational settings.

They further suggested that recruiting communications could be used to modify

applicants' justice expectations in selection processes. Buda and Charnov (2003) found

that positive and negative framing of realistic job previews and an effect on expectations.

Individuals who received negatively framed information had significantly lower

expectations; the relationship was stronger when the credibility of the source was high.

These issues will be explored further in the Study Three literature review.

Individual Differences

The individual differences hypothesis is based on the idea that different types of

sources will attract different groups of applicants which differ on a variety of traits

(Schwab, 1982). Unfortunately, Schwab's (1982) "theory" is extremely non-specific, it

does not specify which sources will be related to which traits or which individual

differences are important to consider or why they might have an impact (Breaugh, 2008;

Horvath, 2010). Much of the research in this area provided little theoretical rationale as

to how these individual differences and different recruitment sources would result in

different outcomes such as performance, turnover intentions, affective commitment, and

absenteeism rates or why differences would result in recruitment source effects (Zottoli &

Wanous, 2000).

Several researchers have found that differences in applicant quality, experience,

age, personality variables, education and job skills and numerous demographic variables

such as gender, marital status, socio-economic status (Barber, 1998; Blau, 1990; Breaugh

et al., 2003; Jattuso & Sinar, 2003; Kirnan et al. 1989; McManus & Ferguson, 2003;

Saks, 2006; Swarroff et al., 1985; Vecchio, 1995). While several researchers have tried

to compare these two hypotheses to determine which best explains the differences, it is

likely that they are not mutually exclusive (Rynes, 1991), and data which supports one

can also support the other (Zottoli & Wanous, 2000). Although individual differences in

source use have been found, there has been less support for individual differences

hypotheses than realistic information hypotheses, perhaps because it is so poorly

specified (Breaugh, 2008). Therefore anything could qualify as an individual differences,

for instance, some research has shown that individual differences such as height, weight,

age and gender, and preferred shift were related to having been rehired and to on the job

performance (Taylor & Schmidt, 1983). In addition Blau (1990) in his research on tenure

and performance in a sample of bank tellers, found more support for individual

differences and Vecchio (1995) found that once individual differences were controlled

there was no effect for recruitment source. Taylor and Schmidt (1983) hypothesized that

different sources tapped into different pools of candidates. Researchers finding outcomes

related to recruiting sources discussed previously, tended to, depending on their

inclinations, argue that the results were due to either hypothesis.

With regard to the individual differences and realistic information hypotheses,

there has been great interest in determining which hypothesis best explains the effects

which were found to be related to recruitment source. When Griffeth et al. (1997),

attempted to compare the two hypotheses as discussed earlier, they found support for

realistic information. Their sample was however relatively small (221 subjects), and

consisted of recently hired nurses. Although there have been numerous differences

related to recruitment sources, few studies have found corresponding differences in

applicant quality related to the individual differences or mediated by these. Furthermore,

some researchers have found no support for either hypothesis (Werbel & Landau, 1996).

Many of the measures used to assess these hypotheses have been imprecise; Rynes

(1991) argued that the hypotheses do not necessarily exclude one another. The debate

between these two hypotheses has not allowed for a clear distinction between them or

allowed for further development and clarity regarding their underlying mechanisms

(Rynes, 1991). One reason why it has been difficult to get a better picture of how these

recruitment source theories work is that the samples have often been limited in terms of

quantity and type of occupational groups, industries and organizations examined.

Additionally, studies have been limited by the number and type of recruitment sources

examined.

Other Potential Explanations

It should also be noted that there are a few other even less well-developed and less-studied hypotheses for recruitment source effects (Horvath, 2010; Zottoli & Wanous, 2000). These include hypotheses stating that some sources, particularly formal sources such as recruitment agencies and newspaper ads, may increase job seekers perception of ease of movement, thus relating to increased turnover. This 'ease of movement' theory was proposed by Decker and Cornelius (1979). It is possible to see how, when faced with numerous advertisements for positions; applicants might perceive there are numerous opportunities during a period of low unemployment. Unfortunately, there have been few indications on how this idea might be tested. Another idea to explain recruitment source effects has been proposed by Breaugh (1981) and Skolnik (1987). This idea proposes that those recruited from different sources might be treated differently once hired. For instance, there would be better socialization of those recruited using informal sources such as family and friends and in particular referrals because of the social ties present between the organization and new hires.

Another explanatory concept proposed to explain the effects of recruitment sources is the information heuristic. This theory is based on concepts related applicant attraction such as signaling theory, the Exposure-Attitude hypothesis and the Environment Processing Meta-theory (Ehrhart & Ziegert, 2005; Horvath, 2010). Essentially, this body of research hypothesizes that a greater amount of information about

something may result in a more positive attitude toward it, regardless of whether the information itself is positive or negative.

        While there has been a great deal of research on recruitment, much of the research is fragmented and very little of it seems to consider how most candidates conduct job searches and eventually find a job, or from the other perspective, how most organizations actually fill vacancies. Appendix C entitled "Summary of basic questions in recruitment" describes pictorially some of the major questions and linkages related to recruitment sources in the literature, thus far. In summary, this appendix depicts which issues have thus far been examined, either directly or indirectly, in relation to recruitment sources. These studies have examined: whether or not a vacancy is filled or a job found and how it is found; using which recruitment sources; and why various sources are used by firms and job applicants (either because the source provides more reliable and realistic information to applicants or because there are individual differences in applicants or firms at the outset). Finally, one of the main questions asked is: "Which type of source, formal or informal leads to the best employees?" This can be measured in terms of a number of variables including: performance, turnover intentions, tenure, qualifications and person organization fit. In addition to the often ignored and sparsely-studied firm differences, one chronically ignored question is the flip side of this question: which type of source leads to the best job for potential employees, in terms of person-organization fit, income, job satisfaction and opportunities for promotion?

As mentioned earlier, the individual differences hypothesis and the realistic

information hypothesis are not mutually exclusive (Rynes, 1991). Based on the research

examined in Study One and Study Two, Study Three postulates a third hypothesis, that

the individual difference and realistic information hypotheses need not be mutually

exclusive and that the two hypotheses complement each other and work together to

determine the recruiting process. In order to study this proposal in greater detail, baseline

data and incidence of recruiting source usage is helpful, as is a greater qualitative

understanding of the process of recruiting from both the organizational and individual

perspective.

Study Three will allow us to integrate the information gathered in Study One and

Two, in order to take a closer look at the use of recruitment sources and perceptions of

applicants and their effect on outcome variables. Therefore, the purpose of Study One is

to examine correlations between recruitment sources and outcomes in a large

representative sample of successfully hired individuals.

*Objective 3: The third objective of this study is to determine whether recruitment source
used correlates with organizational outcome results. Recruitment source usage literature
has identified a number different outcome results which may co-occur with different type
of source usage. The final hypothesis is related to the relationship of source type with
outcomes such as job satisfaction and job performance measures.*

Study One will also examine the incidence of recruitment source use overall and

the individual and organizational factors which are related to source use. This is an

important aspect of recruitment and a neglected area of study. One key area which has

been neglected in recruitment source research is the potential effect of occupation group

on recruitment source incidence.

Several different firm and employee characteristics are available in the data set

used in Study One. The data set includes information on the types of sources used and the

degree to which these sources are used. In addition, the data set allows the study of some

aspects related to the quality of applicants who were hired through the various

recruitment sources. Specifically, those related to outcomes. As such, given prior

research, it would be expected that those using informal sources would be more likely to

receive promotions, stay in the organization longer and experience job satisfaction.

Given the research discussed here, I anticipate a small or moderate effect for recruitment

sources beyond individual differences variables on the outcome variables and I anticipate

a stronger effect overall for job satisfaction for recent hires than for other variables.

2.4 Concluding Remarks

In summary, the literature has a number of gaps which make it difficult to draw

conclusions. Different types of sources have not been studied evenly and fully. For

instance, on-campus hiring, the Internet, and job fairs have not been studied fully. As can

be seen by the literature review, newspaper ads, referrals, and walk-ins are the most

frequently examined recruiting sources. The informal and formal categorization is not

always the same, making comparisons between study findings difficult (Zottoli &

Wanous, 2000). Many of the studies examined single occupations or single industries and

used small samples to draw conclusions (Zottoli & Wanous, 2000). Different samples

from different types of industries and occupations have yielded different results formal and informal sources as can be seen in Appendix A (Summary Table of Recruitment Source Outcome Studies). Many different types of outcomes have been studied and these too have yielded conflicting results, measurement scales and tools used to assess outcomes also vary from study to study (Marr, 2007; Zottoli & Wanous, 2000). As such, Study One can provide a broader-based examination of recruitment source usage across a large number of employed individuals in a wide variety of occupations and industries representative of the successfully employed Canadian public. This broader-based exploratory examination can determine whether there is a relationship between recruitment sources and certain outcome variables. Study One will not only look at the incidence of recruitment source usage but at relationship with outcomes such as job satisfaction, and performance proxies such as promotions and tenure. Unfortunately, this study cannot address all questions regarding recruiting source effects and the reasons underlying these. To see what the study will examine in comparison to the previous research and the ways in which the three research studies will contribute to answering questions regarding underlying theory, see Appendix B, Figure 1. Study One is more exploratory and examines organizational and individual characteristics, recruitment source and some outcomes. Study Two focuses on recruitment sources and asks individuals directly how they look for a job to get a more qualitative angle on the research. Study Three examines some of the same variables as Study One but with the addition of more relevant conceptual variables such as perceived fairness, information gathered and received and job expectations. Study Three should allow for a better

exploration of the effect of recruitment sources on other job attitudinal variables. This

could lead to a better understanding of the contradictory empirical outcome results which

have been found overall in the literature, particularly for job turnover intentions and

performance (Zottoli & Wanous, 2000).

Chapter Three —Study One

Study One will focus on determining whether individual differences in firms and applicants are related to the use of sources. In the case of organizations, the data set allows examination of use of recruitment sources by different industries, revenue, firm size, unionization, formalization of the human resources function, and number of employees hired per year. It also allows examination of individuals' characteristics, with respect to occupational group, education, age, designated group membership, and union membership. Further outcome variables such as job satisfaction, tenure and promotion can be assessed. While these subsidiary analyses are of interest, the main purpose of the study is the examination of the extent of the use of recruitment sources in a large representative population. This alone makes a substantial contribution to our understanding of the degree to which various sources are used and the factors which are related to their use.

3.1. Hypotheses

Given the number of hypotheses and the extensive literature review from which these were derived, I believe it is important at this point to summarize the hypotheses for ease of understanding. Thus, the previous discussion is now presented here in the form of specific hypotheses. Past literature showed a tendency for informal sources to be used most often (Breaugh, 2008; Schwab et al., 1987; Taylor, 1994).

H1: Informal job sources will be will be the primary source of job information used by successfully-hired employees in Canada's labour market across time (2001, 2003, and 2005 samples). Specifically, friends and family will be the single most frequently used source of job information. In 2005 family and friends will be the single most frequently-used recruitment source among those hired in the last year. The incidence of source usage for other recruitment sources will be examined in an exploratory fashion.

H2: There will be an increase in the use of the Internet as a recruitment source for successive cohorts of respondents in 2001, 2003 and 2005. This increase will be stronger for recent hires. Recent hires are defined as those hired in one year or less prior to the survey. Given higher use of the internet and computers as explained in the literature review, younger job seekers will be more likely to use the Internet as a recruitment source than older job seekers.

H3a: Individual differences will be correlated with type of source used. There are very few studies of individual differences and type of source used with specifics reported and some studies found no significant differences in demographics (Breaugh, 1981). As such, only a few tentative hypotheses can be offered for individual differences. Older individuals and those with more experience will use more informal sources as suggested by Ports (1993) and Bortnick and Ports (1992). Women and designated group members will be less likely to use informal sources than men and non employment equity group

members as proposed by other researchers (Bortnick & Ports, 1992; Kirnan et al. 1989; Vecchio, 1995). In addition to looking at differences in experience, gender, designated group membership, and source use, I will also examine whether there are differences between types of sources used and education. Because in the literature researchers have concluded that informal sources lead to better quality applicants, it is expected that more experienced and more educated applicants will be recruited using informal sources. Some variables will be examined in an exploratory fashion due to the lack of consensus of the effects of certain variables on recruitment source usage.

H3b: Differences in the firm (size, revenue, formalization of the Human resources department, type of industry, and occupation) will be associated with the type of job source used by successfully-hired employees. Specifically, employees will be more likely to have used formal sources when employed with a larger firm, compared to those who are employed at smaller firms. As well, formal sources are more likely to have been used when the employee is working at a firm that has a human resources department or has at least one person dedicated to human resources. Type of industry and revenue will be examined in an exploratory manner. I will also examine occupation group, as many practitioner texts have argued that managerial levels are less likely to use the Internet and would be more likely to use informal networking as stated in the literature review earlier. Certain firm variables will be examined in an exploratory fashion due to the lack of information for firm characteristics on recruitment source usage.

H3c: The combination of employee and firm characteristics will provide better

statistical predictions of formal or informal source use than either set of predictors alone.

H4: Firm and candidate characteristics along with type of source used

—specifically informal sources and formal recruitment sources— will be related

to whether employees are promoted, the number of promotions, as well as tenure.

H5: Individual characteristics (gender, education, designated group membership)

as well as use of informal sources will be related to job satisfaction for recent hires.

3.2 Method

3.2.1 Sample Description

The data used in this study come from two large Statistics Canada sponsored

surveys that are meant to be linked to each other. One survey is completed by employers;

the other, by employees. These surveys are referred to as the "Workplace and Employee

Survey" (WES). The WES data was gathered in 1999 and annually from 1999 to 2005,

allowing for analysis across time (see Appendix E: WES surveys). However, while the

same organizations were sampled for six consecutive years, the employee sample

changes every two years in order to avoid subject fatigue. Because my interest is in use of

recruitment source to find jobs, and employees who remained in the same organization

were less likely to have any major significant differences in use of recruitment sources,

only the odd-numbered years were examined. Therefore, Study One was based on data

collected in 1999, 2001 2003 and 2005. Unless there were substantial differences in the

data, the emphasis was placed on the more recent data from 2003 and 2005 sample years

to avoid duplication of lengthy statistical tables and results.

Statistics Canada (2004a) describes the population from which the sample was

drawn as "all business locations in Canada that have paid employees with the following

exceptions, a) Employers in Yukon, Northwest Territories and Nunavut, b) employers

operating in crop production and animal production; fishing, hunting and trapping;

private households; and public administration (Statistics Canada, 2004a, p.31)." The

workplace sample for the WES was taken from the Business Register (BR) which lists all

businesses in Canada and is updated monthly. Employee populations are defined as all

employees who work in one of the chosen workplaces and who receive Canada Revenue

Agency tax slips from their employer (Statistics Canada, 2004a). Therefore students, very

low- income employees and those who work illegally are not included in the sample.

The workplace samples are longitudinal and are selected using sophisticated

stratified sampling techniques from the BR list of organizations in Canada. The employee

sample was selected from within the workplaces and was followed for two years only.

The workplaces sample was stratified by industry (N=14), region (N=6) and size (N=3).

The Neyman allocation was used to select the sample, the generated 252 strata and 9,144

business locations (Statistics Canada, 2004a). Samples were also given a sampling

weight.

The employee samples from the odd years (1999 and 2001) and (2003 and 2005) data differ, but the workplaces are the same. The dual survey started with a sample of organizations that were surveyed and following that employees from each of the organizations were also surveyed using separate and different questionnaires that contain a variety of workplace-related questions pertaining to pay, benefits, training, labour relations, human resources practices, etc.

The data from the 2003 and 2005 samples used different workplaces and employees from the data sampled in the 1999 and 2001 surveys, which used the same organizations but different employees. Therefore 2003 & 2005 data is more easily comparable and 1999 and 2001 data is more directly comparable. However, all of the same sampling and methodological techniques were maintained across all years allowing a means of cross-validating the results from the earlier surveys.

The 1999 data gathered from the employee survey contains 24,983 employee responses and has an 83% response rate according to Statistics Canada reports (2004a). The 1999 survey collected data from 6,322 locations; the remainder of locations were out of business, holding companies, seasonally inactive or owner-operators with no payroll (Statistics Canada, 2004). Statistics Canada (2004a) states that the response rate for the employer survey was 94%.

The 2001 data were collected from 6223 workplaces and 20,377 employees for a 91% response rate for workplaces and an 88% response rate for employees. The employers were sampled across 14 different industries; forestry and mining, labour intensive manufacturing, primary product manufacturing, secondary product manufacturing, capital intensive manufacturing, construction, transportation, communications and utilities, retail trade, finance and insurance, real estate, business services, education, health care and cultural. The 2003 data came from the same industries according to the same sampling techniques. The 2003 data set had an employer response rate of 83.1% and an employee response rate of 82.7%. The complete data set from the 2003 survey contained 6565 workplace responses and 20834 employee responses. The complete dataset for 2005 included 6,693 employer respondents and 24,197 employee respondents; this resulted in a response rate of 77.7% for workplaces and 81.2% for employees (Statistics Canada, 2008).

The data for the workplaces were collected through in-person interviews. For almost 20% of the workplaces, more than one respondent was required to complete the questionnaire. For the employee survey, telephone interviews were initially conducted with participants who indicated their willingness to participate (Statistics Canada, 2001). In subsequent years, data were collected using an electronic survey. The employee sample was drawn from the employers' lists of employees, and a maximum of 12 employees per workplace were sampled using probability sampling techniques. If the workplace contained three employees or less all employees were sampled.

The WES was meant to be weighted under Statistics Canada regulations to extrapolate to the entire population of Canada. Due to non-disclosure and ethical constraints in dealing with the data, only the weighted data can be reported. In the cases of continuous variables, the continuous number was recoded into groups due to the large sample size in order to report descriptives and to maintain confidentiality. The same sampling and administration techniques were used throughout the 1999, 2001, 2003 and 2005 data sets.

The purpose of weighting is to correct known differences in the population sampled in a stratified sample to ensure accurate results (Gelman, 2007). In the past, there has been debate as to whether weighting should be used to analyze data and when weighting should be used (Lohr, 2007). In accessing Statistics Canada data this was not a choice, as the data cannot be published and would not be released to researchers without weighting. Desirable effects of weighting on the results are; a reduction in the Mean Squared error, an increase in internal consistency of estimation, values which are truer to the population, a better fit to the data, and more robust estimators of the population (Lohr, 2007). For instance if the population sample size is different for different types of groups, urban or rural, and these two groups have different population means, the estimate of the means could be wrong (Lorh, 2007). Weighting reduces the bias of different sample sizes of different types of groups if they did not have an equal chance of being sampled in the survey (Lohr, 2007).

For each of the analyses I report, in practice I conducted analyses of un-weighted data and weighted data as well weighted data with the application of bootstrapping weights in accordance with instructions from Statistics Canada statisticians based on my analyses. I found that the weighted data generally increased the estimation values for probabilities and effect sizes and bootstrapping brought sample estimates and estimation values to levels between the weighted and un-weighted analyses. Therefore, any results are usually a slight over-estimate of what they would have been had un-weighted data been reported. Furthermore, as stated earlier, Statistics Canada specifies that researchers may only release and communicate weighted results of analyses due to sampling methodology and non-disclosure rules for this data.

3.2.2 Measures

Data were gathered by asking respondents direct questions based on their knowledge of their job and organization as employees. In the case of the employer survey, employer representatives answered the survey based on their knowledge of the organization. Questions were either multiple choice or dichotomous, unless otherwise specified.

Type of recruitment source. Employees were asked to respond to the following question: "When you were first hired, how did you learn about the job opening? (Check all that apply) Help wanted ad, family or friend, union posting, Canada employment center/other government agency, on-campus recruitment, news story, job fair, recruitment

agency (head-hunter), personal initiative, directly recruited by employer, Internet, other

(specify)." Each of these was coded as a dichotomous variable (0, 1). Recruitment

sources categorized as "formal" in past research were combined in order to facilitate

analysis in a variable which will be referred to hereafter as "formal". In addition an

amalgamated recruitment source variable was created to represent the constructs of

formal and informal recruitment in the same variable specifically in the case of the

regression data, this variable was coded as friends and family (1), and formal recruitment

sources (2). This comparative variable is referred to as "recruitment source type".

Traditionally, formal recruitment sources have included impersonal type postings and

formalized methods. Similarly, in this study, formal recruiting methods included help

wanted ads, union postings, Canada employment centers, on-campus recruiting, job fairs,

head hunters, and Internet postings. Informal postings were simply family and friends as

a source of information. Some consideration was given to including personal initiative;

however this source was poorly defined and was therefore excluded from the informal

variable.

Employee characteristics. The characteristics measured included occupational

group, educational level, amount of work experience, gender, and age. Respondents also

indicated whether they were members of a visible minority, persons with disabilities or

aboriginal people. These last three categories along with gender form the basis of

Canadian employment equity legislation.

Occupational group. Individuals, based on their self-reported job title and duties, were classified into a Standard Occupational Classification system (SOC) with their jobs coded into one of the following categories: manager (1), professional (2), technical/trades (3), marketing/sales (4), clerical/administrative (5), production worker with no trade/certification (unskilled (6)). This measure was coded in subsequent assessments on the premise of an underlying order of prestige and hierarchy of organizational groups which provide it with an underlying ordinal structure (Boyd, 2008).

Education. Individuals reported whether they had graduated from high school. Individuals were also asked what other education they had received. Options included trade school, college, university, bachelors, masters and doctorate. These options were dummy coded and recoded to identify the individual's highest level of education more education was coded as a higher number whereas less than high school was coded at the lowest level (1).

Job satisfaction. Employees were asked one item on their satisfaction with their job: "Considering all aspects of this job how satisfied are you with the job? Would you say you are: Very satisfied, satisfied, dissatisfied, very dissatisfied?"

Tenure. One item asked participants on their length of employment: "When did you start working for this employer?" The question provided the possibility to answer in months and years and was continuous variables. The data were continuous or grouped depending on the analysis. For grouped analyses, the data were grouped as follows; less

than one year to one year, two to five years, six to ten years, 11 to 15 years, and 16 +

years.

Designated group membership. This variable was assessed by looking at a series

of questions regarding the respondent's ethnic and cultural background. The WES survey

asked: "Canadians come from a variety of ethnic cultural and racial backgrounds. From

which group did your parents or grandparents descend? A checklist was provided for

various groups from the following larger categories: Canadian, European, Middle

Eastern, Asian, African, Latin American, Native American. As well a question regarding

limitations due to physical, mental condition or other health problem was asked. Based

on these responses and questions regarding gender, recoding was used do determine

membership in a designated group as defined under the Canadian Charter of Rights. The

designated groups under the Charter are visible minority, person with a disability and

aboriginal. Women are usually also included however women were assessed using the

gender variable. This grouping was used in order to develop large enough groups, based

on meaningful work related data.

Gender. This variable was assessed by the asking respondents to check the

following: "Sex: male, female."

Employee *performance.* The WES survey does not contain direct measures of

employee performance nor does it contain supervisory ratings such as performance

appraisals, which are typically used to assess employee performance. Given this the,

results of the following questions were used individually as proxies to assess

performance: whether or not the employees reported being promoted as well as the

number of times they were promoted. Related questions such as whether performance

appraisals were conducted and whether performance appraisals were related to

promotions were also examined. There has been some support for the use of promotion

and numbers of promotions as a proxy for performance, Meyer (1987) argued in his

validation studies that performance over time measures such as promotions may be more

reliable measures of performance than supervisory ratings. Performance was assessed

using proxy measures associated with promotion based on the work of Meyer (1987).

Other demographic variables. Participants were asked to report their relationship

status (i.e. presence or not of life partner, 1=no 2=yes) and age.

Type of industry. Workplaces were divided into 14 different types of industries

using the 3-digit North American Industry Classification System (NAICS). See Appendix

D with NAICS classification.

Firm size. Organizational representatives reported how many employees worked

for their organization. Data were analyzed as a continuous variable or grouped depending

on the analysis. The data for firm size were grouped into seven categories in the

following manner: 0-10, 11-20, 21-50, 51-100, 101-200, 201-500, and finally, 500 or

more employees.

Total Revenue. Employer representatives reported the gross operating revenue obtained at the specific location of the organization that was being surveyed. Data were analyzed as a continuous variable or grouped depending on the type of analysis. The grouped data were classified into seven categories as follows; less than $250,000; $250,001 through $500,000; $500,001 to $1,000,000; $1,000,001 to $5,000,000; $5,000,001 to $10,000,000; $10,000,001 to $50,000,000; $50,000,001 to highest amounts reported.

Degree of formalization of the human resources department. The degree of formalization of the human resources section in the organization was gauged by the following question: "Which best describes the responsibility for human resources matters at this location?" The organizational representatives choices included five categories: "There is a separate human resources unit in this workplace employing more than one person; one-full time person is responsible for HR matters; HR matters comprise part of one person's job in this workplace such as the owner or manager; HR matters are the responsibility of a person or unit in another workplace; human resources matters are handled as they arise in this workplace (i.e. Are not assigned to one person in particular)." One confound of using this variable was related to organizational size.

Union membership. Organizational representatives reported how many employees were covered by collective bargaining agreements. The distribution of the

sample showed that it was acceptable to assume if any number were reported as covered by a collective agreement then the organization could be considered to be unionized and if none was listed the organization could be considered non-unionized.

3.2.3 Analyses

The data were analyzed using SPSS version 16.0. Prior to analysis, the data were cleaned in order to detect and rectify any coding errors and univariate or multivariate outliers. A number of coding errors were detected and rectified and missing values were eliminated. No univariate or multivariate outliers were detected. General statistical analyses were conducted to obtain descriptives, frequencies, crosstabs for major variables, and correlations. A series of logistic regressions were also conducted to predict which type of sources, formal or informal, might be used based on the characteristics of employees and firms. In addition, the analyses assessed whether employee characteristics or firm characteristics are better predictors of formal or informal source use. A logistic regression analysis was chosen based on the characteristics of the data and the desire to predict group membership (such as formal vs. informal) based on certain predictors. A small number of respondents reported using both formal and informal sources, due to the small number these were eliminated from the analyses. Logistic regression and discriminant analysis have similar goals of predicting group membership based on a set of predictors, however logistic regression is best used when the outcome group choice is dichotomous as was the case here. Although logistic regression can be a less powerful and less efficient statistical tool than discriminant analysis, the assumptions of logistic

regression are less rigorous (Tabachnick and Fidell, 2007). Some of the data are

dichotomous and categorical and not always normally distributed, with equal variances

and a linear distribution; therefore, logistic regression is a better analytical tool than

discriminant analysis. Logistic regression requires larger samples than discriminant

analysis, which are available in the WES data set. Other analyses conducted include

hierarchical regression to determine the relationship of firm and individual differences on

outcome variables such as job satisfaction, job performance measures, number of

promotions and tenure.

It should be noted that the data reported for individual and firm differences related

to recruitment sources included multiple comparisons. As a greater number of

comparisons are made it has been a concern of many researchers that there is an increase

in family-wise error, the simplest and most conservative response to this is utilizing the

Bonferroni correction; this may however significantly reduce the power of the tests and

increase type II error or finding no differences when there actually are differences

(Tabachnick & Fidell, 2007; Hayes, 1994). In this study due to the large data sample, in

many instances the p values reported in SPSS were $p=.000$. To further increase

conservativeness in this case and reduce the likelihood of type I error, these values were

assumed to be equal to $p=.0004$. As such, even though there were a large number of

comparisons made, the significance levels were quite often found to be $p<.05$ or less,

once the Bonferroni correction was applied. It is unusual to test so many different

variables but when there is little previous theory or literature on the direction of variables

or the literature is contradictory, broad testing is appropriate and necessary (Thompson,

2006).

3.3 Results

3.3.1 Sample Characteristics

Descriptive analyses of the data indicated that the gender distribution of the

sample was roughly equal across sample years (see Table 3.1). Approximately a quarter

of the population was unionized in 2001 and 1999 (1999: 26.3%; 2001: 28%). In 2003

and 2005, about a third reported being unionized (35.4%: 2003; 34.7%: 2005). These

differences may be a result of sampling the same organizations in the 1999, 2001 and a

different sampling of the population in 2003 and 2005. In each sample year, over 80% of

respondents reported being born in Canada (1999: 82.4%; 2001: 80.1%; 2003: 81.4%;

2005: 82.1%). This distribution was in line with the 2001 and 2006 Census data from

Statistics Canada (2001; 2006) which indicated that 80.9% in 2001 and 80.2% in 2006 of

the overall Canadian population was born in Canada. Table 3.1 also shows that in each

sample year over 50% of the sample reported having tenure of two years or less. At least

a quarter of the sample (1999: 23.3%; 2001: 30.6%; 2003: 27.9%; 2005; 28.3%) had been

working one year or less at their current location; there was significant difference

between the 1999 and 2001 groups in the amount of people who had been working

between one and two years at their current workplace, with more individuals having

worked between one and two years in the 2003 sample (see Table 3.1).

A substantial portion of the employer population responding to the survey (1999: 24%; 2001: 21%; 2003: 19.8%; 2005: 20.2%) did not answer the revenue question or did not have any revenue to report. As well, 20% (1999: 20.6%; 2001: 20.6%; 2003: 22.2%; 2005: 23.1%) of those that did report revenue, reported values between $1,000,001 through $5,000,000, the second largest group of response values ranged from $10,000,001 through 50,000,000 at 15.1% (1999), 13.8% (2001), 17.8% (2003) and 17.4% (2005).

Table 3.1

Gender and Tenure distribution by sample year

Characteristic	2001	2003	2005
Male	49.4%	46.9%	47.8%
Female	50.6%	53.1%	52.2%
Tenure of one year or less	30.6%	27.9%	28.3%
Tenure between 1 & 2 years	23.9%	25.0%	37.6%

Most employees in this sample were either satisfied (2001 55.8%; 2003: 56.9 %; 2005:57.2%) or very satisfied (2001: 34%; 2003: 33.7%; 2005:34%) with their jobs. They appeared however to be somewhat less satisfied with their pay with about a quarter of the sample (2001:23.5%; 2003: 22.8%; 2005: 26%) either dissatisfied or very dissatisfied compared to those who were very satisfied or satisfied (2001: 76.2%; 2003: 77%; 2005: 75.2%; 73.9%).

For the most part, the age distribution of the samples was similar across age groupings with the exception of the highest age group. Both the 2001 and 2005 samples showed a drop in the percentage of employees between the ages of 55 and 65 or more (see Table 3.2). Table 3.3 presents the occupational distribution of the employee samples across the years. At around 40%, the largest group of employees was from the technical trades groups and production workers were the smallest group of respondents. The distribution of occupation groups was fairly stable across all sample years.

Table 3.2

Percentage of Respondents by Age Group by sample year

Age Group	2001	2003	2005
15-24	11.8%	10.5%	14.2%
25-34	22.4%	22.3%	22.4%
35-44	31.5%	29.1%	28.5%
45-54	24.4 %	26.4%	25.1%
55-65+	9.9 %	11.7%	9.8%

Table 3.3

Distribution of Occupational Groups for respondents by sample year

Occupational Group	2001	2003	2005
Production workers	7.7%	6.8%	6.6%
Clerical/Administrative	13.7%	14.7%	14.8%
Sales/Marketing	8.5%	8.2%	8.0%
Technical/trades	41.4%	41.3%	40.8%
Professional	17.5%	16.1%	17.2%
Managerial	11.2 %	12.8%	12.6%

As can be seen in Table 3.4, the distribution of the three samples by industry across sample years was very stable. When all formal recruitment sources were combined, there were some differences in use of formal recruitment sources across industries and between years. Table 3.4 shows that the largest proportion of employee respondents were from the retail and consumer services industry (approximately 24%) and the second largest were from the education and health services industry (approximately 21%). The proportions of respondents by industry were stable across the three years examined and are according to statistics Canada, reflective of the proportions in the overall Canadian population.

Table 3.4

Distribution of Organizations by Industry Type for 2001-2005 Samples

Industry	2001	2003	2005
Natural resources Forestry , mining oil and gas extraction	1.6%	1.5%	1.7%
Labour intensive tertiary manufacturing	4.9%	5.0%	4.3%
Primary product manufacturing	3.7%	3.2%	3.0%
Secondary product manufacturing	3.5%	3.5%	3.2%
Capital intensive tertiary manufacturing	5.7%	5.0%	4.6%
Construction	4.1%	4.6%	4.8%
Transportation, warehousing, wholesale trade	9.3%	10.1%	9.8%
Communication and other utilities	2.0%	2.0%	2.1%
Retail trade and consumer services	24.5%	24.1%	24.3%
Finance and insurance	4.7%	4.7%	4.7%
Real estate, rental and leasing operations	1.7%	1.8%	1.9%
Business services	10.0%	10.3%	10.5%
Education and health services	21.2%	21.0%	21.8%
Information and cultural industries	3.0%	3.3%	3.2%

3.3.2 Hypotheses 1 and 2

Incidence of source use and Internet as a source for recent hires.

There are interesting values with regard to the overall percentage of the sample using various sources of information in order to obtain their current positions. For details on the incidence recruitment source usage for 1999, 2001, 2003 and 2005 see Tables 3.5 and 3.6. Incidence of recruitment source use across the years maintained fairly similar patterns. However, from 1999 to 2005 there were significant increases in rate of source use for two of the least used sources, news stories and the Internet. While the Internet remained a less frequently used recruitment source than family and friends, help wanted newspaper ads, its reported use increased five times from 0.2% in 1999 to 1.0% in 2001 and more than doubled to 2.2% in 2003 and increased to 3.5% by 2005. When overall recruitment source use was examined in those most recently hired, that is those hired in the last year as expected, the changes were even more striking. The Internet was still not the most highly used recruitment sources even among those hired recently (less than one year) and was not reported to be used nearly as often as touted by the Internet job posting websites and practitioner articles even in the more recent period of 2005. It is interesting to note that there may be a reciprocal relationship between help wanted ads and Internet ads, specifically, as the usage rates of the Internet increased that of help wanted ads decreased.

Between 1999 and 2001, the largest reported decrease in source use was in personal initiative, this could be likened to walk-ins. Usage of personal initiative returned

to the same level or higher in 2003 and 2005. The largest increase between 1999 and

2001 was in the use of family or friends as a source of job information; this too decreased

to approximately the same level in 2003 and 2005. There was also a large proportion of

individuals who reported using family and Friends as a recruiting source, therefore this

recruitment source was compared to formal recruiting methods through a cross tabular

analysis. In addition, a comparison of the Internet was conducted because it is a relatively

new recruitment source. While some respondents reported using more than one

recruitment source, the percentage overall was relatively small (between 2.9% and 5.4%),

although it had increased across the four sample years examined. Conversely, there were

a percentage of employees who reported not having used any the above recruitment

sources. Table 3.5 provides overall usage of all respondents to the question.

Table 3.5

Evolution of Recruitment Source Type Used by Sample Year

Type of Source	1999	2001	2003	2005	Bonferroni Corrected Kruskal-Wallis
Help wanted Ad	17.7%	16.1%	15.3%	14.6%	89.66, p<.05
Family or friend	37.7%	40.6%	39%	40.3%	45.68, p<.05
Union Posting	0.5%	0.5%	0.7%	0.7%	13.30, ns
Canada Employment center (HRDC)	3.0%	2.9%	2.6%	3.0%	10.64, ns
On-Campus recruitment	2.0%	2.4%	2.0%	2.5%	25.39, p<.05
News Story	0.2%	0.9%	1.4%	2.0%	333.88, p<.05
Job Fair	0.2%	0.4%	0.3%	0.4%	14.42, ns
Recruitment agency (Head-hunter)	2.2%	2.9%	3.2%	2.8%	43.56, p<.05
Personal initiative	21.6%	17.8%	20.3%	21.6%	122.78, p<.05
Directly recruited by the employer	10.7%	9.3%	11.3%	14.4%	272.02, p<.05
Internet	0.2%	1.0%	2.2%	3.5%	777.78, p<.05
All Formal recruitment	36.2%	35.1%	36.6%	39.0%	67.36, p<.05

Note: Bonferroni corrected results using Standard employee weight, Statistics Canada Workplace Environment Surveys (1999, 2001 and 2003, 2005).

A similar but stronger pattern of results emerged when only those employees

actually recruited within the last year were examined (see Table 3.6).

There was a corresponding decrease in the use of help wanted ads from 20.3% in 1999 to

14.6% and 14.5% respectively in 2003 and 2005 (Kruskal-Wallis χ^2 =110.35, p<.05). The

use of family and friends was nearly inversely proportional to the use of formal sources.

There was a marked increase in use of family and friends as a source in 2001 and 2005 as

compared to 1999 and 2003 (Kruskal-Wallis χ^2 =48.33, p<.05). The most substantial

change in recruitment sources used was in the use of the Internet for those recruited in the

period of one year or less prior to responding. Of those responding in 1999, only 0.6 %

reported using the Internet whereas in 2001 this increased to 2.5% and to 5.1% in 2003

and 7.2% in 2005 (Kruskal-Wallis χ^2 =470.06, p<.05). After help wanted ads, the Internet

was the most used formal source by 2003 compared to 1999 when it was one of the least

used sources overall. In the 2005 data, the reported use of news stories as a recruitment

source was also fairly high proportionally considering its' indirect nature (from .1% in

1999 to 1.6% in 2005, Kruskal-Wallis χ^2 =85.21, p<.05). The Bonferroni correction was

applied to all of the significance levels. It should be noted that in many cases original

significance levels were p =.000. Table 3.6 compares those hired within the year for each

of the sample years. Once the Bonferroni correction was applied to those recruited in the

last year, some of the changes in recruitment source usage were non-significant for

instance, union posting, on-campus-recruitment, and job fair recruitment source.

Surprisingly, some respondents reported using news stories as recruitment sources; this is

a recruitment source which has not been frequently examined and one over which

companies may have less control. The four largest variations across time in recruitment

source usage were in Internet as a recruitment source, help wanted ads, direct recruitment

by the employers. All of the source usages increased for these except help wanted ads,

but, the Internet had the most dramatic increase. For 2005, the Internet's usage rate was

half of the usage rate of help wanted ads and over five and a half times less than the

reported use of family and friends among those hired in the last year.

Table 3.6

Evolution of Recruitment Sources Used by Recent Hires (less than 1 year)

Recruitment Tools	1999	2001	2003	2005	Bonferroni Corrected Kruskal-Wallis
Help Wanted Ad	20.3%	16.6%	14.6%	14.5%	110.35, p<.05
Family or Friend	37.3%	42.6%	37.5%	39.5%	48.33, p<.05
Union Posting	0.5%	0.3%	0.7%	0.7%	15.53, ns.
Canada Employment Center	2.7%	2.3%	3.2%	4.0%	37.97, p<.05
On-campus Recruitment	2.4%	1.8%	2.0%	2.6%	13.39, ns.
News Story	0.1%	1.3%	1.1%	1.6%	85.21, p<.05
Job Fair	0.3%	0.6%	0.3%	0.4%	6.94, ns
Recruitment Agency(Headhunter)	3.0%	4.1%	3.7%	3.1%	16.99, p<.05
Personal initiative	21.2%	17.7%	22.9%	21.9%	52.35, p<.05
Directly Recruited by Employer	9.5%	7.9%	10.3%	13.5%	109.02, p<.05
Internet	0.6%	2.5%	5.1%	7.2%	470.06, p<.05

Results using Standard employee weight, Statistics Canada Workplace Environment Surveys (1999, 2001 and 2003)

3.3.3 Hypotheses 3a and 3b

Cross-tabs for individual and firm differences.

Numerous cross-tabular analyses were conducted related to employee characteristics and source usage, for instance, cross-tabular analyses of designated group membership, gender and age with source usage. There were significant differences for age, with respect to Internet use, with a trend indicating that younger workers were generally more likely to use the Internet than those 55 or older. This was particularly evident in the 2003 and 2005 data (2003; χ^2=301.85, p<.001, df=4: 2005; χ^2= 172.53, p<.001, df=4). However, despite the overall trend the percentage usage for those in the youngest age group was still much higher for informal sources (family and friends) then the internet to find their jobs. The youngest recent hires (15 to 24 years) did not use the Internet to find a job as frequently as anticipated, their usage rate was only half of that for the 25-34 age group (6.3% compared with 12.7%). The high use of informal sources among the 15-24 (46.1%) may be the result of lack of work experience resulting in greater reliance on networking.

It is important to remember that the Internet sample is a small sub-sample of recruitment source usage overall. There was a fairly small percentage overall of those using the Internet to find their job (1999; 0.2%: 2001; 1.0%: 2003; 2.2%: 2005; 3.5%). When only recent hires were examined, the reported rates of use of the Internet as a recruitment source were higher and increased over the cohort years but it remained relatively small compared to the informal source of family and friends (1999; 0.6%:

2001; 2.5% : 2003; 5.1%: 2005; 7.2%). Of the 7.2% in 2005, the largest proportion of this

group, 62.1%, were in the 25-34 age group, the second largest was the 35-44 age group at

20.8% and the third largest group reporting successfully finding a job using the Internet

was the 15 to 24 age group (8.7%). Comparing the various years 1999 to 2005, older age

groups reported using the Internet more in 2005 than they had in 1999 and usage overall

increased steadily (see Table 3.6). Significant differences in age were also found for the

use of formal and informal sources. The youngest respondents (15 to 24 year olds)

showed a tendency to use family and friends as a recruiting source most often and were

less likely to use formal recruitment sources. There were significant differences in age

and use of informal sources across all years, these differences were most pronounced in

the 2001 data (χ^2=284.99, p<.001, df=4) though all years exhibited this trend. As can be

seen in Tables 3.7 and 3.8, although younger job seekers showed a trend to use informal

sources, differences in usage of formal sources by age were also significant, with a trend

indicating older individuals most likely to use formal sources (over 55 years). In this

case, younger job seekers (15 to 24 years) hired in the last year were less likely to use

formal sources (see Table 3.8). For those hired in the last year (2005 data), there was a

trend for mid-career individuals to use help wanted ads more often; respondents between

the ages of 45 and 54 reported a higher use of help wanted ads (45-54; 20.6%) than

younger (11.1% under 24, 25-34; 10.6%) or older age groups (55 or more; 14.5%).

Usage of help wanted ads was lowest among those hired in the last year aged 25 to 34.

Family and friends (informal sources) was the highest single source overall for those

hired in the last year, although usage rates were similar when all formal recruitment

sources were combined.

Table 3.7

Proportion of Source Type Usage by Age Group and Sample Year

	Age Group	Formal	Inform al	Interne t	2003	2005	2001	2003	2005
15-24	22.9%	22.7%	32.0%	55.9%	51.6%	46.7%	1.1%	1.1%	4.5%
25-34	35.8%	35.9%	41.3%	41.2%	41.7%	42.7%	2.3%	4.7%	5.9%
35-44	37.2%	34.8%	40.2%	38.6%	43.2%	40.3%	0.7%	1.2%	4.6%
45-54	34.8%	33.9%	40.5%	36.9%	38.1%	38.6%	0.4%	0.4%	2.6%
55-65+	37.4%	33.6%	39.9%	36.7%	40.2%	35.9%	0.2%	0.5%	1.1%
% Total Use in Source	35.1%	33.2%	39.0%	40.6%	42.5%	40.3%	1%	2.2%	3.5%
χ^2 (df=4)**	181.83	143.32	99.27	284.99	123.40	118.10	112.86	301.85	172.53

Note: χ^2 (df = 4), all significant at **p<.01 unless otherwise indicated, all analyses were Bonferroni corrected.

Table 3.8 Proportion of Source Type Usage in 2005 by Age Group for those with tenure of less than one year

Age Group	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative
15-24	11.1%	6.3%	46.1%	34.1%	0.1%	3.5%	3.2%	0.8%	1.6%	1.4%	25.4%
25-34	10.6%	12.7%	39.3%	41.4%	0.9%	3.9%	3.1%	4.1%	1.1%	4.6%	20.3%
35-44	15.6%	9.1%	37.6%	45.7%	0.7%	3.5%	2.4%	7.2%	2.4%	4.9%	18.4%
45-54	20.6%	4.6%	33.6%	46.3%	1.2%	5.1%	2.4%	6.3%	1.5%	2.9%	23.6%
55-65+	14.9%	2.5%	35.4%	50.0%	2.0%	4.4%	0.9%	0%	0.5%	2.5%	17.2%
% Total Use in Source	14.5%	7.2%	39.5%	42.0%	0.7%	4.0%	2.6%	0.4%	1.6%	3.1%	21.9%
χ^2 (df=4)*	76.5*	90.57*	68.0*	92.74*	30.22*	7.31ns	12.23ns	13.60ns	14.5ns	45.74*	40.32*

Note: χ^2 (df=4), *all significant at p<.05 unless otherwise indicated, all analyses were Bonferroni corrected.

As discussed earlier in the literature review, several researchers have expressed concern that members of designated groups do not have the same access to informal recruitment sources (Barber, 1998; McKay & Avery, 2006). There was a large proportion of individuals who reported using family and Friends as a recruiting source, therefore this recruitment source was compared to formal recruiting methods for usage by designated group members. In addition, a comparison of the Internet was conducted because it is a relatively new recruitment source. As can be seen in Tables 3.9 and 3.10, there are no significant differences in the use of formal and informal sources by designated group once ae Bonferroni corection was applied to the significance levels with the acception of informal source usage in 2003. There were consistent differences in the usage of the Internet with a higher proportion per capita of usage of the Internet among those in designated groups. In Table 3.10, crosstabs of designated group membership and Internet use showed that a smaller number of designated group members used the Internet; these designated group members used the Internet at a slightly higher proportion. In 2001, 0.8% of non-designated group members reported using the Internet vs. 1.6% of designated group members reported using the Internet to find their job (χ^2 =18.95, df=1, p<.05). In 2003, 2.9% in the designated groups used the Internet as compared to 2% (χ^2 =16.71, df=1, p<.05) and in 2005, 4.7% of designated group members used this source compared to 3% (χ^2 =38.85, df=1, p<.05). Therefore it appears that there are generally no differences in use of formal and informal recruitment sources for designated groups but that designated group members reported a slightly higher use of the Internet as a recruitment source than non-designated group members overall.

In Table 3.10, the 2005 data for recruitment source usage of those hired less than one year ago showed a similar trend, where the comparison between formal and informal source usage showed no significant differences, but the usage of the Internet was about 2% higher for designated group members (8.8% vs. 6.5%). This rate was statistically significant even after the Bonferroni correction was applied for all of the source crosstabs analyses (χ^2 (df=1)11.99, p< .05).

There were also a few differences in source usage for designated group members versus non-designated group members for certain lesser used sources. Union posting was reported as a having a significantly higher proportion of usage for designated group members than non-designated group members. On-campus hiring was used significantly less by designated group members than non-designated group members. Otherwise there were no other significant differences in reports of recruitment source usage among those examined. Source usage was examined carefully because it was believed that membership in a designated group could be a demographic variable which is related to recruitment source usage.

Table 3.9

Proportion of Source Type Usage for designated and non-designated Groups by Sample Year

Group	Formal			Informal			Internet		
	2001	2003	2005	2001	2003	2005	2001	2003	2005
Non- Designated group	35.5%	36.9%	39.3%	40.1%	38.1%	40.0%	.08%	2.0%	3.0%
Designated group	33.7%	35.9%	38.1%	42.1%	41.1%	41.2%	1.6%	2.9%	4.7%
% Total	35.1%	36.6%	39.0%	40.6%	39.0%	40.3%	1.0%	2.2%	3.5%
χ^2 (df=1)	5.56	1.56	2.86	5.79	15.98*	3.25	18.95*	16.71*	38.85*

Note: χ^2 (df=1), *p< .01, otherwise non significant, once Bonferroni correction applied, 2-tailed.

Table 3.10

Proportion of Source Type Usage by designated vs. non designated group for those hired less than one year in 2005 data

Group	Source											
	Help wanted ad	Internet	Informal	All Formal	Union Posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative	Emp-loyer Recruit
Non-Designa-ted group	15.0%	6.5%	40.0%	42.5%	0.5%	3.7%	3.0%	0.5%	1.6%	2.8%	21.2%	14.5%
Designa-ted group	13.4%	8.8%	38.3%	40.8%	1.4%	4.6%	1.7%	0.3%	1.6%	3.8%	23.3%	11.2%
% Total	14.5%	7.2%	39.5%	42.0%	0.7%	3.9%	2.6%	0.4%	1.6%	3.1%	21.9%	13.5%
χ^2 (df=1)	2.87ns	11.99*	1.65ns	1.74ns	17.01*	3.5 ns	8.95 *	.71ns	.001ns	5.10ns	3.71 ns	13.54*

Note: χ^2 (df=1), *p< .05, otherwise non significant, once Bonferroni correction applied, 2-tailed.

Table 3.11 indicates that informal sources (family and friends) were used as a

recruiting source more frequently by men (2005; 43.6%) than women (2005; 37.3%).

This held true across all three sample years, although the effect appeared stronger in the

2003 and 2005 data (2005; χ^2=99.59, df=1, p<.01 (2 tailed Bonferroni corrected). With

respect to gender and usage of the Internet as a recruitment source, although there were

some significant differences in earlier data, there were no significant differences in

Internet usage by gender in any of the data sets from 2001 to 2005. This contrasts with

1999 data, where although the overall incidence of use of the Internet to find jobs was

low.

As can be seen in Table 3.11, when only recent hires were examined in the 2005 data

there were less significant differences for gender between sources used. These differences

remained for informal source usage; males reported using this source more frequently

than females. Females reported significantly greater usage of help wanted ads (16.1% vs.

12. 8%) than males. Females reported significantly higher usage of the Canadian

government job search agency (Human resources development Canada "HRDC" χ^2

=26.22, df=1, p<.01; 5.1% as opposed to 2.7%for recent hires in 2005).

Table 3.11

Proportion of Formal and Informal Source Usage by Gender and sample year

Gender	Formal			Informal			Internet		
	2001	2003	2005	2001	2003	2005	2001	2003	2005
Male	34.0%	35.4%	37.5%	42.2%	42.3%	43.6%	1.0%	1.9%	3.6%
Female	36.1%	37.7%	40.4%	38.9%	36.0%	37.3%	1.0%	2.5%	3.4%
% Total	35.1%	36.6%	39.0%	40.6%	39.0%	40.3%	1.0%	2.25%	3.5%
χ^2 (df=1)	9.84ns	11.47*	21.64**	25.8**	88.0**	99.59**	0.15ns	9.56ns	0.57ns

Note: χ^2 (df=1), **p< .01, *p< .05 otherwise non significant, once Bonferroni correction applied, 2-tailed.

Table 3.12

Proportion of Source Type Usage by Gender for those hired less than one year in 2005 data

Group	Source										
	Help wanted ad	Internet	Informal	All Formal	Union Posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative
Male	12.8%	7.3%	42.7%	42.1%	1.1%	2.7%	2.6%	0.3%	1.5%	3.2%	19.3%
Female	16.1%	7.0%	36.5%	41.9%	0.5%	5.1%	2.6%	0.6%	1.7%	2.9%	24.3%
% Total	14.5%	7.2%	39.5%	42.0%	0.7%	3.9%	2.6%	0.4%	1.6%	3.1%	21.9%
χ^2 (df=1)	14.48*	.29ns	27.00 *	.03ns	8.57ns	26.22*	.02ns	3.44ns	.47ns	.54 ns	25.32*

Note: χ^2 (df=1), *p< .05, otherwise non significant, once Bonferroni correction applied, 2-tailed.

As can be seen from Table 3.12, cross-tabular analyses for recent hires in the 2005 data indicated that there were no significant differences in the rates of formal source usage among males and females. There were also no significant differences in the use of the Internet as a recruitment source by gender. There were, however, significant differences in the usage of family and friends (informal sources). Males (42.7 %) reported using this source more than females (36.5%).

Table 3.13 shows a trend toward a slightly higher use of formal recruitment sources among those with less tenure than among those with greater tenure. This remains similar across all three years. In addition, cross tabs of tenure and the Internet were conducted. As expected, there was a strong effect of tenure on Internet usage to find a job across all years (2001 χ^2 =213.84, df=9, p<.01; 2003, χ^2 = df=9, p<.01; 2005 χ^2 =213.84, df=9, p<.01).   Those recruited more recently were more likely to have been recruited using the Internet although Internet recruiting was growing but remained low overall.

Table 3.13

Percentage of Formal and Informal Source Usage by Experience and Sample Year

Years Experience	2001		2003		2005	
	Formal	Informal	Formal	Informal	Formal	Informal
0-1	37.7%	40.6%	38.5%	37.5%	42.0%	39.5%
2-3	36.3%	40.9%	37.4%	40.2%	40.8%	40.9%
4-5	33.8%	42.2%	36.1%	40.8%	39.1%	39.5%
6-8	33.3%	42.1%	35.6%	42.0%	37.0%	38.8%
9-10	31.2%	40.3%	33.9%	42.0%	31.8%	47.5%
11-15	34.4%	38.9%	36.1%	35.7%	36.7%	39.8%
16-20	31.1%	40.7%	29.5%	36.3%	36.4%	38.6%
21-25	29.3%	42.2%	36.4%	35.3%	32.9%	48.4%
26-30	27.2%	38.8%	36.1%	28.8%	26.5%	36.6%
31 or more	25.1%	40.9%	28.7%	36.9%	32.1%	42.4%
χ^2 (df=9) **	71.03	7.93ns	38.27	51.34	107.17	53.12

Note: χ^2 (df=9), all significant at **p<.01, Bonferroni corrected unless otherwise indicated

Looking at educational levels and the use of formal and informal sources (Table 3.14), there was an overall trend to use more formal recruitment at higher education levels. Furthermore, cross tabular analyses of those who did not complete high school and those who did revealed that the use of informal sources was higher overall among those who did not graduate. This same trend held true for university graduates, where 34.2% of those who did not have bachelor's degrees reported using formal sources, whereas 46.9 % of those with bachelor's degrees reported using formal sources (χ^2=

227.22, df=3, p<.01). The trend was reversed with the use of informal sources. In general,

those with less education used informal sources more than those with greater education.

Although use of informal sources was higher overall in 2001, the trends remained similar

across all years such that higher levels of education were generally related to the use of

more formal recruitment sources. Informal sources still remained the single most used

recruitment source.

As can be seen in Table 3.15, recent hires in the 2005 exhibited a similar trend to

the one demonstrated across cohort years. Those with less education were more likely to

use informal sources (χ^2= 46.6, df=3, p<.01) whereas those with more education were

more likely to use formal sources (χ^2= 71.40, df=3, p<.01). There was also a trend for

more those with more education to report using the Internet as a recruitment source (χ^2=

84.39, df=3, p<.01). For instance 12.5% of university educated reported using the internet

compared to 3.3% of those without high school and 4.7% of those with a high school

education. It should be kept in mind that the Internet usage rate in 2005 for recent hires

was reported at 7.2% overall, compared with informal family and friends which was used

at a rate of 39.5%.

Table 3.14

Proportion of Formal and Informal Source Usage by Education Level across Time

Education level	Formal			Informal		
	2001	2003	2005	2001	2003	2005
< High School	24.9%	29.5%	31.9%	52.9%	46.5%	47.6%
High School	30.3%	33.1%	36.7%	47.6%	42.9%	41.9%
Vocational College	26.0%	36.6 %	42.4%	38.8%	38.5%	37.9%
University	37.3 %	51.2%	43.3%	39.5%	35.8%	30.4%
χ^2 (df =3)**	67.26**	55.79**	134.59**	113.82**	46.17**	129.19**

Note: χ^2 (df=3), all significant **p<.01, Bonferroni corrected.

Table 3.15

Proportion of Source Type Usage by education level for those hired less than one year in 2005 data

	2005		
	Formal	Informal	Internet
< High School	33.4%	44.1%	3.3%
High School	38.6%	43.0%	4.7%
Vocational College	46.1%	36.4%	9.7%
University	52.4%	28.0%	12.6%
% of total	42.0%	39.5%	7.2%
χ^2 (df=3)**	71.40**	46.60**	84.39**

Note: χ^2 (df=3), all significant **p<.01, Bonferroni corrected.

Table 3.16 provides a summary of the breakdown for use of formal, informal and Internet recruitment sources by occupation group. There appeared to be a general trend for those in lower level positions to report using less formal recruitment and more informal sources than those in higher level positions. The trend for occupation group source usage was not as clear for Internet use as a recruitment source. Although there was clearly a significant difference in usage of the internet across occupation groups (2005 data; $\chi^2 = 213.37$, df=5, p<.01), the trend did not follow occupational hierarchy in this instance. Those in professional and administrative positions reported the highest use of Internet (6.4% and 5.6% respectively) and those in sales and marketing as well as production workers reported the lowest incidence of use of the Internet as a recruitment source (1.5% and 1.8% respectively).

The trends for formal and informal source usage held true for those hired in the last year for the 2005 data (see Table 3.17). The pattern of source usage for the Internet also remained the same for recent hires where those in administrative and professional occupations reported higher internet usage. Production workers were the occupation reporting the least usage of the Internet as a recruitment source (2%) followed by marketing and sales occupations (3%). There were significant differences across occupations with regard to recruitment source usage.

Table 3.16

Proportion of Source Type Usage by Occupation Group and Sample Year

Occupation Group	Formal			Informal			Internet		
	2001	2003	2005	2001	2003	2005	2001	2003	2005
Managerial	37.8%	45.1%	42.5%	37.9%	32.2%	32.3%	0.4%	2.2%	2.8%
Professional	46.2%	48.0%	47.8%	25.9%	28.2%	30.6%	2.7%	4.0%	6.4%
Technical Trade	32.9%	34.7%	35.9%	43.1%	42.0%	45%	0.8%	1.6%	2.4%
Sales/Marketing	29.9%	27.4%	31.8%	42.1%	42.0%	39%	0%	1.4%	1.5%
Administrative	35.5%	39.1%	44.3%	46.3%	40.3%	40.4%	0.7%	3.1%	5.6%
Production workers	22.6%	26.4%	25.3%	52.5%	51.8%	53.7%	0.8%	1.1%	1.8%
% Total Use in Source	35.1%	38.2%	39%	40.6%	38.7%	40.3%	1.0%	2.2%	3.5%
χ^2 (df=5)**	344.27	353.35	398.18	479.06	341.49	456.63	135.25	89.51	231.37

Note: χ^2 (df=5), all significant at **$p<.01$, Bonferroni corrected.

Table 3.17

Proportion of Source Type Usage in 2005 by Occupation Group for those with hired less than one year ago

Occupation Group	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative
Managerial	11.0 %	4.8%	27.4%	44.3%	0.1 %	2.6 %	4.1%	0.2%	1.8 %	3.7%	24.0%
Professional	14.9%	15.4%	33.6%	51.8%	0.2 %	1.7 %	4.8%	0.2%	1.4 %	5.9%	20.3%
Technical Trade	15.2 %	5.4%	42.2%	40.9%	1.6 %	4.1 %	2.0%	0.5%	1.7 %	2.6%	19.4%
Sales/ Marketing	15.4 %	3.0%	42.9%	31.3%	0 %	3.3 %	0%	1.3%	1.7 %	0.2%	37.6%
Administrative	16.4 %	10.5%	39.9%	48.1%	0.1 %	8.0 %	3.0%	0.3%	1.4 %	3.7%	17.6%
Production workers	11.2 %	2.0%	52.0%	25.6%	0.8 %	2.9 %	1.1%	0.2%	1.3 %	1.4%	23.4%
% Total Use in Source	14.5%	7.2%	39.5%	42.0%	0.8 %	4.0 %	2.6%	0.4%	1.6 %	3.1%	21.9%
χ^2 (df=5)*	18.40 ns	183.38	117.22	151.74	47.32	65.45	53.72	14.14 ns	1.66 ns	55.76	117.47

Note: χ^2 (df = 5), *all significant at p<.05 unless otherwise indicated, Bonferroni corrected.

As can be seen from Table 3.18, the type of recruitment source used is associated with firm size. There was a general trend indicating larger firms have a tendency to use more formal sources and smaller firms have a tendency to use more informal sources. Of those recruited using formal recruitment sources approximately one fifth or more were recruited into organizations with over 500 employees. There were significant differences between degree to which formal sources were used and firm size (2005; $\chi^2 = 68.50$, df=6, p<.01: 2003; $\chi^2 = 15.30$, df=6, p<.05: 2001; $\chi^2 = 88.98$, df=6, p<.01).

There were also significant differences in the use of informal sources across firm size, with those in smaller organizations showing a trend toward greater use of informal sources (2005; $\chi^2 = 113.22$, df=6, p<.01: 2003; $\chi^2 = 84.06$, df=6, p<.05: 2001; $\chi^2 = 243.12$, df=6, p<.01) . The pattern of formal source usage differs for larger organizations over 40% of all those organizations using help wanted ads for recruitment had less than 50 employees (2003:48.7%; 2001: 43.1%; 1999: 46%). In contrast, well over 30% of those using headhunter recruiters were in large organizations over 200 employees (2003: 35.3%; 2001: 42.5%; 1999: 32.9%).

As can be seen in Table 3.19, the trend in informal source usage held for those recruited in the last year in the 2005 data. Although formal source usage was not significantly different, informal source usage was still higher for smaller firms in general. For recent hires there appeared to be a tendency for those in larger firms to be more likely to use the Internet as a recruitment source (2005; $\chi^2 = 91.62$, df=6, p<.01). Usage of the Internet was higher for firms with over 500 employees (13.2%) compared to those in firms with few employees. Those in forms with 1-10 people reported using the Internet to find their job

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5.3% of the time and those in firms of 11 to 20 people reported using the internet to find

their job 6.1% of the time.

Table 3.18
Use of formal, informal and Internet by firm size across sample years 2001-2005

Firm Size	Formal			Informal		
	2001	2003	2005	2001	2003	2005
1-10	33.0%	34.1%	34.0%	44.2%	44.1%	44.3
11-20	32.2%	37.4%	38.5%	45.5%	38.5%	44.8
21-50	33.6%	37.8%	41.8%	43.6%	36.7%	40.7
51-100	33.3%	37.8%	37.3%	41.8%	37.1%	40.9
101-200	36.6%	36.5%	40.7%	42.2%	39.7%	36.9
201-500	33.6%	36.8%	39.9%	41.1%	41.5%	40.7
501 +	40.8%	36.7%	40.5%	30.6%	35.5%	35.3
χ^2 (df =6)	88.98**	15.30*	68.50**	243.12**	84.06**	113.22**

Note: All significant at ** p<.01 or * p<.05, Bonferroni corrected, 2-tailed.

Table 3.19

Proportion of Source Type Usage in 2005 by firm size for those with hired less than one year ago

Firm size	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative
1-10	13.9%	5.3%	40.6%	37.0%	0%	4.4%	0.8%	0.3%	1.9%	1.3%	22.1%
11-20	12.2%	6.1%	43.3%	40.4%	0%	0.6%	3.3%	0%	1.9%	1.1%	22.1%
21-50	15.7%	5.8%	39.4%	43.0%	0.5%	3.5%	1.8%	0.4%	2.0%	1.9%	20.9%
51-100	16.2%	5.1%	39.7%	21.4%	2.0%	3.8%	2.3%	0.2%	0.7%	5.8%	24.9%
101-200	17.6%	5.8%	33.2%	44.3%	0.5%	3.0%	1.2%	0.5%	1.3%	6.6%	23.8%
201-500	14.6%	7.1%	43.7%	42.1%	0.7%	5.7%	2.9%	1.2%	1.9%	3.6%	19.8%
501 +	12.6%	13.2%	36.8%	45.4%	1.3%	6.2%	5.1%	0.8%	1.4%	3.1%	20.2%
χ^2 (df=6)*	16.92ns	91.62*	24.46*	19.92ns	43.20*	52.73*	56.74*	17.11 ns	8.75 ns	80.31	11.27 ns

Note: χ^2 (df=6), *all significant at p<.05, unless otherwise indicated, Bonferroni corrected, 2-tailed.

As shown in Table 3.20, the size of the HR department and whether it was located in the workplace was related to formal and informal source usage. Although informal sources were used most frequently overall, there was a tendency for more formal sources to be used when there was a separate person whose job was specifically dedicated to human resources and particularly when there was a separate Human Resources department (2005; $\chi^2 = 98.23$, df=5, p<.01: 2003; $\chi^2 = 42.37$, df=5, p<.01: 2001; $\chi^2 = 163.03$, df=5, p<.01). This effect was stronger in the 2001 and 2005 data than the 2003 data.

Table 3.20

Proportion of Recruitment source type by year & size and location of the HR department

Human Resources department	Formal			Informal		
	2001	2003	2005	2001	2003	2005
Other HR Arrangement	32.5%	35.3%	35.5%	40.8%	44.1%	43.2%
HR matters not assigned	31.9%	38.5%	35.9%	47.6%	40.7%	45.0%
Responsibility of one person/unit in another workplace	38.1%	32.0%	34.2%	34.3%	38.1%	43.5%
HR part of one person's job (ex. owner or manager)	31.1%	34.9%	37.5%	45.4%	40.3%	41.3%
One full-time person in the workplace responsible HR	33.9%	38.8%	41.2%	41.9%	38.8%	42.0%
Separate HR unit in the work more than one person	40.9%	38.3%	43.1%	32.9%	36.2%	35.2%
χ^2 (df =6)**	163.03	42.37	98.23	312.74	39.64	126.40

Note: ** p<.01, unless otherwise indicated, Bonferroni corrected, 2 tailed

Table 3.21

Proportion of Recruitment source type by year & size and location of the HR department for recent hires in 2005

Human Resources department	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruitment agency	Personal initiative
Other HR Arrangement	17%	6.5%	37.8%	40.2%	0%	4.6%	0.9%	1.2%	1.2%	0.9%	23.8%
HR matters not assigned	13.6%	5.1%	44.7%	41.5%	1.4%	3.5%	1.0%	0.1%	1.7%	1.9%	19.0%
Responsibility of one person/unit in another workplace	9.1%	5.8%	44.1%	35.2%	1.6%	1.2%	3.5%	1.4%	0.9%	2.3%	22.4%
HR part of one person's job (ex. owner)	15.8%	5.0%	39.4%	39.1%	0.5%	4.4%	1.4%	0.1%	1.2%	1.4%	23.9%
One full-time person in workplace responsible HR	18.3%	7.7%	36.5%	46.5%	0.1%	4.3%	3.5%	0.1%	3.3%	6.0%	18.6%
Separate HR unit in workplace more than one person	12.5%	11.5%	37.5%	46.3%	1.0%	4.0%	4.8%	7.8%	1.6%	5.3%	21.4%
χ^2 (df =6)*	30.71*	78.34*	20.98ns	37.83*	18.82ns	11.12ns	66.59*	29.16*	18.21ns	87.38*	16.75ns

Note:χ^2 (df = 5), *all significant p<.05 unless otherwise indicated, Bonferroni corrected, 2-tailed.

There were no significant differences in the use of informal sources, HRDC,

union postings, news stories or personal initiative as recruitment sources, related to the

size and location of the Human resources department in the organization for recent hires

in the 2005 data (Table 3.21). There was a significant difference in the use of the Internet

as a recruitment source based on the characteristics of the HR department of an

organization (χ^2(df = 5)=78.34, p<.05),where there was a higher use of the Internet 11.5%

in organizations were there was a separate HR unit in the workplace employing more

than one person. Use of formal recruitment sources was also apparent in cases where the

employing organization had a larger HR department (χ^2 (df = 5) =37.83, < .05) as well as in

on-campus recruitment (χ^2 (df = 5) =66.59, p<.05; 4.8%) and job fairs (χ^2 (df = 5)=29.16, p<.05;

7.8%). Headhunters were more likely to be used in cases where the organization included

at least one full-time person responsible for HR matters (χ^2 (df = 5)=87.38, p<.05;

6.0%).

It is clear from Table 3.22 that formal recruitment sources were in general used

more frequently in business services and education and health services (between 39% and

45%). Further, in general, the lowest use of formal recruitment sources appeared to be in

construction, natural resources and primary product manufacturing (between 24% and

32%). When formal sources as a whole are examined, they were used overall about one

third of the time.

The type of industry was examined for recent hires. Industries were grouped in

accordance with four types of sectors, primary (mining, forestry, primary manufacturing),

secondary, finished goods manufacturing, construction) tertiary (service industry) and

quaternary, (education, culture, information).

As shown in Table 3.23, there was a pattern in source usage for type of industry where

those recent hires working in the tertiary and quaternary types of industries exhibited a

greater use of formal sources (2005; χ^2= 171.48, df=3, p<.01) and those working in

primary and secondary types of industries reported greater use of informal sources (2005;

χ^2= 218.18, df=3, p<.01. Those working in tertiary and quaternary types of industries

also reported a significantly greater use of the Internet as a recruitment source (2005; χ^2=

87.04, df=3, p<.01).

Table 3.22

Percentage of Respondents Using Formal Sources by Industry Type

Industry	2001	2003	2005
Forestry , mining oil and gas extraction	29.5%	26.1%	37.9%
Labour intensive tertiary manufacturing	27.4%	34.9%	32.8%
Primary product manufacturing	24.6%	31.7%	31.8%
Secondary product manufacturing	29.7%	36.6%	38.8%
Capital intensive tertiary manufacturing	34.2%	38.5%	41.7%
Construction	27.8%	28.6%	32.1%
Transportation, warehousing, wholesale trade	33.8%	42.5%	41.4%
Communication and other utilities	37.9%	38.9%	49.3%
Retail trade and consumer services	29.9%	29.7%	33.4%
Finance and insurance	37.5%	38.8%	41.4%
Real estate, rental and leasing operations	38.7%	35.1%	39.4%
Business services	42.6%	39.4%	44.5%
Education and health services	43.4%	42.2%	43.3%
Information and cultural industries	37.0%	41.1%	37.8%
χ^2 (df =13)**	251.45	260.73	243.95

Note: **All significant at p<.01, Bonferroni corrected, 2 tailed

Table 3.23

Type of recruitment source used by industry type in recent hires 2005

Industry type	2005		
	Formal	Informal	Internet
Primary	43.6%	39.8%	6.2%
Secondary	35.7%	40.6%	4.7%
Tertiary	40.1%	42.6%	6.1%
Quaternary	45.9%	38.2%	10.0%
χ^2 (df =3)	53.60**	3.48 ns	53.17**

Note: Significant at ** p<.01, unless otherwise indicated, Bonferroni corrected, 2-tailed

As can be seen in Table 3.24, there are significant differences in type of sources used to find employment and the revenue reported by the organization where the employee works. Only use of help wanted ads and job fairs was non- significant for different revenue groups. There was significantly greater use of the Internet as a recruiting source among those hired less than a year prior who were working for organizations generating under $250,000 per year (12% vs. 7.2% overall). This may be because of the low cost and broad reach of the Internet. Recent hires in organizations reporting the highest revenue generation ($50,000,001 or more) reported greater use of informal sources than the average and than other organizations generating different revenue levels (44.3% vs. 39.5%) on-campus recruitment (4.3% vs. 2.6% on average) recruitment agencies (7.2% vs. 3.1% on average) and lowest use of personal initiative as a recruiting sources (16.2% vs. 21.9% on average). While significant differences were

found for several firm and individual differences the theoretical reasons for these

differences and distributions are not clear nor is their relationship with outcomes.

Table 3.24
Proportion of Source Type Usage in 2005 by revenue Group for those with hired less than one year ago

Revenue Group	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruit -ment agency	Personal initiative
1=< $250,000	15.2%	12.0%	31.9%	50.8%	1.3%	3.7%	3.8%	0.4%	1.6%	2.9%	25.0%
2 $250,001 thru $500,000	13.4%	2.5%	41.1%	32.6%	0%	5.0%	0.4%	0.3%	1.2%	0.1%	28.9%
3 $500,001 thru $1,000,000	11.7%	8.2%	35.9%	43.6%	0%	0.9%	1.1%	0%	7.1%	1.5%	23.9%
4 $ 1,000,001 thru $5,000,000	16.3%	5.7%	43.9 %	38.3%	0.4%	2.7%	3.3%	0.4%	0.7%	1.9%	20.8%
5 -5,000,001 thru $10,000,000	14.1%	6.7%	35.3%	50.3%	1.5%	5.8%	2.4%	0.3%	1.3%	4.8%	19.4%
6 $10,000,001 thru $50,000,000	16.2%	7.2%	40.2%	40.2%	0.3%	6.7%	1.5%	1.0%	0.9%	3.4%	20.7%

Revenue Group	Source type										
	Help wanted ad	Internet	Informal	All Formal	Union posting	HRDC	On-campus	Job fair	News story	Recruit-ment agency	Personal initiative
7-$50,000,001 or more	10.5%	7.4%	44.3%	39.6 %	1.4%	2.0%	4.3%	0.4%	2.1%	7.2%	16.2%
% Total Use in Source	14.5%	7.2%	39.5%	42.0%	0.8%	4.0%	2.6%	0.4%	1.6 %	3.1%	21.9%
χ^2 (df =6)	22.37 ns	71.19*	59.29*	98.82*	31.60*	60.33*	43.73*	12.58 ns	104.91 *	90.08*	50.89*

χ^2 (df = 6), *all significant p<.05 unless otherwise indicated, Bonferroni corrected, 2-tailed.

3.3.4 Hypotheses 3a and 3b: Correlations

For all of the sample years (1999, 2001, 2003 and 2005), nearly all the variables of interest were significantly correlated; however, many of the correlations themselves were extremely low. Few correlations achieved values of 0.1 or greater. The number of significant correlations is no doubt a function of sample size and the high statistical power due to the large sample size of the study. The correlations differed slightly across the different sample years but showed similar trends in most cases. Therefore, only significant correlations of interest to the study for 2005 will be reported here. Correlations related to firm demographics have been hypothesized to be related to recruitment and selection practices (Barber, 1998, Barber et al. 1999) but this is the first time they have been clearly shown in a large representative sample. I examined firm and employee characteristics related to recruitment source usage. Previous research has also hypothesized that recruitment sources affect outcomes such as turnover and job satisfaction either through realistic information or through attracting different types of candidates or individual differences. I included correlations of job satisfaction, promotion and tenure. I also deliberately chose to include the measure of occupation group in the Pearson correlations because I wanted to determine in particular if there was an underlying correlation with any of the variables for the 'hierarchy of occupational groups'. Any differences would mainly be interpreted based on whether there was a correlation with higher or lower occupational groups based on occupational prestige as argued by Boyd (2008). This theory is based on the idea that there is an underlying order

and 'hierarchy of occupational groups' which tend to an underlying ordinal structure

(Boyd, 2008). In an effort to ensure correlations were properly conducted and compare

results for occupation group, I also attempted to run Spearman correlations for certain

variables where appropriate. Unfortunately this was not possible, at every turn the

Statistics Canada computers froze during this operation, even when the sample size was

reduced to include only those hired in the last year. This was possibly as a result of the

weighting and heavy processing required. As such, I was faced with the choice of not

conducting a correlation or conducting a Pearson correlation. The Spearman correlation is

really a mathematical correction of the Pearson correlation, to account for attenuation of

the relationship in the variables, in larger populations the correlations yield very similar

resulting values and in some cases certain sample distributions using Spearman

correlations can lead to overcorrection (Zimmerman & Williams, 1997).

There were significant correlations between firm size and tenure (2005: $r=.09$,

$p<.001$; 2003: $r=.11$, $p<.001$; 2001: $r=.12$ $p<.001$; 1999: $r=.23$ $p<.001$), although this did

not hold true for recent hires (2005 recent hires: $r=-.01$, $p<.001$) between firm size and

revenue (2005 recent hires: $r=.27$, $p<.001$; 2005: $r=.24$, $p<.001$; 2003: $r=.24$, $p<.001$;

2001: $r=.21$, $p<.001$;1999: $r=.18$ $p<.001$), between firm unionization and firm size (2005:

$r=.30$, $p<.001$; 2003: $r=.40$, $p<.001$; 2001: $r=.49$, $p<.001$, 1999: $r=.60$ $p<.001$). Firm size

was also correlated with employees' age (2005: $r=.09$, $p<.001$; 2003: $r=.10$, $p<.001$;

2001: $r=11$, $p<.001$; 2001: $r=.10$, $p<.001$) although less so for recent hires (2005 recent

hires: $r=.05$, $p<.001$). Firm size was correlated with employees' education level (2005

recent hires: r=.17, p<.001; 2005: r=.15, p<.001; 2003: r=0.15, p<.001; 2001: r=.13,

p<.001). Not surprisingly, age and tenure were correlated (2005: r=.42, p<.001; 2003:

r=.43, p<.001; 2001: r= .45, p<.001). These correlations indicate that larger organizations

are associated with higher revenue, more unionization, longer tenured and older

employees.

Strong or even medium correlations between type of sources and employee

differences or firm differences were few and far between. In all sample years, referrals by

friends or family and use of all formal recruiting methods combined were negatively

correlated with each other (2005 recent hires: r=-.56, p<.001; 2005: r=-.51, p<.001; 2003:

r= -54, p <.001; 2001: r= -.56, p<.001; 1999: r= -.53, p<.001,). Family and friends as a

recruiting source was negatively correlated with all other formal recruiting sources

including the Internet (2005 recent hires: r=-.21, p<.001; 2005: r=-14, p <.001).

Use of family and friends as a source was positively correlated with occupational

group (2005 recent hires: r=.11, p<.001; 2005: r=.09, p<001; 2003 and 2001: r=.11,

p<.001; 1999: r=.09, p<.001). The cross tabular analyses, indicated that production

workers tended to use more informal sources than other occupational groups. Informal

sources were negatively correlated with education level (2005: r=-.07,p<.001; 2003: r=-

.08, p<.001; 2001: r=-.18, p<.001; 1999: r=-.15, p<.001), as well as age (2005: r=-

.07,p<.001; 2003: r=-.08, p<.001; 2001: r= -.10, p<.001; 1999: r=-.09, p<.001). This

indicates that those recruited using family and friends as a recruitment source tended to

be less highly educated and younger overall, although these correlations are small.

Formal sources as a whole were correlated with education level (2005: 2005: r=.08, p

<.001, 2003: r=.10, p<.001; 2001: r=.08, p<.001; 1999: r=.09, p<.001).

There was a similar weak correlation between the use of formal recruiting sources

and employee promotions in the 2003 data (2003: r=-04 number promotions, p<.001; and

r=-.01, ns for promotion) in the 2005 data the relationships were very weak or non

significant. The use of friends and family as a recruiting source and employee promotions

(2005: r=.02, ns; 2003: r=.05, p<.001; and number of promotions 2005: r=.02, ns; 2003:

r=.04, p<.001, employee promotion). The relationships for promotions and number of

promotions were smaller in 2005 data than in 2003. Overall the correlations with the

outcome variables were quite small. This may indicate that on their own formal and

informal recruitment sources are not strongly related to these outcome variables.

When only recent hires correlations were examined for the 2005 data, stronger

negative relationship emerged for firm size and designated group (2005: r=-.20, p<.001)

as well as a slightly stronger relationship with education (2005: r=.17, p<.001). Education

level was correlated with use of the Internet (2005: r=.11, p<.001) and formal recruitment

sources (2005: r=.10, p<.001) and negatively correlated with informal sources (2005: r=-

.08, p<.001). Higher education level was correlated with occupation group (r=-.23,

p<.001). Age was negatively correlated with informal sources (2005: r=-.10, p<.001),

indicating that younger individuals are more likely to use informal sources. In addition

there was a small negative correlation (r=-.06, p<.001) between gender and the use of

informal recruitment sources, indicating that males were more likely to use informal

sources. Job satisfaction was correlated with promotions (2005: r=.12, p<.001) and number of promotions (2005: r=.13, p<.001).

In Table 3.26 when only recent hires were examined, the correlations between recruitment types of sources (formal, internet, and informal) and outcomes such as promotions, number of promotions and job satisfaction were generally slightly stronger but remained weak overall. Other than correlations between the types of sources and number of promotions with promotion, one of the strongest correlations was for the relationship between firm size and revenue (r=.27) this correlations was similar to that of the data in table 3.26 (r=.24). The second strongest correlation was for occupational group and education (r=.23). This correlation was the same in the total 2005 sample and the recent hires sample.

Table 3.25: Correlations between predictor and criterion variables 2005 sample year (all respondents)

Variables	M 2005	SD 2005	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Firm size	587.01	1529.69	----													
2. Revenue	7.08E7	3.65E 8	0.24	---												
3. Gender[a]	1.52	.50	.01	-.08	---											
4. Designated group[b]	1.28	.45	.00	.02	.00	---										
5.Education level	2.41	.74	.15	.03	.02	.04	---									
6. Occupation Group[c]	3.16	1.39	-.08	.01	.17	.00	-.23	---								
7. Age	40.24	11.52	.09	.03	-.03	-.02	-.04	-.10	---							
8. Tenure	5.80	6.60	.09	.01	-.04	-.04	-.04	-.04	.42	---						
9. Promotion[d]	1.39	.49	.02	.07	-.03	-.03	.08	-.17	-.05	-.05	---					
10. Number of promotions	.82	1.36	.05	.10	-.08	-.03	.08	-.19	.02	.01	.86	---				
11. Job satisfaction	3.21	.68	.05	.03	.02	-.08	.03	-.09	.09	.06	.08	.09	---			
12. Internet[e]	.02	.15	.04	.01	-.01	.04	.07	-.00	-.08	-.11	-.02	-.04	-.00	---		
13. Family & Friends[f]	.39	.49	-.04	.02	.06	.01	-.07	.09	-.07	.01	.02	.01	.01	-.14	---	
14. Formal[g]	.37	.48	.04	.01	-.03	-.01	.08	-.06	.04	-.05	-.00	-.01	.03	.24	-.51	--

Note. All significant at *p* < .001 (2-tailed) if r ≥ .03; and at p<.05, if r ≥ .02, otherwise N.S. = non significant; [a]Gender male=1 female=2.
[b]Designated group no=0, yes=1, [c]occupation group 1=manager, 6=production. [d]Promotion 1=no 2=yes. [efg]Source type used 0=no, 1=yes.

Table 3.26: Correlations between predictor and criterion variables 2005 sample year for recent hires only

Variables	M 2005	SD 2005	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Firm size	539.82	1511.02	----													
2. Revenue	6.35E7	3.13E 8	0.27	---												
3. Gender[a]	1.52	.50	.04	-.05	---											
4. Designated group[b]	1.30	.46	-.20	-.01	.00	---										
5.Education level	2.41	.74	.17	.06	.02	.03	---									
6. Occupation Group[c]	3.24	1.44	-.07	-.05	.13	.02	-.23	---								
7. Age	33.49	11.87	.05	.07	-.05	-.01	.05	-.14	---							
8. Tenure	0.68	0.47	-.01	-.02	.03	-.03	-.03	-.02	.06	---						
9. Promotion[d]	1.38	.48	-.00	.07	.03	-.01	.07	-.18	-.02	-.03	---					
10. Number of promotions	.67	1.15	.01	.10	-.00	-.02	.07	-.21	.05	-.03	.75	---				
11. Job satisfaction	3.18	.71	.08	.05	.02	-.07	.01	-.13	.08	-.02	.12	.13	---			
12. Internet[e]	.07	.26	.06	-.01	-.01	.04	.11	-.03	-.05	-.03	-.04	-.08	.02	---		
13. Family & Friends[f]	.39	.49	-.01	.05	-.06	.02	-.08	.11	-.10	-.01	.02	.02	.03	-.21	---	
14. Formal[g]	.42	.49	.02	-.04	-.00	-.02	.10	-.08	.13	-.04	-.03	-.03	.03	.33	-.56	--

Note. All significant at $p < .001$ (2-tailed) if: $r \geq .04$; and at p<.05, if $r \geq .03$, otherwise N.S. = non significant; [a]Gender male=1 female=2.
[b]Designated group no=0 yes=1, [c]occupation group 1=manager, 6=production. [d]Promotion 1=no 2=yes. [efg]Source type used 0=no, 1=yes.

3.3.5 Hypothesis 3c: Use of Formal and Informal Sources

Logistic Regression for source usage. The results were remarkably similar

across all of the years examined. Due to the consistent nature of the data for these

analyses, only the 2005 data tables for these analyses are presented here. The data tables

for the 1999, 2001 and 2003 results are not reported. The 2005 data will be reported for

those recruited within one year of the administration of the 2005 WES survey.

A sequential logistic regression was used to predict the use of formal and informal

recruitment sources by recent (in the last year) successfully recruited employees.

Recruitment sources were specified as dependent variables and organizational and

individual characteristics were entered as independent variables. Specifically, I examined

these variables as predictors of the use of family and friends, formal sources and the

Internet. The individual characteristics were: occupational group (6 categories),

education level (5 categories), and gender, designated group membership (2 categories)

and relationship status (presence of life partner or not; 2 categories). The organizational

characteristics were: industry type (14 categories), firm size (continuous), revenue level

(continuous), unionization (dichotomous) and size of the human resources department (5

categories).

There was a good model fit when the six firm characteristics were entered alone

(2005: χ^2 (26, n =3822) = 221.34, p< .001). This result indicated that the predictors as a

set reliably distinguished between whether or not the "formal" or "informal" recruitment

source was used for successful job seeking. The classification rates were improved from the constant only to the introduction of firm characteristics. When only the constant was included, approximately 59 % were correctly predicted overall and 0% of formal source usage was predicted and 100% of informal. When the firm differences predictors were included only, the classification rate improved by 3.1% (62.1%) overall and the formal source usage classification improved, from 0% to 30.4% of those using formal sources. The variance accounted for was small; the Nagelkerke R^2 was .08. With the exception of firm size, two industries and some HR department characteristics, all of the firm predictor variables were significant. The Hosmer-Lemeshow goodness of fit tests were not significant (2005: χ^2 (8, n=3822) =3.83, p= .87). A non-significant Hosmer-Lemeshow indicates the model is a good fit to the data.

When the individual difference variables were added the overall model for the coefficients was a good fit (2005: χ^2 (36, n =3822) = 348.86, p< .001) and the variance accounted for improved; the Nagelkerke R^2 was .12. The Hosmer-Lemeshow goodness of fit test was significant (2005: χ^2 (8, n=3822) =34.01, p<.001). A significant Hosmer-Lemeshow indicates the model is not a good fit to the data. Tabachnick and Fidell (2007) have however noted that this test is sensitive to sample sizes. Sample sizes were large in this study. For the demographic variables age, presence of a life partner and of dependent children was non-significant. It may be that these variables were subject to range restriction because only those hired in the last year were examined in this analysis. Overall classification improved from the firm characteristics only by 9% for prediction of

formal sources and by 1.3% overall. There was a tendency for over classification in the

informal source category. Table 3.27 shows the regression coefficients, chi square tests,

odds ratios and confidence intervals.

Table 3.27

Logistic regression for type of recruitment source (formal or informal) as a function of firm and individual difference predictors among recent hires in 2005

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Revenue	.00	.00	9.23	1	.01	1.00	1.00	1.00
Firm size	.00	.00	.75	1	ns	1.00	1.00	1.00
Industry			66.33	13	.001			
Natural resources	-.18	.34	.29	1	ns	.83	.43	1.63
Primary manufac-turing	.65	.26	6.23	1	.01	1.92	1.15	3.21
Secondary manufac-turing	1.20	.28	18.33	1	.001	3.33	1.92	5.77
Tertiary manufac-turing	1.31	.28	22.01	1	.001	3.69	2.14	6.36
Capital manufactur ing	1.21	.25	23.80	1	.001	3.35	2.06	5.45
constructio n	.59	.25	5.44	1	.05	1.81	1.10	2.97
transportati on	.97	.23	18.55	1	.001	2.63	1.70	4.10
communica tion	.76	.30	6.27	1	.01	2.14	1.18	3.89
Retail	.80	.22	13.78	1	.001	2.22	1.46	3.38
Finance	.36	.24	2.27	1	ns	1.43	.90	2.31
Real estate	1.03	.30	11.82	1	.001	2.79	1.56	5.01
Business services	.59	.22	7.31	1	.01	1.81	1.18	2.78
Education & Health	.98	.26	14.67	1	.001	2.66	1.61	4.39
unionized[a]	.56	.11	26.05	1	.001	1.75	1.41	2.16

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Occupation			58.48	5	.001			
Manager	.93	.18	28.08	1	.001	2.53	1.80	3.57
professional	1.21	.18	45.13	1	.001	3.34	2.35	4.74
Technical trade	.73	.14	25.75	1	.001	2.08	1.57	2.76
Sales	.39	.18	4.64	1	.05	1.48	1.04	2.12
Administrative	.96	.16	36.10	1	.001	2.60	1.91	3.56
HR dept			25.66	5	.001			
Other	-.03	.18	.02	1	ns	.975	.68	1.39
Not assigned	-.34	.13	7.05	1	.01	.710	.55	.91
Outsourced	-.70	.17	16.32	1	.001	.50	.35	.70
Owner	-.17	.11	2.67	1	ns	.84	.68	1.04
One full time	.05	.13	.13	1	ns	1.05	.81	1.35
Gender[b]	.39	.08	24.72	1	.001	1.47	1.27	1.72
Designated group[c]	.15	.08	3.82	1	.05	1.16	1.00	1.35
education			56.64	4	.001			
<High school	-1.01	.21	23.85	1	.001	.37	.24	.55
High School	-1.00	.18	29.97	1	.001	.37	.26	.53
College	-.50	.19	7.03	1	.01	.61	.42	.88
University	-.61	.18	11.37	1	.001	.54	.38	.77
Age	.01	.01	1.52	1	ns	1.01	1.00	1.02
Partner[d]	.04	.08	.27	1	ns	1.04	.89	1.23
Previous	.01	.01	5.15	1	.05	1.01	1.00	1.03

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
experience								
Dependents[e]	.03	.08	.16	1	ns	1.03	.88	1.21

[a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes,
[e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5,
HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture,
occupation=production, HR department=HR unit, Education=graduate school

A sequential logistic regression was used to predict the use of the Internet as a recruitment source by recent hires. Recruitment sources were specified as dependent variables and organizational and individual characteristics were entered as independent variables. Specifically, I examined these variables as predictors of the use of family and friends, formal sources and the Internet. The individual characteristics were: occupational group (6 categories), education level (5 categories), and gender, designated group membership (2 categories) and relationship status (2 categories; presence of life partner or not). The organizational characteristics were: industry type (14 categories), firm size (continuous), revenue level (continuous), unionization (dichotomous) and size of the human resources department (5 categories).

There was a good model fit when the six firm characteristics were entered alone (2005: χ^2 (26, n =3822) = 144.43, p< .001).This result indicated that the predictors as a set reliably distinguished between whether or not the Internet recruitment source was used for successful job seeking. The classification rates were improved from the constant only to the introduction of firm characteristics. When only the constant was included,

90.9 % were correctly predicted overall but 0% of Internet source usage. When the firm

differences predictors were included only, the classification rate did not change overall or

for Internet source usage. The variance accounted for was small; the Nagelkerke R^2 was

.08. Most of the industries, occupation groups, HR department characteristics, and firm

unionization were not significant predictors. The Hosmer-Lemeshow goodness of fit tests

were significant (2005: χ^2 (8, n=3822) =45.58, p< .001). A non-significant Hosmer-

Lemeshow indicates the model is a good fit to the data therefore the model was not a

good fit.

When the individual difference variables were added, the overall model for the

coefficients was a good fit (2005: χ^2 (36, n =3822) = 216.52, p< .001) and the variance

accounted for improved; the Nagelkerke R^2 was .12. Unfortunately the Hosmer-

Lemeshow goodness of fit tests was significant (2005: χ^2 (8, n=3822) =27.11, p<.001). A

significant Hosmer-Lemeshow indicates the model is an indicator that the model is not a

good fit to the data. Tabachnick and Fidell (2007) have however noted that this test is

sensitive to sample sizes. Sample sizes were large in this study. For the demographic

variables age, presence of a life partner and of dependent children was non-significant. It

may be that these variables were subject to range restriction because only those hired in

the last year were examined in this analysis. Overall classification remained unchanged.

Education and age seemed to be the main contributors. There was a tendency for over

classification in the informal source category. Table 3.28 shows the regression

coefficients, chi square tests, odds ratios and confidence intervals.

Table 3.28

Logistic regression for the Internet as a recruitment source as a function of firm and individual difference predictors among recent hires in 2005

	B	S.E.	Wald	df	Significance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Revenue	.00	.00	8.67	1	.01	1.00	1.00	1.00
Firm size	.00	.00	7.68	1	.01	1.00	1.00	1.00
Industry			24.23	13	.05			
Natural resources	-.37	.56	.43	1	ns	.51	.23	2.07
Primary manufac-turing	-.18	.44	.18	1	ns	.83	.35	1.97
Secondary manufac-turing	.72	.41	3.14	1	ns	2.05	.93	4.54
Tertiary manufac-turing	.36	.42	.73	1	ns	1.43	.63	3.27
Capital manufacturing	.03	.38	.01	1	ns	1.03	.49	2.16
construction	-.51	.45	1.28	1	ns	.60	.25	1.45
transportation	.32	.32	.98	1	ns	1.38	.73	2.60
communication	-.16	.49	.11	1	ns	.85	.33	2.22
Retail	-.06	.31	.04	1	ns	.94	.51	1.74
Finance	.10	.35	.09	1	ns	1.11	.56	2.20
Real estate	-.50	.55	.82	1	ns	.61	.21	1.79
Business services	.41	.30	1.83	1	ns	1.51	.83	2.73
Education & Health	-.59	.46	1.67	1	ns	.20	.23	1.35

	B	S.E.	Wald	df	Significance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
unionized[a]	.29	.18	2.44	1	ns	.12	.93	1.91
Occupation			32.83	5	.001			
Manager	.94	.37	6.38	1	.01	2.56	1.24	5.32
professional	1.48	.36	17.12	1	.001	4.37	2.17	8.79
Technical trade	.92	.33	7.70	1	.01	2.50	1.31	4.78
Sales	.54	.41	1.77	1	ns	.18	.78	3.80
Administrative	1.44	.34	17.86	1	.001	4.20	2.16	8.17
HR dept			4.72	5	ns			
Other	-.10	.29	.12	1	ns	.90	.51	1.59
Not assigned	-.16	.21	.58	1	ns	.85	.57	1.29
Outsourced	-.58	.31	3.55	1	ns	.56	.31	1.02
Owner	-.24	.17	2.06	1	ns	.78	.56	1.09
One full time	.06	.20	.10	1	ns	.94	.63	1.40
Gender[b]	.02	.13	.02	1	ns	1.02	.79	1.31
Designated group[c]	.16	.13	1.64	1	.20	1.17	.91	1.50
education			38.99	4	.001			
<High school	-1.50	.33	21.29	1	.001	.22	.12	.42
High School	-1.24	.24	27.38	1	.001	.29	.18	.46
College	-.72	.25	8.67	1	.01	.49	.30	.79
University	-.62	.23	7.69	1	.01	.54	.35	.83
Age	-.03	.01	8.54	1	.01	.97	.95	.99

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Life Partner[d]	.41	.14	8.58	1	.01	1.50	1.14	1.97
Previous experience	.00	.01	.05	1	ns	1.00	.98	1.03
Dependents[e]	-.12	.15	.63	1	ns	.89	.67	1.19

[a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes,
[e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5,
HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture,
occupation=production, HR department=HR unit, Education=graduate school

3.3.6 Hypotheses 4 and 5: Sources Relationships with Outcomes

Logistic regression for promotion. Because the promotion outcome variable was

dichotomous, whether a promotion occurred or not was analyzed using a sequential

logistic regression to determine the relationship of recruitment sources on promotion

above and beyond firm and individual differences. Specifically, I examined these

variables as predictors of promotion. The organizational characteristics were: industry

type (14 categories), firm size (continuous), revenue level (continuous), unionization

(dichotomous) and size of the human resources department (5 categories).The individual

characteristics were: occupational group (6 categories), education level (5 categories),

and gender, designated group membership (2 categories) and relationship status (2

categories; presence of life partner or not). The sources examined were the use of family

and friends and the use of formal sources. I examined all of the participants rather than

recent hires in this case because it is unlikely in the case of promotion that a large number

of respondents would receive promotions in a period of less than one year. Many

organizations have probation periods of one year for new hires.

In the 2003 data prior to introduction of the variables, 61.3 % of the cases were properly classified overall but they were all in the non-promoted category. There was a good model fit when the six firm characteristics were entered alone (2003: χ^2 (26, n =17217) = 1514.71, p< .001).This result indicated that the predictors as a set reliably distinguished between whether or not the Internet recruitment source was used for successful job seeking. The classification rates were improved from the constant only as a result of the introduction of firm characteristics. When the firm differences predictors were included only, the classification rate overall improved from 61.3 % to 64.9% and the classification for promotion improved from 0% to 31.6%. The variance accounted for was small; the Nagelkerke R^2 was .10. Occupation groups and size of the HR department and revenue were significant predictors. The Hosmer-Lemeshow goodness of fit tests were not significant (2003: χ^2 (8, n=17217) =12.41, p= .13), indicating the model is a good fit to the data therefore the model was a good fit for the firm variables.

When the individual difference variables were added the overall model for the coefficients remained a good fit (2003: χ^2 (35, n =17217) = 1743.64, p< .001) and the variance accounted for improved slightly; the Nagelkerke R^2 was .11. Unfortunately the Hosmer-Lemeshow goodness of fit tests was significant (2003: χ^2 (8, n=17217 =61.01, p<.001), indicating that the model is not a good fit to the data. Tabachnick and Fidell (2007) have however noted that this test is sensitive to sample sizes. Sample sizes were quite large in this study. For the demographic variables gender and some levels of education were non-significant, other demographic variables were all significant. Overall

classification remained improved slightly from 64.9% to 66.0% and classification for

presence of promotion was 33.7% vs. 31.6%. Finally, once recruitment sources were

added in the equation, overall model for the coefficients remained a good fit (2003: χ^2

(37, n =17217) = 1780.42, p< .001) and the variance accounted did not change; the

Nagelkerke R^2 was .11. The Hosmer-Lemeshow goodness of fit tests was significant

(2003: χ^2 (8, n=17217) =46.69, p<.001) indicating poor fit of the model although the chi

square value did decrease. There was a tendency for over classification in the no

promotion category.

The 2005 data indicated a similar trend prior to introduction of the variables,

61.6% of the cases were properly classified overall but they were all in the non-promoted

category. There was a good model fit when the six firm characteristics were entered

alone (2005: χ^2 (26, n =20015) = 1656.33, p< .001).This result indicated that the

predictors as a set reliably distinguished between whether or not the Internet recruitment

source was used for successful job seeking. The classification rates were improved from

the constant only to the introduction of firm characteristics. When the firm differences

predictors were included only, the classification rate overall improved from 61.6 % to

65.2% but the classification for those receiving a promotion improved from 0% to 28.3%.

The variance accounted for was small; the Nagelkerke R^2 was .09. Occupation groups

and size of the HR department and revenue were significant predictors as was firm size.

The Hosmer-Lemeshow goodness of fit test was significant (2005: χ^2 (8, n=20015)

=41.37, p<.001), indicating the model was not a good fit for the firm variables.

When the individual difference variables were added, the overall model for the

coefficients remained a good fit (2005: χ^2 (35, n =20015) = 251.49, p< .001) and the

variance accounted for improved slightly; the Nagelkerke R^2 was .10. The Hosmer-

Lemeshow goodness of fit tests was non-significant (2005: χ^2 (8, n=20015) =17.69,

p=.02), indicating the model is a good fit to the data. For the demographic variables

gender, designated group membership, age and some education levels were significant.

Overall classification remained the same 65.2% to 65.1% and classification rate for

presence of promotion was slightly improved, 29.5% vs. 28.3%. Finally, once

recruitment sources were added in the equation, overall model for the coefficients

remained a good fit (2005: χ^2 (37, n =20015) = 1952.49, p< .001) and the variance

accounted was slightly greater; the Nagelkerke R^2 was .11. The Hosmer-Lemeshow

goodness of fit tests was non-significant (2005: χ^2 (8, n=20015) =23.88, p=.02),

indicating good fit of the model. The overall classification rates remained the same but

the classification rate for those receiving a promotion again improved slightly from

29.5% to 30.1%. There was a tendency for over classification in the no promotion

category. Table 3.29 shows the regression coefficients, chi square tests, odds ratios and

confidence intervals. An examination of the data was conducted to determine prediction

of promotions when all formal sources were entered separately. This analysis using the

2005 data showed a similar classification level and level of variance explained; the

Nagelkerke R^2 was .12, although the classification for promotion was slightly improved

to 33.9%.

Table 3.29

Logistic regression for recruitment sources as a predictor of promotion for hires
in 2005 WES data

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Revenue	.00	.00	8.76	1	.05	1.00	1.00	1.00
Firm size	.00	.00	15.02	1	.001	1.00	1.00	1.00
Industry			289.03	13	.001			
Natural resources	.41	.13	10.14	1	.001	1.50	1.17	1.93
Primary manufac-turing	-.05	.10	.26	1	ns	.95	.78	1.16
Secondary manufac-turing	.19	.11	3.11	1	ns	1.21	.98	1.50
Tertiary manufac-turing	.13	.11	1.47	1	ns	1.14	.92	1.40
Capital manufactur ing	.10	.10	.96	1	ns	1.10	.91	1.34
constructio n	.19	.10	3.49	1	ns	1.20	.99	1.46
transportati on	-.01	.09	.02	1	ns	.99	.83	1.18
communica tion	.39	.12	10.33	1	.001	1.47	1.16	1.87
Retail	-.03	.08	.09	1	ns	.98	.83	1.15
Finance	.34	.10	12.36	1	.001	1.41	1.16	1.71
Real estate	-.41	.13	10.06	1	.05	.66	.52	.86
Business services	-.14	.09	2.45	1	ns	.87	.74	1.04
Education & Health	-.55	.08	44.41	1	.001	.58	.49	.68
unionized[a]	-.34	.04	86.69	1	.001	.71	.66	.76

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Occupation			745.66	5	.001			
Manager	1.76	.08	517.42	1	.001	5.80	4.99	6.75
professional	.97	.08	157.95	1	.001	2.64	2.27	3.07
Technical trade	.90	.07	171.54	1	.001	2.45	2.14	2.80
Sales	.38	.09	20.47	1	.001	1.47	1.24	1.73
Administrative	.65	.08	73.93	1	.001	1.91	1.65	2.22
HR Dept			152.92	5	.001			
Other	-.44	.07	35.80	1	.001	.64	.56	.74
Not assigned	-.54	.05	116.63	1	.001	.58	.53	.64
Outsourced	.20	.06	9.83	1	.05	.82	.72	.93
Owner	-.43	.04	106.15	1	.001	.65	.60	.71
One full time	-.38	.05	50.03	1	.001	.68	.62	.76
Gender[b]	.10	.03	10.73	1	.001	1.11	1.04	1.18
Designated group[c]	-.19	.03	37.46	1	.001	.83	.78	.88
education			76.30	4	.001			
<High school	-.22	.08	8.68	1	.01	.80	.69	.93
High School	.12	.06	3.48	1	ns	1.12	.99	1.27
College	.07	.07	1.12	1	ns	1.07	.94	1.22
University	.23	.06	13.97	1	.001	1.26	1.12	1.42
Age	-.03	.01	8.54	1	.01	.97	.99	.99
Life Partner[d]	.04	.03	1.13	1	ns	.97	.90	1.03

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Dependents[e]	.04	.03	1.51	1	ns	1.04	.98	1.10
Formal	.09	.04	5.44	1	.05	1.09	1.01	1.17
Informal	.11	.03	11.74	1	.001	1.12	1.05	1.19

[a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes,
[e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5,
HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture,
occupation=production, HR department=HR unit, Education=graduate school

Logistic regression for job satisfaction. The job satisfaction outcome variable

had four categories (1=very dissatisfied, 2=dissatisfied, 3=satisfied, 4=very satisfied).

Attempts to analyze the data using nominal regression and ordinal regression indicated

several assumptions were violated in particular cell counts and the test of parallel lines.

Therefore, the data was recoded to a dichotomous variable (1=very

dissatisfied/dissatisfied and 2=satisfied/very satisfied) in order to allow for logistic

regression analysis. The data were analyzed using a sequential logistic regression to

determine the relationship of recruitment sources on job satisfaction above and beyond

firm and individual differences. Specifically, I examined these variables as predictors of

job satisfaction. The organizational characteristics were: industry type (14 categories),

firm size (continuous), revenue level (continuous), unionization (dichotomous) and size

of the human resources department (5 categories).The individual characteristics were:

occupational group (6 categories), education level (5 categories), and gender, designated

group membership (2 categories) and relationship status (2 categories; presence of life

partner or not). The sources examined were the use of family and friends and the use of

formal sources. I examined recent hires in this case in line with finding from Weller et al.

2009 that recruitment sources would likely be more strongly related to outcomes in a

more recent period after hire.

In the 2005 data prior to introduction of the variables, 87.3 % of the cases were

properly classified overall but they were all in the 'satisfied' category. There was a good

model fit when the six firm characteristics were entered alone (2005: χ^2 (26, n=5521) =

165.93, p< .001).This result indicated that the predictors as a set reliably distinguished

between whether or not recruitment source was used for successful job seeking. The

classification rates did not improve from the constant only to the introduction of firm

characteristics. When the firm differences predictors were included only, the

classification rate overall was 87.6% and the classification for job dissatisfaction

remained at 0%. The variance accounted for was small; the Nagelkerke R^2 was .05.

Revenue, occupation groups and certain industries were significant predictors. The

Hosmer-Lemeshow goodness of fit tests was significant (2005: χ^2 (8, n=5521) =27.99, p<

.001), indicating the model is not a good fit to the data therefore the model was not a

good fit for the firm variables.

When the individual difference variables were added the overall model for the

coefficients remained a good fit (2005: χ^2 (35, n =5521) = 242.72, p< .001) and the

variance accounted for improved slightly; the Nagelkerke R^2 was .08. The Hosmer-

Lemeshow goodness of fit tests was non-significant (2005: χ^2 (8, n=5521 =10.06, p=.26),

indicating the model is a good fit to the data. For the demographic variables designated

group, presence of a dependent child and some levels of education were significant,

gender was non-significant. Overall classification remained the same at 87.6% and

classification job dissatisfaction was still under-classified at 0%. Finally, once

recruitment sources were added in the equation, overall model for the coefficients

remained a good fit (2005: χ^2 (37, n =5521) = 247.43, p< .001) and the variance

accounted did not change; the Nagelkerke R^2 was .08. The Hosmer-Lemeshow goodness

of fit tests was non-significant (2005: χ^2 (8, n=5521) =20.19, p=.01) indicating good fit of

the model. The tendency for over classification in the satisfied category remained and

overall classification rates did not improve. As shown in Table 3.30, firm size and some

industries, occupations, unionization, some education levels, designated group

membership, and presence of a dependent child were significant.

When the full data for 2005 was analyzed it showed similar results where the

variables did not contribute to improving the classification rates for job satisfaction and

very little variance was explained by the entry of the firm, individual and recruitment

source variables.

Table 3.30
Logistic regression for recruitment sources as a predictor of job satisfaction
for recent hires in 2005 WES data

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Revenue	.00	.00	2.34	1	ns	1.00	1.00	1.00
Firm size	.00	.00	4.59	1	.05	1.00	1.00	1.00
Industry			42.11	13	.001			
Natural resources	1.66	.47	12.35	1	.001	5.27	2.09	13.33
Primary manufac-turing	.36	.26	1.86	1	ns	.17	.86	2.38
Secondary manufac-turing	.35	.29	1.49	1	Ns	1.42	.81	2.50
Tertiary manufac-turing	.68	.31	4.77	1	.05	1.97	1.07	3.64
Capital manufacturing	.78	.28	7.63	1	.01	2.17	1.25	3.76
construction	.98	.27	12.84	1	.001	2.67	1.56	4.56
transportation	.54	.22	5.93	1	.05	1.72	1.11	2.65
communication	.150	.49	9.42	1	.01	4.48	1.72	11.68
Retail	.48	.20	5.52	1	.05	1.61	1.08	2.40
Finance	1.04	.28	14.17	1	.001	2.84	1.65	4.90
Real estate	.21	.31	.45	1	ns	.50	.67	2.29
Business services	.84	.23	13.52	1	.001	2.31	.148	3.60
Education & Health	.36	.25	2.00	1	ns	1.43	.87	2.35
unionized[a]	-.35	.12	8.45	1	.01	.71	.56	.89

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Occupation			56.24	5	.001			
Manager	1.07	.19	30.25	1	.001	2.91	1.99	4.26
professional	.99	.22	20.32	1	.001	2.68	1.75	4.11
Technical trade	.27	.14	3.68	1	ns	1.31	.99	1.73
Sales	.90	.19	22.10	1	.001	2.47	1.69	3.59
Administrative	.44	.17	7.17	1	.01	1.55	1.13	2.15
HR dept			20.23	5	.001			
Other	-.09	.20	.21	1	ns	.91	.62	1.34
Not assigned	.05	.15	.12	1	ns	.73	.78	1.42
Outsourced	.19	.19	.98	1	ns	1.21	.83	1.75
Owner	.43	.14	10.29	1	.001	1.54	1.18	2.01
One full time	.09	.16	.34	1	ns	1.10	.80	1.50
Gender[b]	-.03	.09	.08	1	ns	.97	.82	1.16
Designated group[c]	-.32	.09	13.07	1	.001	.73	.61	.87
education			39.48	4	.001			
<High school	.53	.25	4.47	1	.05	1.70	.69	.93
High School	.18	.23	.61	1	ns	1.19	.99	1.27
College	.00	.24	.00	1	ns	1.00	.94	1.22
University	-.32	.22	2.02	1	ns	.73	1.12	1.42
Age	.00	.00	.03	1	ns	1.00	.99	.99
Life Partner[d]	.13	.10	1.82	1	ns	1.14	.94	1.38

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Dependents[e]	.33	.10	10.54	1	.001	1.34	1.14	1.71
Formal	.04	.11	.13	1	ns	1.04	.85	1.28
Informal	.20	.10	4.18	1	.05	1.22	1.01	1.48

Note [a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes, [e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5, HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture, occupation=production, HR department=HR unit, Education=graduate school

Hierarchical regressions for number of promotions and tenure.

A series of hierarchical regressions were conducted to examine the relationship of firm differences, individual differences and the type of recruitment source on tenure. These results are summarized in tables 3.31 and 3.32. Data across the three sample years revealed similar results, therefore in lieu of reporting repeated versions of similar results, only the results for the 2003 and 2005 data are reported.

For the hierarchical regression analyses, given the work which had been conducted previously where different recruitment sources had been linked to a variety of distal outcome variables such as performance, turnover, I wanted to examine the relationship between recruitment sources and outcome variables. Therefore, firm and individual characteristics were entered on earlier steps and the variable source which was the type of recruitment source used, informal (family and friends) vs. formal was entered on the final step. Firm characteristics were entered on the first step to control for co-variation. The reasoning for the order of entry was simple; the firm usually decides when and how it will advertise a job vacancy. Normally, when a job posting is advertised the

recruitment source used is determined first and foremost by the firm advertising its

vacancy. As such, the firm characteristics should be more strongly related to the type of

recruitment source used. The individual job seekers then are faced with the task of

finding the job wherever the firm may have posted it, depending on their search

techniques and their individual characteristics which could be related to where they

search for a job.

Further, organization characteristics such as size and industry, revenue, level of

unionization are anticipated to play a role in the outcome variables such as promotions,

number of promotion and tenure, due the presence of differing working conditions and

benefits which would be expected in larger more profitable firms and based on past

research. Where appropriate, the variables were dummy coded to create vectors. Dummy

coding was chosen as the most appropriate coding technique because dummy coding is

the simplest and most straightforward manner in which to code given that none of the

firm variables requiring coding (size of the HR department, Industry, occupations groups)

had been examined in this context previously. Therefore as a result of the exploratory

nature of this portion of the data, it was determined that it was best to utilize simple

straight forward coding to determine if there was a relationship of the variable and the

nature of the relationship. As well, there were logical reference groups within each of the

variables of interest (education, industry, occupation group and size of the HR

department) and therefore dummy coding was deemed the most appropriate coding

technique.

A hierarchical regression was employed to determine the degree to which firm

and individual differences predicted number of promotions and if recruitment source type

contributed to the prediction of the number of promotions beyond the prediction afforded

by firm and individual differences. Table 3.31 provides the unstandardized regression

coefficients (B), the standard error, the standardized regression coefficients as well as the

R, R^2 and adjusted R^2 after entry of each group of variables. In this case less than 10% of

the variance was again explained in number of promotions by the variables entered in the

equation (2003: 9.9%; 2005:9.3%). Most of the variance was predicted by firm

characteristics (2003: 8.7%; 2005: 8.9%). Coefficients for industry, firm size

occupational group were significant for both samples as were education level, age, gender

and designated group membership were also significant in both samples. In the 2003

sample the coefficient for type of recruitment source was significant the change in the

variance explained was also significant (F_{change} (1, 16670) = 33.70, p<.001),

unfortunately the variance change resulting from recruitment sources was .04, less than

1%.

After step 1, R^2 =.087 in the 2003 data and R^2=.089 in the 2005 data (2003: F

$_{change}$ (21, 16681) =76.01, p<.001; 2005: F_{change} (21, 19283) =90.82, p<.001). After step

2, R^2 =.06 in the 2003 data and R^2=.09 in the 2005 data (2003: F $_{change}$ (9, 16672) =16.77,

p<.001; 2005: F_{change} (9, 19274) =9.72, p<.001). After step 3, R^2 =.10 in the 2003 data

and R^2=.10 in the 2005 data (2003: F $_{change}$ (2, 16670) =33.70, p<.001: 2005; F_{change} (1,

19272) =7.73, p<.001).

Table 3.31

Hierarchical Regression Analysis predicting number of promotions from type of
recruitment source used

	2003 Survey			2005 Survey		
	B	Std. Error	Beta	B	Std. Error	Beta
Step1						
Industry						
Primary	.30	.08	.03***	.47	.07	.05***
Manufacturing	.35	.04	.10***	.35	.04	.10***
Construction	.45	.06	.07***	.40	.05	.07***
Transportation	.29	.05	.07***	.36	.04	.09***
Communications	.45	.08	.05***	.44	.07	.05***
Retail	.31	.04	.10***	.14	.04	.05***
Real Estate	.72	.06	.12***	.63	.05	.11***
Business services	.22	.09	.02***	.07	.07	.01
Education & Health services	.18	.05	.04*	.22	.04	.06***
Firm Size	1.65E-005	.00	.02**	.00	.00	.08***
Revenue	-6.15E-011	.00	-.01*	3.61E-011	.00	.01
Size of HR department						
Not assigned	-.56	.04	-.14***	-.30	.03	-.08***
Outsourced	-.18	.04	-.04***	-.10	.04	-.02**
Owner	-.52	.03	-.18***	-.26	.03	-.09***
One person	-.47	.04	-.11***	-.23	.04	-.05***
Occupational group						
Manager	.89	.05	.22***	1.02	.05	.26***
Professional	.19	.05	.04***	.52	.05	.12***
Technical	.28	.04	.10***	.41	.04	.15***
Sales	-.24	.05	-.05***	.20	.05	.04***
Administrative	.09	.05	.02	.18	.04	.05***
Unionization[a]	-.13	.03	-.04***	-.22	.03	-.06***
Change Statistics	$R=.30$, $R^2=.09$, Adjusted $R^2 = .09$, SEE=1.34 F_{change} (21, 16681) =76.00, $p<.001$			$R=.30$, $R^2=.09$, Adjusted $R^2 = .09$, SEE=1.29 F_{change} (21,19283) =90.82, $p<.001$		

	2003 Survey			2005 Survey		
	B	Std. Error	Beta	B	Std. Error	Beta
Step 2						
Education level						
Less high school	-.05	.06	-.01	-.08	.05	-.02
High School	.08	.05	.03	.04	.05	.02
College	.08	.06	.02	.01	.05	.00
University	.12	.05	.04*	.07	.05	.02
Age	-.01	.00	-.05***	-.00	.00	-.03***
Gender[b]	-.06	.02	-.02**	-.01	.02	-.00
Designated group[c]	-.21	.02	-.07***	-.14	.02	-.05***
Life partner[d]	.03	.03	.01	.00	.02	.00
Dependent child[e]	.01	.02	.01	.04	.02	.02**
Change Statistics	$\Delta R^2=.01***, R=.31, R^2=.10,$ *Adjusted* $R^2 = .09$, SEE=1.33 F_{change} (9,16672) = 16.77, $p<.001$			$\Delta R^2=.00***, R=.31, R^2=.09,$ *Adjusted* $R^2 = .09$, SEE=1.29 F_{change} (9,19274) = 9.72, $<.001$		
Step 3						
Source type						
Formal	-.08	.03	-.03**	-.06	.02	-.02**
Informal	.12	.03	.04***	.02	.02	.01
Change Statistics	$\Delta R^2=.00***, R=.32, R^2=.10,$ *Adjusted* $R^2 = .10$, SEE=1.33 F_{change} (2,16670) =33.70, p<.001			$\Delta R^2=.00***, R=.31, R^2=.10,$ *Adjusted* $R^2 = .09$, SEE=1.29 F_{change} (2,19272) =7.73, p<.001		
Model Summary	$F(32, 16671)=57.34, p<.001$ 10% of variance explained overall			$F(32, 19305)=63.10, p<.001$ 10% of variance explained overall		

Note * $p < 05$, ** $p < 01$, *** $p < 001$ [a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes, [e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5, HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture, occupation=production, HR department=HR unit, Education=graduate school

A hierarchical regression was employed to determine the degree to which firm and individual differences contributed to tenure and if type of recruitment source use contributed to the change in variance explained in tenure beyond firm and individual differences. Table 3.32 displays the unstandardized regression coefficients (B), the standard error, the standardized regression coefficients as well as the R, R^2 and adjusted R^2 after entry of each group of variables. Approximately 21% of the variance was explained in both samples (2003: 21%; 2005: 21%). The coefficients for firm size, occupational group and unionization as well as those for age, education, designated group membership and presence of a dependent child were consistently significant in both samples. The coefficient for type of for use of formal sources and direct employer recruitment was also significant but the addition of the type of recruitment source used did not reliably improve R^2. Most of the change in R^2 was predicted by firm and individual differences.

After step 1, $R^2 = .05$ in the 2003 data and $R^2 = .05$ in the 2001 data (2003: F_{change} (21, 16681) =42.42, p<.001; 2005: F_{change} (21, 19283) =45.47, p<.001). After step 2, R^2 =.21 in the 2003 data and $R^2 = .20$ in the 2005 data (2003: F_{change} (9, 166672) =358.91, p<.001; 2005: F_{change} (9, 19274) =410.99, p<.001). After step 3, $R^2 = .21$ in the 2003 data and $R^2 = .21$ in the 2005 data (2003: F_{change} (2, 16669) =13.71, p<.001; 2005: F_{change} (2, 19272) =65.65, p<.001). Unfortunately, type of recruitment source did not contribute significantly to the prediction of tenure.

Table 3.32

Hierarchical Regression Analysis predicting tenure from type of recruitment source used

	2003 Survey			2005 Survey		
	B	Std. Error	Beta	B	Std. Error	Beta
Step1						
Industry						
Primary	.17	.34	.00	-.81	.31	-.02**
Manufacturing	.04	.18	.00	.11	.17	.01
Construction	-.14	.24	-.01	-.48	.22	-.02**
Transportation	-.14	.19	-.01	-.28	.18	-.02
Communications	.27	.32	.01	-.71	.30	-.02**
Retail	.27	.17	.02	-.39	.16	-.03**
Real Estate	-.04	.24	-.00	-.94	.22	-.03***
Business services	-.10	.36	.00	-.13	.32	-.00
Education & Health services	-.45	.19	-.02*	-.39	.18	-.02
Firm Size	9.64E-.005	.00	-.03***	-6.64E-005	.00	-.01
Revenue	2.64E-010	.00	.01	2.43E-011	.00	.00
Size of HR department						
Not assigned	.13	.15	.01	.18	.14	.01
Outsourced	-.08	.17	-.00	-.75	.18	-.03***
Owner	.40	.12	.03***	.11	.11	.01
One person	-.06	.15	-.00	-.45	.15	-.02**
Occupational group						
Manager	.50	.21	.03*	.26	.19	.02
Professional	1.03	.22	.05***	.90	.21	.04***
Technical	.96	.17	.08***	1.20	.16	.10***
Sales	-.28	.22	-.01	.88	.20	.04***
Administrative	.72	.20	.04***	1.03	.19	.06***
Unionization[a]	1.96	.12	.12***	1.85	.11	.11***
Change Statistics	R=.21 , R^2=.05, Adjusted R^2 = .05, SEE=5.99 F_{change} (21, 16681) =42.42, p<.001			R=.22 , R^2=.05, Adjusted R^2 = .05, SEE=6.06 F_{change} (21, 19283) =45.47, p<.001		

	2003 Survey			2005 Survey		
	B	Std. Error	Beta	B	Std. Error	Beta
Step 2						
Education level						
Less high school	1.57	.25	.09***	.99	.23	.05***
High School	1.49	.22	.12***	.72	.21	.06***
College	1.21	.23	.08***	.59	.22	.04**
University	.91	.22	.06***	.68	.21	.05***
Age	.21	.00	.04***	.20	.00	.39***
Gender[b]	-.58	.10	-.05***	-.47	.09	-.04***
Designated group[c]	-.67	.10	-.05***	-.35	.09	-.03***
Life partner[d]	.18	.11	.01	.79	.10	.06***
Dependent child[e]	-.24	.09	-.02*	-.29	.09	-.02***
Change Statistics	$\Delta R^2=.15***, R=.45$, $R^2=.21$, Adjusted $R^2 = .20$, SEE=5.48 F_{change} (9,16672) = 358.91, $p<.001$			$\Delta R^2=.15***, R=.45$, $R^2=.20$, Adjusted $R^2 = .20$, SEE=5.55 F_{change} (9,19274) = 410.99, $p<.001$		
Step 3						
Source type						
Formal	-.63	.12	-.04***	-.80	.10	-.06***
Informal	-.12	.10	-.01	.25	.10	.02**
Change Statistics	$\Delta R^2=.00***$, $R=.46$, $R^2=.21$, Adjusted $R^2 = .21$, SEE=5.48 F_{change} (2,16670) =13.71, $p<.001$			$\Delta R^2=.01***$, $R=.45$, $R^2=.21$, Adjusted $R^2 = .21$, SEE=5.54 F_{change} (2,19272) =65.65, $p<.001$		
Model Summary	$F(32, 16671)=131.64, p< .001$ 21% of variance explained overall			$F(32, 19273)=30.65, p< .001$ 21% of variance explained overall		

Note * $p < 05$, ** $p < 01$, *** $p < 001$ [a]Unionized 1=no, 2=yes, [b]Gender male=1 female=2, [c]Designated group, 0=no, 1=yes, [d]Partner 1=no 2=yes, [e]Dependents 1=no 2=yes, Education 1= less high school, 4= university, occupation manager=1, admin=5, HR not assigned=1, one person=5, formal=1, informal=2 Reference groups Industry= Information & culture, occupation=production, HR department=HR unit, Education=graduate school

3.4 Discussion

This study answered a wide range of recruitment source related questions. Of particular importance, it provided the first ever, large sample, multiple occupation type, and multiple industry investigation into the incidence of recruitment source use across several years. The results indicate an evolution of recruitment source use in firms and amongst similar types of employees. Thus the multi-year workplace data collection provide a never before look at how recruitment source use can evolve over time.

Breaugh and Starke (2000) have argued that few studies in recruitment understand how complex recruiting can be and take that into account when designing their research. Although several recruitment source studies have argued that differences exist in the quality of applicants depending on whether formal or informal sources are used few have specifically looked at the differences if they exist. The results indicate an evolution of recruitment source use in firms and amongst similar types of employees. The multi-year workplace data collection provide a never before look at how recruitment source use can change over time. Of greatest interest was the large degree of current and increasing use of family and friends as a job source for those who are successfully employed. This provides confirmation of previous small sample results as well as single industry studies that informal forms of recruitment play a large role in employee hiring.

Low incidences overall of other sources may be a concern for those companies

who want to increase their diversity, as has been argued by McKay and Avery (2006). If

the employers' current organization lacks diversity reliance on family and friends as

recruitment sources may be problematic as had been suggested by Barber (1998). The

low incidence of the use of multiple recruitment sources was also a concern in this data

set a relatively small percentage of participants reported using more than one recruiting

source to find their jobs. This may mean that organizations are not reaching the

individuals they want to reach if they have not chosen their recruitment source (s)

carefully and properly targeted their recruitment. As well, low incidences of other source

use may also indicate that employers are wasting coverage by using other advertising,

firm based or formal recruiting sources when they could use employee referrals or other

such informal programs or activities.

3.4.1 Hypothesis 1

The results support Hypothesis 1, that informal job sources were used more

frequently than formal sources by successfully hired employees in Canada's labour

market and are the primary source of job information. It is clear that informal sources are

used most often. As predicted, friends and family were the single most important source

of job information. This supports much of the previous literature from single occupation

studies. Usage of family and friends as a source had the single largest increase in use

from 1999 to 2001 however, a similar decrease occurred in the 2003 data. It is possible

some other unknown factor was related to the variance in the use of family and friends. It

is unclear whether this fluctuation is due to micro or macro forces. Alternatively, this

may represent sampling error during this period or chance as a result of different samples

being drawn randomly amongst firm employees. It is also possible that perhaps there was

some effect caused by employment rate were family and friends might be used more

frequently in periods of high unemployment, an examination of the employment rate and

the state of the economy using Statistics Canada reports did not support this possibility. It

appears that across all sample years (1999 to 2005), the usage of family and friends as a

recruitment source was the single most used job information source. Many organizations

have instituted reward programs for employee referrals. While this may be an effective

way of finding a pool of qualified candidates who fit the organization's culture, if an

organization wants to improve organizational diversity, looking amongst current

employees or relying on current employees may not be appropriate (Barber et al., 1999).

3.4.2 Hypothesis 2

This hypothesis stated that the Internet would an increase in the use of the

Internet as a recruitment source for successive cohorts of respondents in 2001, 2003 and

2005 particularly for recent hires. This hypothesis was supported. Although there was

little incidence of Internet usage over the entire sample as compared to other recruitment

sources, the usage was the one with the greatest growth rate overall. In addition, 91.8% of

those who did find a job using the Internet were hired in the last two years. Although the

incidence of Internet use rose sharply from 0.2% in 1999 and continues to grow, it was

still one of the least used sources. This small incidence might be explained by the fact

that only recent hires would be likely to use the Internet due to its recent introduction as a

recruitment source; however, in the overall sample, 40% or more (2003: 41.6%; 2001:

50.7 %; 1999: 40.6%) of those surveyed had been in their current position for two years

or less. Further, even when only those hired in the last year are considered, as was clear

in Table 3.6 that Internet as a recruitment source is not as highly used as the practitioner

reports have indicated, at least in 2005 where only 7.2% of recent hires reported the use

of the Internet as a recruitment source. Therefore, this explanation is unlikely.

When only those hired in the last two sample years were considered, the Internet

usage rate rose dramatically. The use of the Internet as a recruitment source more than

tripled from 1999 where it was less than one percent (0.6%) to 2001 (2.5%) and doubled

to 5.1% from 2001 to 2003 (see Table 3.6). There did appear to be a significant

relationship of age and tenure with the use of the Internet. In addition to those more

recently hired being more likely to use the Internet as a recruitment source, those between

the ages of 25 and 34 were more likely to use the Internet to find a job for instance in

Table 3.8 the highest rate of Internet usage in the 2005 data was for those aged 25-34 and

hired in the last year (12.7%), it was interesting to note that the youngest age group 15-24

hired in the last year only reported 6.3% usage of the internet as a recruitment source,

contrary to expectations. These increases in Internet source usage are not nearly as

substantial or dramatic as those touted in the practitioner media, which has argued since

the late nineties that the Internet is the "only" way to recruit (Cullen, 2001; Zall, 2000). It is of note that the rates of Internet recruitment have been increasing for different occupation groups, in particular there seems to be increased usage of the Internet among those in managerial occupations across the sample years. The highest rates of Internet usage a job information source has been among professionals, technical trades and more recently clerical staff, sales and production workers have a low usage overall.

Although the Internet seems to be used most often by recent hires, it was still reported to be used to a lesser degree than informal sources and help wanted ads as a source of information for recruitment, at least in this study across large samples of employees and over four data sets. This may mean that organizations that rely exclusively on Internet recruiting such as the federal government may be severely restricting their applicant pool and limiting their chances of finding the best person for the job. One exception would be if companies are looking for individuals who are more comfortable with technology and are more Internet savvy. An interesting question to push this matter further would be regarding the quality of Internet applications. There has as of yet been little research in this area. There as also been little research in the area of diversity and Internet recruitment.

3.4.3 Hypothesis 3

Hypothesis 3a proposed that individual employee differences would correlate with use of recruitment sources, specifically occupation, education level, age, gender, membership in designated groups. Several of individual differences in recruitment sources were found. Age was slightly negatively correlated with the use of family and friends as a recruitment source. Recent hires in the 2005 were even more likely to have informal negatively correlated with age. According to cross tabular results, those under 24 were most likely to use informal sources to find their jobs across all sample years. Those in the 25-34 age range were more likely than those in the 15-24 age range to use the Internet. Those in the 45-54 age range were more likely to use help wanted ads and HRDC. Those in the 35-44 age range reported they were most likely to use job fairs as a recruitment source and those in the 25-44 age groups reported using recruitment agencies more frequently.

For designated groups in 2001, 2003 and 2005, the cross tabular results for use of formal and informal sources was equivocal. Designated group embers use of formal sources differences were non significant for across all years as compared to non-designated group members. There was a significant difference indicating that designated group members were less likely to use formal sources and more likely to use informal sources in 2003 and designated group members were more likely to report using the Internet as a recruitment source. This is an interesting result as often firms are cautioned

against the use of informal sources as potential sources of discrimination against

members of designated groups. It should be kept in mind that the sample data included a

large number of small businesses as it was selected to be representative of the population,

therefore, these results may reflect this difference.

Gender was slightly negatively correlated with informal source usage indicating

that women were slightly less likely to use informal sources than men for job recruitment,

cross tabular results also support these findings, women were also significantly more

likely to report using help wanted ads and HRDC. Women, in comparison to members of

designated groups, had a higher usage of both formal recruitment sources and the

Internet. At higher levels of experience there was a slightly greater reported use of

informal recruitment source. Across sample years there appeared to be a tendency,

contrary to expectations, for those with higher education levels to use more formal

sources. This tendency was even stronger among those recently hired in the 2005 data.

Cross tabular results indicated that those with high school or less generally tended to use

informal recruitment sources significantly more than those at higher levels of education.

Hypothesis 3b postulated that differences in the firm (size, revenue, formalization

of HR, type of industry, occupation) were correlated with the type of job source used.

This was supported by the results of the logistic regression; The effect size was extremely

small as were correlations and the classification rates were lower than anticipated. At

most, close to 5% of the variance in formal or informal source use was explained by firm

characteristics. The strongest evidence for difference in use of recruiting techniques

seems to come from different occupational groups. Findings from cross tabular analyses

provided further support for different occupational groups using different types of job

sources. Those in production, clerical and sales occupations tended to use informal

sources more frequently than formal sources. Managers and professionals reported using

formal sources more frequently. Interestingly professionals and administrative reported

the highest rates of using the internet as a recruitment source. Results indicated this

tendency even more strongly in recent hires in the 2005 data. Those in technical

occupations, sales and production workers are more likely to use informal sources and

those in professional and administrative occupations are more likely to use formal

sources.

Hypothesis 3b also stated that employees at larger firms would be more likely to

have been recruited by formal sources, and that size of the Human resources department

would be associated with greater use of formal recruitment sources. Overall results

indicated significant differences in formal and informal recruitment source usage by firm

size with a tendency for more formal sources to be used in larger organizations and more

informal source in smaller organizations. Those in organizations with over 500

employees tended to report being recruited by formal sources approximately 40% of the

time, and by informal sources about 30% of the time. Differences were smaller in the

2003 data. Among those hired in the last year there was a significant tendency for more

formal recruitment sources (internet, union postings, HRDC, on-campus, recruitment

agencies) to have been used when there the organization was larger. Despite this there

was not a significant difference for all formal sources and for use of help wanted ads.

Barber et al. (1999) have suggested that if the firm is large enough and well

known enough applicants will adjust their job seeking style if they wish to become part of

that organization. This does not seem to be fully supported. More homogeneous findings

may be found with greater segmentation of the data. It may be that this finding is stronger

within a single industry or if only small and large firms were compared. It has been

suggested in the past that industry type may be related to job source use (Barber, 1998;

Rynes, 1991; Zottoli & Wanous, 2003). Future studies may want to take more in-depth

looks at different industries to examine whether the results would differ substantially

from industry to industry. For type of human resources department, there were significant

differences in several types of recruitment sources, according to the chi-square results.

Formal sources in general and several specific formal sources (recruitment agency, on-

campus recruitment, job fairs, internet, help wanted ads) were more likely to have been

used in larger and more formalized HR departments as predicted. There were different

tendencies in the use of formal sources across industries, across the various sample years.

Those in business services industries and education and health services industries tended

to indicate greater use of formal sources than those in natural resources and primary

manufacturing industries, however there appeared to be a fairly wide variation between

years. For revenue, there was a higher use of the internet among those recently hired in

the 2005 data for organizations with less revenue, perhaps due to the lower cost of

internet advertising as compared to newspapers. Although there were significant

differences in the reported use of formal and informal sources by revenue group, these indicated a higher use of formal sources at very low revenue levels and higher revenue levels above $ 5 million.

Correlations and the classification rates were lower than anticipated. For instance, firm size was significantly positively correlated at the $p<.001$ (2-tailed) level with the use of formal recruitment sources. Firm size was also negatively correlated with the use of family and friends. The correlations between firm size and sources were smaller and non-significant for those hired in the last year. Logistic regressions also examined the extent to which firm characteristics explained recruitment source use; these variables explained at most 5% of the variance in use of recruitment sources. Barber et al. (1999) have suggested that if the firm is large enough and well known enough applicants will adjust their job seeking style if they wish to become part of this organization. This does not seem to be fully supported. More homogeneous findings may be found with greater segmentation of the data. It may be that this finding is stronger within a single industry or if only small and large firms were compared. Future studies may want to take more in-depth looks at different industries to examine whether the results would differ substantially from industry to industry.

Hypothesis 3c proposed that the combination of employee and firm characteristics would provide better predictors of whether formal or informal sources were used than either set of predictors alone. The logistic regressions conducted for Internet and

formal/informal recruitment sources that neither the firm differences nor the individual

differences fully explained the use of recruitment sources or the Internet. When firm and

individual differences were combined, the test of goodness of fit of the data (Hosmer-

Lemeshow) was closer to being non significant and indicating that the variables were

good predictors of the recruitment source outcome. Classification rates for recruitment

sources did improve with the combination of both types of predictors as well. Overall,

this hypothesis was not supported. Although it appears that the combination of individual

and firm differences explains the greatest amount of variance overall for the logistic

regressions the classification rates and model fit were poor.

3.4.4 Hypotheses 4 and 5

These hypotheses predicted that firm and individual candidate characteristics

along with type of source used will be related to outcomes in terms of employee

promotion, job satisfaction and tenure. A series of hierarchical regressions examined if

recruitment source contributed to outcomes such as obtaining promotions, being satisfied

with one's job and tenure. Findings indicated that once firm and individual characteristics

were controlled, recruitment source on its own contributed little to the final outcomes.

Therefore these hypotheses were generally not supported (see Tables 3.29 to 3.32). In

the case of promotions, the Nagelkerke R^2 was small (.12). For number of promotions,

less than 10% of the variance was explained again most of it was as a result of firm

differences. The inclusion of individual and firm differences and type of recruitment

source explained over 20% in the variance for tenure (see Table 3.32). Most of the

variance in tenure was explained by individual differences, age in particular. Prediction

for job satisfaction was even lower. The Nagelkerke R^2 was smaller (.08) for recent hires

in 2005. Numerous interesting and useful firm and individual differences in source usage

were found overall which may be of assistance to practitioners and researchers in refining

recruitment source research h further. However, contrary to expectations and previous

meta-analytic research (Zottoli & Wanous, 2000) there was little or no support for the

relationship of formal or informal recruitment sources with outcome variables in this data

even when only recent hires were examined. It may be however that stronger

manipulations and measures and the inclusion of more psychometric variables may have

found stronger relationships. For instance the measure of job satisfaction was recoded to

allow for analysis due to the structure of the outcome variable and there was only one

type of informal source "family and friends" a greater variety of informal sources may

have resulted in stronger findings and a measure of prior job information or source

informativeness may have provided stronger evidence of a relationship. Unfortunately

these types of variables were not available in study One.

3.4.5 Limitations of Study One

Although the data are rich in the sense that it is an extremely large sample and a

very representative sample of the Canadian population of privately owned businesses, it

is limited in that the survey does not use well-constructed and highly validated and

reliable psychometric scales. Therefore in order to measure several conceptual variables

proxy variables had to be used in particular for promotion and job satisfaction. The use of

proxies may have attenuated findings. The study was also limited in that several

questions have dichotomous response possibilities, which severely limited the types of

analyses, which could be conducted.   Furthermore, the way the question regarding

recruitment sources was formulated may limit the conclusions that can be drawn

regarding the incidence of sources used. It is not clear from the manner in which the

question was posed whether employees used other sources unsuccessfully or whether

these were the sources they typically used in job searches, from the job seekers

perspective this question may be the more pertinent one.

As well, there were constraints in reporting true unweighted values, and in

reporting certain small cells which may have been of interest. Several examples of this

are in the Internet cross-tabular analyses as well as other less frequently used sources.

Therefore, there are certain instances where comprehensive data reporting was

impossible. Despite numerous constraints, the data which have been reported is

interesting and valuable and will contribute to the overall research on recruitment by

providing a fuller picture of recruitment process and factors influencing recruitment

source usage.

In addition there are limitations as a result of the self-report nature of the data and

as a result of the use of retrospective data and the recall which may have been required of

employees for instance of the recruitment sources used to find their jobs. This limitation

is attenuated due to the examination of more recent hires and due to the autobiographical

and highly salient nature of the data collected. Successfully finding a job is a salient self

event which has important thematic components and such salient events have been found

to facilitate recall (Ghetti and Weade Alexander, 2004; Laney, Campbell, Heuer and

Reisberg, 2004; Smith, Hunt, McVay and McConnell, 2007). Potential limitations to the

research as a whole will be discussed and addressed more extensively in chapter seven.

3.5 Summary of Study One

In summary, the data indicated that when firm and demographic differences were

controlled recruitment source itself was not strongly related to outcome variables that

have been examined by previous authors. In addition, the firm and individual differences

variables themselves were not strongly correlated to the use of formal or informal (family

and friends) recruitment sources. This may indicate that the relationships for turnover

intentions, performance, job satisfaction and other outcome variables which have been

found in the past are correlated with another variable or artifact which is influencing the

findings in many of the previous studies as a result of smaller less representative samples

than was available here. Perhaps when occupation and industry is tightly controlled with

range restriction, the findings related to outcome variables and demographic differences

in source usage are more compelling.

It may however also be the case that information provided by recruitment sources and not the sources themselves is what influences outcome results. In this instance, the only informal source available was 'family and friends'. It was not clear whether 'family and friends' were inside the organization or outside the organization. Employee referrals were not one of the recruitment sources available to be assed in Study One. Perhaps previous studies in the literature which have found recruitment source effects tapped into realistic information about the job or organization in a way which was not possible within these Statistics Canada data sets with the current questions. For instance, amount of information gathered and received perceived informativeness of recruitment sources and personality characteristics might assist in explaining patterns of recruitment source usage.

While these questionnaires taped into large data sets and provide a wealth of information, there were no measures of informativeness of recruitment sources, personality variables or of recruitment source perceptions in the WES data. As such, further research on recruitment sources may benefit from examining recruitment sources more closely to determine if and how they relate to perceptions of the organization/ job and how these perceptions might relate to outcomes. Study Two will seek to provide qualitative data about recruitment source perceptions and reactions to recruitment and selection experiences to assist in developing the questionnaire in Study Three.

The results in this study show many significant and interesting findings which provide a more in-depth and complete picture of the incidence of recruitment source use than have been available in the past. Because of the large representative sample which crosses a number of industries and all occupational groups we are able to see the overall incidence of recruitment source use and how variables related to recruitment source interact. As well, the availability of multiple years of data lends credibility to the findings and gives a picture of both the consistent and changing nature of recruitment source use. Thus a number of questions which have heretofore been unanswered due to small unrepresentative samples have also been explored and addressed in this study. As the complexity of human resources practices increase, it will become essential for organizations to further develop their recruitment tactics to ensure an appropriate potential pool of candidates is reached. Future research on recruitment should examine the relationships between using certain recruitment sources on diversity recruitment and refine the number and type of variables in order to develop a better prediction and classification of the use of different sources.   As well, presenting segmented results by occupational group and industry may also provide researchers and practitioners with a better picture of recruitment sources.

Organizations do not often evaluate recruitment effectiveness and when they do, it is usually done by counting the number of applications received. Few attempts are made to determine the relationship between the recruitment sources used and applicant pool size, relative quality of applicants and success rate following hire, yet it essential that HR

determine effectiveness to show its worth (Grossman 2000). Using utility analysis

methodology, Carlson, Connerley and Mecham (2002) and Boudreau (1991) argue that it

is essential to assess the quality of applicants attracted in a recruiting effort, they argue

that the quality of applicants attracted has an important impact on recruiting costs and

ultimately, cost to the organization. Although several recruitment source studies have

argued that differences exist in the quality of applicants depending on whether formal or

informal sources are used.

Chapter Four

Literature Review —Study Two

4.1.1 Main Objective

The literature review presented in Study One and reflected in several reviews and meta-analyses (Barber; 1998, Breaugh, 2008; Breaugh & Starke, 2000; Conard & Ashworth, 1986; Rynes, 1991; Zottoli & Wanous, 2000) demonstrated that much, if not all, of the research on recruitment sources and attributed outcomes is inconsistent and contradictory. Much of recruitment source research has been atheoretical and as a result of this and the nature of the data available, Study One was also mostly empirical and atheoretical. Its purpose was to discover baseline recruitment source usage and some associated correlates, in order to provide better direction for future research. Previous recruitment studies that have been used to draw conclusions regarding sources and outcomes generally involved relatively small sample sizes which were tied to specific occupations or industries. Study One allowed the examination of source usage and related outcomes in a very large sample while controlling for a number of factors that could prejudice the results. Several hypotheses based on the previous literature were developed to examine this large database. In particular, I was interested in the use of formal vs. informal recruitment sources. When variables such as firm size and individual differences were controlled, there were negligible differences in outcomes that could be attributed to recruitment sources. Contrary to the hypotheses, when taken together, formal and informal sources were used at similar rates, although informal sources were used more often overall. Furthermore, despite the expectation that Internet would be a very

frequently used recruitment source among recent hires, it was used much less frequently than anticipated.

A partial explanation for the Study One results may reside in the nature of the survey. The dataset used in Study One was obtained through a survey developed by Statistics Canada labour economists; it was not designed to answer theoretically-related questions about recruitment sources. The survey simply asked respondents to identify the sources they had used in searching for a job. The survey did not ask respondents what strategies they would pursue, how they perceived different recruitment sources, which recruitment sources they would use as part of searching for a job, or which strategies they found to be most effective. The failure to ask the respondents these additional questions has led to gaps in our understanding of the recruitment process and limits our knowledge solely to quantitative aspects as examined in Study One.

Study Two attempts to redress some of the shortcomings of Study One. Its main objective is to gain a better understanding of how applicants look for jobs, which recruitment sources they use and how these sources are perceived. Study Two uses a qualitative methodology to obtain a better understanding of how job applicants view different approaches to recruitment and the use of various recruitment sources. The results from these qualitative interviews with workers will then be used to develop a questionnaire that will be used in a larger quantitative study, which will hopefully fill in some of the gaps from Study One's results.

The explanations underlying the use of recruitment sources are not fully specified,

tentative and difficult to test separately in an empirical fashion (Horvath, 2010; Rynes,

1991, Rynes and Cable, 2002, Wanous and Collela, 1989). A deeper, qualitative

understanding of recruitment source usage and outcomes may help explain the

differences that have occurred throughout recruitment source research and help to explain

how and why certain recruitment sources are used. It may also provide some answers as

to whether information is related to some of the relationships to outcomes which have

been found for recruitment sources in past literature. The underlying reasons why certain

recruitment sources are related to specific outcomes, such as lower absenteeism, higher

turnover or differences in performance and job satisfaction have not been fully explored

(Horvath, 2010) in the previous, quantitative research studies. A qualitative perspective

may also allow for a more comprehensive understanding of the reasons why recruitment

sources are used why quantitative studies have obtained contradictory or equivocal

results and why recruitment source might be related to outcomes. Qualitative techniques

may shed some light on the theoretical impasses in the literature by providing a deeper

understanding of the phenomena which has been studied quantitatively and provide some

alternative directions for future recruitment research.

4.2 Qualitative Research in Recruitment

Only a handful of qualitative studies have examined recruitment issues of any kind. These were mentioned briefly in Study One, and will now be discussed in greater detail. Two studies in particular used a combination of qualitative and quantitative methods. The first, an unpublished conference paper by Stafsudd and Collin (1999) examined the recruitment process from the organization's perspective. The second, Rynes, Bretz and Gerhart (1991) examined university students' perceptions of an on-campus recruitment process.

Stafsudd and Collin (1999) examined the disconnect between recruitment policies and the actual processes managers use for recruitment using case study data obtained in a large Swedish corporation. Their paper argued that recruitment policies were a type of espoused theory which would not be reflected in the recruitment process, whereas actual recruitment decision assumptions resembled theory-in-use, as defined by Argyris and Schön (1974). Stafsudd and Collin (1999) gathered archival information about the corporation. They also sent surveys to the top managers and conducted loosely structured interviews. Stafsudd and Collin (1999) found that despite a company policy stating a preference for internal recruitment, there was a greater degree of external recruitment for managers, and a tendency to promote managers who were initially recruited externally as managers to higher managerial levels. During the data collection, hiring managers noted several exceptions to the internal recruiting policy such as when specialized knowledge

was required and when top management executives were recruited. The underlying

message in Stafsudd & Collin's research was that what the companies' policies state they

do in recruitment is not necessarily what they do in practice. As such, espoused

recruitment theories may vary somewhat from theories in use (Stafsudd & Colin, 1999).

Although this is interesting food for thought, Rynes et al.'s (1991) study is more

closely related to the current research. Rynes et al. (1991) used a two-step interview

technique to gather data regarding college students' perceptions of on-campus

recruitment. Students were interviewed at the beginning and at the end of the on campus

recruitment process during the second semester of their last year of university. Using

both quantitative and qualitative techniques to analyze the data, Rynes et al. (1991) found

evidence that recruitment practices were related to job choice. Their research showed that

candidates make judgments about organizations and jobs based on signals they receive

from recruiters consistent with signaling theory. Rynes et al. (1991) further concluded

that contextual factors such as previous knowledge of the organization and type of

recruiter mediated interpretations about companies. Signaling theory in this context

essentially argues that the manner in which recruiters treated job seekers acted as a signal

for how they would be treated if hired, and for the students' perceptions of organizational

fit. Furthermore, signaling theory suggests that due to incomplete information, applicants

will use whatever information they have at hand to make judgments regarding job and

organizational characteristics (Rynes et al., 1991). The researchers also found that

candidates with greater opportunities were more strongly affected by negative

recruitment experiences and delays in recruitment. This led them to conclude that

applicant reactions may be systematically related to the demographic characteristics of

candidates, such as gender, grades, and previous work experience (Rynes et al., 1991). It

should be noted that signaling theory is not well delineated, it does not specify which

signals applicants will use, nor does it specify why or how signals may be used to make

assessments and decisions about employment.

One of the few attempts to examine the recruitment process, extending it beyond

initial contact to decisions of job acceptance, was a longitudinal study by Taylor and

Bergmann (1987). This study looked at five stages of the recruitment process from the

initial campus interview to the job decision stage. Taylor and Bergmann (1987) found

that the characteristics of the job were the most significant predictor of applicants'

decisions to continue with the recruitment process across the five recruitment stages.

Moderating variables did not have an effect on the process. One significant limitation of

this study was the high level of participant attrition at the various stages, and the

concentration on on-campus recruitment. This focus on on-campus recruitment precluded

the study of other recruitment source relationships. The survey methodology, while

efficient, may also have obviated some of the intricacies of recruitment effects by

restricting participant responses more than an interview format. Saks and Ashforth

(1997) examined the relationship between sources of job information, perceptions of

person-organization and person-job fit with turnover intentions and stress indicators.

They found that using more formal job sources such as campus recruiting, employment

agencies and advertising was correlated with increased positive person-job and person organization fit perceptions (Saks & Ashforth, 1997). According to Barber (1998) greater focus should be placed on applicants since applicants are the drivers of the organizational process; if they do not apply organizations cannot select them. As such, only recently successful applicants were invited to participate in Study Two.

In order to gain some perspective on their recruitment process, I wanted to select participants who had fully completed the recruitment process. Further, I decided to control the effects of not being selected and of on-going unemployment periods by choosing applicants who had recently been successful in their job search. Although job search and employment are highly salient biographical and episodic events which are less subject to memory errors or memory loss (Ghetti & Weede-Alexander, 2004; Smith & Thomas, 2003), I choose to interview recently successful individuals who had had sufficient time to assess their new organization and form opinions about their choice but not so much time as to not recall events clearly.

Perceptions of Recruitment Source. There has been little research on applicant perceptions of the different types of recruitment sources. What has been examined more closely are perceptions of recruiters and their effects on applicants, perceptions of the Internet as a relatively new recruitment source, the content or informativeness of recruitment ads, and more recently the quality of word of mouth information as a recruitment source (Rynes, 1991; Van Hoye & Lievens, 2009). However Ryan and

Delany (2010) have concluded that the source of recruitment information, and its content, was related to applicant attraction in the early stages of recruitment. Much of this recruitment source research has been focused on proximal outcomes such as decisions to apply for jobs, to accept an offer or on perceptions of fit, and not on outcomes such as absenteeism, turnover or differences in performance and job satisfaction (Breaugh, 2008). I will briefly review this research as it tangentially relates to the purpose of Study Two; in addition, it is somewhat related to the realistic information hypothesis.

Recruiter Effects and Perceptions. Most recruiter effects research has centered on demographic and behavioural differences in recruiters (Breaugh, 2008). Chapman et al.'s (2005) meta-analysis, which provided one the best summaries of this research, concluded that recruiters' behaviours and applicant perceptions of a recruiter's personableness were better predictors of attraction than recruiter demographics. Turban, Forret & Hendrickson (1998) also found that recruiter behaviours mediated applicant attraction via perceptions of organizational and job attributes. Breaugh (2008) further argued that because of the limitations of many of these studies in terms of samples examined and variables assessed, there is insufficient evidence and information to determine whether applicant perceptions of recruiters lead to decisions to apply for jobs or to accept positions. He advocated for further research to address these questions. Marr (2007) concurred that the support for the effect of recruiters on applicant perceptions and decision making is mixed. Furthermore she concluded that where effects have been found such as in recruiters' "personableness", the constructs have been vaguely defined.

Breaugh (1992) argued that if there is a recruiter effect then there are certain conditions in which the effect should be stronger, such as when the recruiter is the potential manager or co-worker. Recently, Breaugh, Macan and Gambow (2008) stated that differences in results across these types of studies may reflect differences in the types of recruiters studied and the lack of detail on the recruiters provided in the studies. Breaugh et al. (2008) specifically argued that recruiters differ on their level of informativeness, their perceived trustworthiness and different signals they provide to different applicants. They concluded that more specific in-depth research was needed.

Perceptions and the Internet. Several studies have explored applicant and practitioner perceptions of the Internet as both a recruitment source and as a selection and assessment tool (Allen et al., 2007; Chapman & Webster, 2003; Van Hoye & Lievens, 2007; 2009). Bauer, Truxilo, Tucker, Weathers, Bertinlino, Erdogan and Campion, (2006) examined the issues of comfort level for using computers and privacy concerns related to on-line screening. A fair amount of research has mainly been oriented toward company website designs (Breaugh, 2008). Allen et al. (2007) found evidence to support signaling theory and informativeness in Internet-related job searches by students, who made major inferences about jobs and companies from small amounts of information. Thompson, Braddy and Wuench (2008) also found support for signaling theory related to web recruitment and willingness to pursue a job opportunity. Usability and attractiveness of the website predicted willingness to pursue employment, although attractiveness was a stronger predictor. Williamson, Lepak and King (2003) found that websites with

information oriented toward providing recruitment related information were perceived

more positively and rated as more attractive than those with more of an orientation

toward screening the applicant. Company websites for larger, well-known and well-

respected companies are more likely to generate more applicants (Rynes & Cable, 2003).

A few miscellaneous Internet studies have examined the relationship of the use of

search terms, job boards and their credibility. Jansen, Jansen and Spink (2005) found that

"jobs" and "employment" were the most frequently used search terms and that nearly half

of job searches specified location in the search request. Feldman and Klaas (2002), in

their study of recently graduating MBAs, found that 29% of respondents believed the

Internet was the most helpful job search method. In contrast, 43% felt the jobs listed on

the Internet were not relevant to their career interests.

Van Hoye and Lievens (2007) applied a source credibility theory to see if Internet

"word-of- mouth", which they labeled "word-of-mouse", would influence an

organization's attractiveness to potential applicants for nursing positions. "Word-of-

mouse" (company independent electronic information) was more effective when it related

to the whole organization, whereas testimonials (company dependent information) were

more effective when they related to individuals within the organization (Van Hoye &

Lievens, 2007).

Although Internet job postings appear to be popular and generate numerous

applicants, they have not been studied extensively by academic researchers (Breaugh,

2008). In her study of applicants at a large university, Marr (2007) did not find the

Internet to be a better or more effective source of applicants than informal sources. Marr

(2007) did, however, find that HR professionals perceived the Internet as a cost-effective

recruitment source which could generate large numbers of applicants but who were not

necessarily qualified for the advertised positions.

Jattuso and Sinar (2003) compared occupation specific job boards to generic job

ones for sales positions in three large manufacturing companies. There were no

differences in applicants' overall score of qualifications based on whether they applied

through either type of job board. Jattuso and Sinar (2003) found that applicants on

specific job boards were more educated and had better preferred job fit with the job

posting, in contrast, those on general job boards reported greater work experience leading

to equivocal results. As discussed previously, typically sources have been classified as

formal vs. informal. Jattuso and Sinar (2003) used an alternative classification system

called low vs. high interim contact to classify their sources where interim contact was

similar to informal sources but included sources not normally considered informal such

as direct targeted emails to job applicants, as high interim contact. They also found

sources with higher interim contact (informal sources) yielded more highly qualified

candidates in terms of education and technical skills in particular (Jattuso & Sinar,

2003). Further they found applicants rated specific job board as having greater perceived fit than general job boards.

Content and Informativeness of Sources. The amount of information provided to applicants and organizational attractiveness have been linked in previous studies on recruitment sources (Allen et al. 2007; 2004; Barber, 1998; Breaugh; 2008; Ryan et al., 2004; Rynes, et al., 1991). Informativeness has also been linked with some of the reasons why recruitment sources are thought to influence outcomes. The realistic information hypothesis is one of the key explanations used to explain findings of increased performance and decreased turnover and other organizational outcomes (Barber, 1998; Horvath, 2010; Rynes, 1991; Zottoli & Wanous, 2000). Allen et al. (2007) argued that at its essence, job search is an information seeking task and, as such, predicted that more informative websites would be perceived more positively. Their study of business students revealed that the amount of information provided on a website was related to intention to apply after controlling for organizational image.

There has been substantial research on the content of job advertisements and recruitment websites (Barber, 1998; Breaugh, 2008). Some researchers have examined whether more specific qualifications listed in recruitment advertising were related to the likelihood to apply (Belt & Paollilo, 1982; Mason & Belt, 1986). Others have looked at messages about the organization. Research on the content of job source advertising has even found that recruitment web sites containing pro-environmental corporate social

responsibility messages can increase applicants' intention to pursue a job (Behrend,

Baker& Foster-Thrompson, 2009). Mason and Belt (1986) found that more specific

applicant qualifications in job advertisements lead less qualified applicants to self select

out.

A variable of particular interest in this research has been informativeness of the

job ad (Allen et al. 2007; Roberson, Collins & Oreg, 2005). Roberson et al. (2005) found

that when job ads are more specific and informative, perceived person–organization fit is

higher leading to greater organizational attractiveness and higher application intentions.

Chapman et al.'s (2005) meta-analysis concluded that perceptions of fit were one of the

strongest predictors of applicant attraction.

Other researchers have examined recruitment advertising and diversity messages

(McKay & Avery, 2006). They concluded that these messages attracted minority

applicants but did not dissuade non-minority applicants from applying, although they

improve organizational impressions of female and African American applicants. McKay

and Avery (2006) found that company-specific diversity messages and images included

in job ad content increased the attractiveness of the job and of the organization to

minority candidates. This effect may be counter-productive if these messages do not

accurately represent the state of the diversity climate in the organization. In that case,

newly hired applicants may have acquired unrealistic expectations that result in decreased

person-organization fit, job satisfaction and increased turnover (Knouse, 2009; McKay &

Avery, 2006).

Word-of-Mouth. Recent research on informal recruitment sources has shown that

positive word-of- mouth correlates with candidates' application behaviour and perceived

organizational attractiveness (Van Hoye & Lievens, 2009). Using marketing and

advertising related concepts in the context of job recruitment, Van Hoye and Lievens

(2009) defined word-of-mouth as a personal communication job information source

which is independent of the company or product and not directly controlled by the

organization. Seeking word of mouth information correlated with applicant personality

factors those seeking word of mouth information were higher in extroversion and

conscientiousness. Applicants spent more time listening to negative word of mouth if the

source person was perceived as knowledgeable about the organization and the applicant

was higher in conscientiousness (Van Hoye & Lievens, 2009). These findings may have

implications for job acceptance and the treatment of internal employees in order to ensure

recruitment of top notch candidates (Van Hoye & Lievens, 2009).

4.2.1 Applicant Reactions, Perceived Fairness and Recruitment Sources

It is well understood in recruitment research that applicants bring their own

experiences and impressions of organizations to the recruitment process (Barber, 1998).

This understanding has led to research on organizational image and perceptions related to

applicant reactions and organizational attraction. Chapman et al.'s (2005) meta-analysis

concluded that organizational image was a key antecedent of applicant attraction,

although primary predictors of applicant attraction were job and organization

characteristics and expectations of being hired. Perception of organization fit also played

an important role in applicant attraction along with recruiter effects. Applicant reactions

research is concerned with the attitudes, cognitions and affective reactions which

individuals experience during the selection process (Ryan & Ployhart, 2000). There is

substantial research on applicant reactions to various selection techniques such as

intelligence tests, interview procedures, and use of technology in selection (Steiner &

Gilliland, 1996; Gilliland & Honing, 1994). Several researchers (Tom, 1971; Gatewood,

Gowan and Lautenschlager, 1993; Turban & Greening, 1997) have also found a

relationship between organizational impressions or image on recruitment results and

decisions of applicants to make an application. In contrast, there is little research on

applicant reactions to recruitment sources per se (Barber, 1998). Ryan and Delany (2010)

concluded in their recent review of literature that the research indicates that recruitment

source has a role in applicant attraction. Research regarding recruitment sources appears

to have focused mainly on the quantity and type of information provided (Barber &

Roeling, 1993; Blackman, 2006), how the information is used (Gatewood et al.1993) and

the specificity of qualifications (Belt & Paollilo, Mason & Belt, 1986). More specific

qualifications were found to lead less qualified applicants to self-select out (Mason &

Belt, 1986). Ryan and Ployhart (2000) argued that there have been two main streams of

research in the literature on applicant reactions; one of these streams is perceptions of

selection tests and the other is organizational justice, as conceptualized by the work of

Gilliland. Underlying general justice models is the assumption that people have

expectations regarding their treatment (Ployhart & Harold, 2004). According to

Gilliland's (1993) model, justice rules and expectations can be satisfied or violated, thus

influencing perceptions of fairness and in turn outcomes such as test performance, self

perceptions, organizational attractiveness and job choice. The test perception model

(Arvey, Strickland, Drauden and Martin, 1990) proposes that tests perceived as related to

the job and that predict job performance and that have greater perceived face validity will

be related to test performance. Furthermore, this model generally argues that this

relationship is mediated by test taking motivation and anxiety. Ployhart and Harold

(2004) argued that both of these two main streams of research include components of

classic attributional theory in social cognition. Given this premise, Ployhart and Harold

(2004) proposed the attribution-reaction theory to explain applicants' attributional

processing as part of applicant reactions and work to combine both of the two original

streams of research. Basically, their model argues that some objective recruitment event

is "subjected" to evaluations by the individual job seeker, which considers perceptions of

salience, expectations of justice and the satisfaction or violation of the justice rules.

These considerations then lead to attributions, all of which were also related to cultural

and individual differences. These attributions, in turn, are related to behavioural

outcomes as well as perceptions of fairness, perceptions of self, attitudes and perceptions

of selection tests (Ployhart & Harold, 2004). Ployhart and Harold (2004) concluded that

their attribution theory leads to a number of implications for recruitment research.

Specifically, they argued that these attribution mechanisms may lead job seekers to become more likely to make dispositional attributions about the organization and situational attributions about themselves (Ployhart & Harold, 2004). Furthermore, job seekers will perceive processes they did well in as being fairer (Ployhart & Harold, 2004). Whether or not these perceptions are "accurate" does not diminish their importance or relevance. The key practical area of interest in recruitment is whether these perceptions or attributions are related to behaviour as hypothesized by Ployhart and Harold (2004).

Applicant reaction research has mainly focused on reactions to selection procedures and applicant reactions to rejection (Hausknecht, Day & Thomas, 2004; Gilliland, Groth, Baker, Dew, Polly & Landon, 2001). There has also been great interest in ways to mitigate these reactions (Ployhart, Ryan & Bennett, 1999). For instance, Ployhart et al. (1999) found that fairness perceptions were affected by procedural information, which mitigated applicant reactions to selection decisions. Ployhart and Harold (2004) argued that there are two key models of applicant reactions the test perceptions model and the organizational justice model. Ployhart and Harold (2004) integrated these models and extended them by using attribution theory. They proposed that assessments of fairness and job relatedness are a result of attributional processing. There are several constructs of organizational justice which have evolved including distributive, interpersonal, informational and procedural justice (Nowakowski & Conlon, 2005). Research which has integrated justice expectations and applicant perceptions has

found that in recruitment, procedural and interpersonal justice perceptions may mitigate applicant reactions as well as feelings of self-efficacy and self-esteem (Bell et al. 2004; Cohen-Charash & Spector, 2001; Gilliland & Steiner, 2001; Masterson, Lewis, Goldman & Taylor; 2000).

4.2.2 Media Effects, Informativeness and Recruitment.

One recent study of interest has looked beyond various recruitment source effects to examine recruitment media effects. Allen, Van Scotter and Otondo (2004) presented another possible theory underlying source effects based on communication research, which essentially states that richer two-way communication techniques will be more effective for recruiting than less rich media. Interestingly, Allen et al. (2004) found that in general richer recruitment source media did correlate with intentions to joining an organization. However, the results also indicated, contrary to their hypotheses, that text media, which is typically considered the poorest communication media, was rated more highly by job seekers than the face-to-face and auditory media. This may be a result of the need for accuracy and detail when applying for a job which is not necessarily required in other types of persuasive media outcomes. Their study presents some interesting issues to consider and which have not been raised in the past in relation to recruitment source effects and outcomes. It also provides promising information as to how recruitment sources might relate to application for a job.

Ryan, Hovarth and Kriska (2005) did not find a relationship between type of

source used, its level of informativeness and decisions to apply for the job in question.

However, they did find evidence that differences in the recruitment source that were used

were associated with demographic differences among applicants and differences in their

attitudes toward organizations, such as their feelings of familiarity toward the

organization. Level of informativeness was, however, assessed by recruiters and not by

applicants. It may be that failure to find differences in applications based on

informativeness are related to differing opinions regarding informativeness by the two

different types of actors. The equivocal effects may also reflect contradictory reactions to

informativeness in different individuals. Informativeness may work in different ways;

more information may strongly encourage certain types of individuals to apply and

discourage others depending on the nature of the information in question and the

attributes of the person. For instance, when companies provide a specific statement of

qualifications, they are expecting that those meeting the qualifications would be more

likely to apply than those who do not meet the qualifications. Further, information such

as pay level may discourage applicants who are already receiving a similar or higher

salary from applying, allowing the organization to use its efforts and time to select

qualified candidates from among those for whom the salary or salary range is acceptable.

The above research sets the scene for the qualitative research carried out in Study Two.

I used the research discussed here, in the literature review for Study One as well as the

results from the previous study to develop a structured interview guide following

McCracken's (1989) long interview technique. I sought to answer the basic question of

how applicants found their job and how they personally experienced the recruitment

process. I also sought to identify key perceptions and issues involved in recruitment

source use from the applicant's perspective.

Objective 4: *In Study Two, I seek a better understanding of applicants' perceptions of recruitment sources and the role these recruitment sources play in job search behaviour and decisions.*

The results from Study Two will subsequently be used to develop a questionnaire

relevant to recruitment source use and outcomes that will be used in Study Three.

Objective 5: *The results from Study Two will be used to develop a recruitment source questionnaire to expand understanding of use of recruitment sources and their importance within the recruitment process.*

Chapter Five —Study Two

5.1 Method

In qualitative research, there are a number of potential approaches that can be taken, each of which may be better suited to certain research questions. Despite the fact that there is some theory underlying recruitment source use and the recruitment process as a whole, findings are contradictory. As such, it is important to maintain an openness regarding the results in order to uncover unanticipated assumptions and factors, as suggested by Silverman (2000). This openness may allow the discovery of elements of the research topic which have not been examined previously and see the topic from a different angle. One way to discover new directions is to take a grounded approach (Glaser & Strauss, 1967). This is a good approach to follow when the investigator does not want to impose a particular framework or direction on the data. It allows an examination of the data in and of itself thus allowing the data to determine the theoretical bent of the study. Much of the research on recruitment sources in the past has been examined from a managerial perspective in terms of labour market and human resources view rather than from the candidate's perspective. The grounded theory approach may be useful when the researcher wants to and can take a "*tabula rasa*" perspective. Another approach is to manufacture distance (McCracken, 1989). Manufacturing distance can be an important way to increase confidence in the findings obtained from qualitative data collection (McCracken, 1989).

5.1.2 Evaluative Criteria in Qualitative Research: Trustworthiness, Reliability &
Validity

By its very nature, qualitative research cannot be measured by the same yardstick

as quantitative research, for instance, by using internal validity, reliability and

generalizability as traditionally defined. It is nevertheless essential to establish that the

information gathered and the conclusions reached in this study are trustworthy and

reliable. Kirk and Miller (1986) have stated that: "Qualitative researchers can no longer

afford to beg the issue of reliability" (p. 72). As such, Kirk and Miller recommend that

qualitative researchers document their procedures as has been done in this study.

Although this does not directly increase reliability and validity it can increase confidence

in the findings. I have also developed a semi-structured interview and used the

methodology established by McCracken (1989) as a guide to increase reliability and

credibility of findings.

Kirk and Miller (1986) argue that validity in qualitative research is fundamentally

about methods but about whether the researcher is "seeing what he or she thinks he or she

sees." (p.21). Kirk and Miler (1986) also emphasize that not all understandings are

equally tolerated. In essence, validity is about trust in the findings, it is about whether the

data that emerges is properly labeled and supported. According to Lincoln and Guba

(1985), "trustworthiness" can be established in qualitative research by demonstrating

truth value, applicability, consistency and neutrality. Truth value at its heart, and relates

to the credibility of findings. Validity also involves the principle of falsification, while

hypotheses cannot be proved per se, data must be subject to falsification as was proposed

by Popper (Kirk & Miller, 1986; Lincoln & Guba, 1985; Popper, 1959). The findings in

this study can be seen to be credible for a variety of reasons, for instance in the structure

of my methods and my analytic techniques. I reviewed my cultural categories in

accordance with the McCraken (1989) methodology to manufacture distance and increase

the level of objectivity. In this study I also used peer debriefing that is, discussing my

findings and conclusions with peers and advisors (Lincoln & Guba, 1985). This allowed

me to verify my understanding of the data. Another method Lincoln and Guba (1985)

recommend for establishing trustworthiness is prolonged exposure. Unfortunately,

prolonged exposure was not feasible in this study. The interviews lasted anywhere from

one to three hours. However I was able to ensure referential adequacy by tape recording

the interviews and having them professionally transcribed to ensure an accurate record

and I spent significant time poring over the tape recordings, field notes and transcripts to

ensure consistency, all of which would increase confidence in the findings. Another

useful technique for ensuring trustworthiness is member checking, providing the data to

the interviewee to ensure accuracy, this was done to help to ensure the understanding of

the data. Checking understandings during the interview was also an important procedure

to ensure credibility and assess intentionality. Although useful this is by no means the

only or best technique.

Credibility of findings can also be established through comprehensive data treatment by demonstrating similar findings from more than one case and through deviant case analysis by actively seeking out disconfirming information (Silverman, 2000). I have attempted to seek out and report any deviant utterances both within cases and between cases, so that any confirming or disconfirming cases found are reported in an effort to demonstrate credibility. This is clear in the data reporting where I provide similar and discrepant examples of utterances between and within cases. Denzin (1978) has proposed four potential sources of triangulation; using different theories, using different sources of data, using different methodologies and using different investigators. As one purpose of my study is to utilize the data which emerges from Study Two to develop the questionnaire for Study Three, if the results of all three studies are congruent, this would serve to lend greater credibility through triangulation in methods and data sources.

5.1.3 Sampling

Miles and Huberman (1994) assert that it is not feasible to study all possible cases; therefore sampling is the key to subsequent analysis and establishing the credibility of findings. Qualitative samples tend to be purposive rather than random (Kuzel, 1999). Maximizing the variety of groups studied and data gathered and looking for potential disconfirming cases allows for a better understanding of the phenomenon under study and

helps to increase confidence in the conclusions. Glaser and Strauss (1967) also

recommend gathering data to the point of "theoretical saturation" (p. 61) where no new

information is being obtained. McGrath, Martin and Kulka (1982) argue that there are a

number of judgment calls and a number of demands, which the researcher must balance.

There are several practical considerations in research these include ease of access to the

population of interest, time required to conduct the study and access to funding, which

must be taken into account.

Contrary to quantitative research which strives for generalizable probability

sampling, qualitative research strives for purposeful sampling to represent a phenomenon

of interest (Lincoln & Guba, 1985; Patton, 1990). Lincoln and Guba (1985) have argued

that maximum variation sampling is the best strategy for capturing central themes while

also providing detail and context thus acknowledging the deviant case to provide a

clearer picture of the entire phenomenon of interest. When common themes emerge in

highly divergent participants this lends weight that a key aspect of a phenomenon may

have been uncovered and increases trustworthiness of the findings (Patton, 1990).

In my study participants were recruited through a purposive sampling technique

to obtain information from those participants who had recent and successful job hunting

experiences. A snowballing technique was used whereby recently hired individuals

referenced other individuals with recent successful job hunting experiences. This

procedure allowed for a better illustration of the recruitment process itself in accordance

with recommendations from Silverman (2000). The recruitment process for study

participants was conducted through email and word of mouth. Despite the use of the

snowballing technique which can result in similar cases, as far as possible, an attempt

was made by the researcher to recruit participants from a variety of different backgrounds

in order to increase the variability of the sample. Variability was important to develop

potential categories related to recruitment source use which were not based on a single

age group or occupation, etc. Silverman (2000) encourages variability in the sample to

ensure the information gathered is not too narrowly focused. The snowballing process to

obtain participants resulted in ten individuals being interviewed. Participants were from

three different provinces across Canada, three were visible minorities and four were

landed immigrants. All of those who were landed immigrants had entered Canada at a

young age or had been in Canada for over ten years. All of the participants only had job

search experience and related examples of job search occurring in Canada with the

exception of a Canadian-born nurse who had work experience in the United States of

America and a Canadian-born academic who had experience working in the United

Kingdom.

In order to develop a thorough understanding of the recruiting process as

perceived by candidates, a wide variety of individuals were interviewed. Participants

worked in a variety of employment settings such as, for-profit, not-for-profit and

government organizations. In addition, several different types of industries were

represented including: education, transportation, financial, healthcare, information

technology, social services and pharmaceutical. Participants' occupations varied from

individuals in managerial positions, sales positions, professional positions and finally

skilled trade positions. Participants ranged in age from 28 to 58 and in education levels

from high school to doctoral studies. There was a concentration of individuals in their

late twenties and thirties and most of the participants were highly educated. Therefore

the findings in this study may best represent the views of educated, early to mid-career

job seekers. The purpose of the use of the qualitative methodology in this study and

particular of the long interview format was to obtain and develop cultural categories. The

purpose was not to obtain generalizability in the scientific sense. Major findings will

subsequently be examined in the quantitative research during the course of Study Three.

Ten semi-structured interviews were conducted using interviewing techniques

from McCracken's (1989) long interview format. McCracken's (1989) techniques

advocate a rigorous concern for objective data collection and efforts to avoid influencing

respondents and to remain objective and impartial in the data collection and reporting. At

the same time, it recognizes that complete objectivity is not possible in reality; all

interviews involve an interaction with participants who are not passive or uninfluenced

during the data collection process (Holstein & Gubrium, 1995), and the very act of

collecting data can influence responses to some extent. Each interview was taped, and

following the interview session, these interviews were transcribed and analyzed

iteratively, recursively and reflexively, going back frequently to revise and review,

question and reclassify findings and develop insight as new data was collected.

5.3 McCracken Technique

Step 1: review of literature. The first step in McCracken's (1989) long interview

format is a thorough and complete review of literature which critically examines what is

known about the current area of interest. Not only does this inform the researcher and

provide direction to the study and facilitate the construction of the interview questions,

but also provides the researcher with an ability to manufacture distance and to examine

unexpected information or information provided by participants which is contrary to

established findings (McCracken,1989). This literature review was conducted and

discussed at the start of Study One and forms Chapters Two and Four of this dissertation.

The literature specific to findings for recruitment sources has also been summarized in

Appendix A (Summary of Table of Recruitment Source Outcome Studies). Appendix A

is important because it illustrates the disconnected and confusing state of the recruitment

source literature and the diverse and contradictory findings from this area of study. Issues

specifically pertinent to qualitative research in recruitment were then discussed at the in

Chapter Four. A comprehensive literature review can create expectations which the

interview data can subsequently defy.

Step 2: review of cultural categories and construction of the interview. A second

important step in the long interview process is for the researchers to carefully review their

cultural categories (McCracken, 1989). This allows the researchers to expose their

potential biases and assumptions in order to compare and contrast with the interview data

and to further manufacture distance by revealing their views, allowing for a more critical

approach to the gathered data (McCracken, 1989). Qualitative research requires

interpretation, and as a form of inquiry, has an anthropological ancestry. Being a part of

the culture you are studying, in this case "job seekers" can be a great advantage in that it

provides intimate knowledge of the topic, alternatively, it can also reduce the

investigators ability to observe and interpret the data gathered because it may seem so

obvious (McCracken, 1989). One way to maximize the ability of the researcher to

capitalize on their knowledge without being blinded by it is to review cultural categories

so they can be recognized, and, to some degree set aside. "Cultural categories" are

essentially the meaning, expectations and assumptions people ascribe to certain events,

products, symbols, etc. beyond face value, cost or usefulness (McCracken, 1988; 1989).

In this case, job search has underlying meaning, expectations and assumptions related to

its occurrence for me which I reviewed in an effort to bring these forward to prevent them

from influencing my analyses. Later, after clarifying my own cultural categories to

prevent bias and following data collection, during iterative data analysis, I will attempt to

uncover common cultural categories based on my participants' responses to distill and

make sense of the data collected and in turn these will be 'converted' to analytical

categories as part of the long interview technique.

Therefore, prior to conducting the interviews I carefully examined my own expectations, interpretations, assumptions and experiences with job search and recruitment as well as my individual circumstances. This dissertation has been informed in part by my experiences with recruitment and by my background related to recruitment. I am female, well educated, middle class, 37, and I have, in the past had some difficulties finding employment. The two key points where I experienced difficulties finding employment were when searching for my first "official" job in high school, and, subsequent to my Master's degree, when attempting to secure a position which was related to my studies. My family instilled a strong work ethic, so I persevered both in finding work and in ensuring my work was done well, to the point where on occasion I worked two or three different jobs. I have considerable work experience in different jobs at different levels and requiring different types of skills (unskilled, semi-skilled, blue collar, professional and managerial). I have been working since I was 12, in a variety of different positions including: babysitter, hotel chambermaid, retail clothing sales clerk, convenience store cashier, customs officer, Human Resources research coordinator, teaching assistant, university lecturer, Human Resources and Labour Relations Advisor, regional manager, and finally, as an Investigator and Staffing Complaints Adjudicator. In addition to my experiences as a job applicant and candidate, by the nature of my chosen profession, I have experience in recruitment as an advisor to managers regarding how to proceed with recruitment and selection processes.

Further I have experience as a manager attempting to recruit employees and as an adjudicator ensuring legal requirements in employment are respected. In my view, a selection process should be fair, impartial and transparent. The process should have a sufficient pool of candidates from which to choose. The main goal of the selection process should be to select the most qualified candidate for the position.

As a candidate I also believe the process should be fair and include clear communication to candidates regarding the process, the position and the organization. When I am in a recruitment process, I try not to get too wrapped up with the job or too excited about it before I know I have it. I try to be realistic about my chances of getting it. I expect to be assessed on my qualifications and I try to find out as much as I can about the job and the organization and the manager both before and after an interview I decide whether or not to take a job based on personal and practical considerations. The practical considerations upon which to base a decision to accept a job are: location, salary, and benefits, working conditions, potential for advancement, my skills, abilities and capabilities. The personal considerations which influence my decision to accept a job are: whom I will be working with, whether I believe the position will be challenging/interesting, the potential for personal growth/development/learning and whether the job helps me meet long term and short term career goals.

An incident regarding recruitment which violated my previous experiences in recruitment was one of the first jobs I formally applied for in high school. I had always found it easy to find work in the small town where I grew up. Whether it was babysitting,

working as a chambermaid or retail clothing salesclerk, I was offered jobs without ever

applying for them. During high school, I moved to a town where no one knew me or my

family and I had great difficulty finding a stable job. I went to Service Canada (then

HRDC) to search out job opportunities, and I signed up as a student looking for summer

employment. I received a few calls, but these were mostly for short-term jobs with few

hours. Then I found a listing for a storeroom clerk in a large department store. The

position paid well and the hours were good, so I applied. Human resources for the store

called me and set up and interview time. When I arrived at the appointed time and asked

for the supervisor he came out into the store and started talking to me right in the middle

of the department store, without even taking me to a private room for an interview room.

The supervisor stated bluntly that he did not want to hire a girl. In his opinion, girl

weren't strong enough for the work he required in the storeroom and that he did not even

know why HR had wasted his time and sent me to him for an interview. I have never felt

so discriminated against in my life, either before or since that time.

Several years later, I experienced my first highly formalized interview and

recruitment process. This time, I had applied for a position as a student customs

inspector. I applied for the job about eight months before I was called in for an interview.

The school guidance counselor had suggested I apply for a summer government

recruitment program. By the time I was called in for an interview, I didn't even

remember applying. They sent me documentation and recommended I study it and they

sent me a letter with the date, time and location of the interview, at the end of the process

I was subsequently hired and worked there for 11 years.

Not only do I have experience in a wide variety of work, I also have experience

using a wide variety of recruitment sources to find jobs including: using a network of

contacts, family and friends, career fairs, government recruiting agencies, walk-ins, on-

campus recruiting, and Internet postings. As a result of my experiences, I formed the

opinion that certain recruitment sources were more productive than others, with HRDC

and family and friends being my least favourite sources, because I associated these with

lower level temporary jobs and a lack of fairness in the recruitment process. I also had

assumed that everyone wanted a fair recruitment process, regardless of the outcome. The

analysis of cultural categories allowed me to identify these underlying assumptions, thus

allowing me to manufacture distance from my own biases increasing the trustworthiness

of the research. This analysis of cultural categories along with the literature review, also

informed the development of the interview guide for this research.

Step 3: discovery of cultural categories. I developed an interview guide

(Appendix F), based on the insights gained from steps 1 and 2, as well as Study One.

The interview guide provided a structured approach and a direction to the data gathering,

while allowing participants to provide their information regarding recruitment in their

own words. In accordance with McCracken (1989), the interview guide consisted mainly

of grand tour questions and floating prompts such as an agreeable nod, raised eyebrow or

interested look designed to encourage participants to continue elaborating upon their statements. In accordance with McCracken's (1989) recommendations, when categories identified in the literature and cultural review did not emerge spontaneously, planned prompts were used in order to elicit greater discussion from participants. These were not used until the end of the interview question after the participant had the opportunity to respond in their own way. All but one interview was conducted in person; the remaining interview was conducted via telephone. All interviews were recorded and professionally transcribed. Interviews lasted anywhere from approximately an hour to over three hours, over 130 pages of single-spaced transcription data resulted as well as several pages of notes and observations taken during the interviews.

Step 4: discovery of analytic categories and interview analysis. The data were analyzed using the five stages described by McCracken (1989) as a guide. Each utterance was treated on its own devoid of other contextual cues. The observation in the utterance was then examined based on the information in the transcript. Then in the third stage the information was examined in the context of known literature and the cultural review. At the forth stage the information obtained was examined for consistency and contradiction within the interview itself. Finally, at the fifth stage, the information was compared across the various interviews for consistency and contradiction.

In summary, as discussed at length above my findings have credibility and truth

value as a result of my efforts to follow the McCracken technique; including

manufacturing distance, using a semi-structured interview, conducting a literature review,

reviewing my cultural categories. My efforts to obtain maximum variability in my choice

of participants and to conduct data gathering until no new information arose in the

interviews. My findings are also lent credibility as a result of my efforts at maintaining

records through tape recordings and field notes, comprehensive data treatment,

comprehensive transcription and coding, iterative analysis and seeking out confirming

and disconfirming instances and negative case analysis as well as member checking and

peer debriefing which while not sufficient to establish trustworthiness can contribute to

the credibility of findings. Later on in Study Three I will also attempt to triangulate my

key findings to add credibility to the results.

5.3.1 Participants

In summary, the interviewees were 4 males, 6 females, 2 managerial level, 7

professional, highly educated for the most part, 1 high school education, 1 community

college certificate, 4 Bachelor's completed, 4 Masters' completed, 3 visible minorities, 7

Caucasian. Attempts were made to maximize variability by finding participants from a

wide variety of industry settings and professions. As such participants are from a variety

of industries; financial (banking), government, not-for-profit, service, information

technology, pharmaceutical, education, Health. Participants are also from a wide variety

of occupations: executive director, manager, HR professional, IT professional, academic,

sales manager, nurse, mechanic. A detailed description of the various participants and

their pseudonyms is provided in Appendix G.

5.4 Results

5.4.1 Recruitment Themes which have Emerged: Sample Utterances

The data was organized in accordance with two key pieces of the puzzle related to

recruitment source use:

1) Perceptions of recruitment sources

2) Perceptions of the information provided by recruitment sources.

A summary of the categories and key themes which emerged is presented in

Figures 5.1. and 5.2. The themes that emerged from the data in accordance with the

perceptions of recruitment sources are presented initially followed by examples and

analyses of sample utterances to support the emergent themes. Appendix G provides a

sample concept card and Appendix H provides a tentative taxonomy of participant

perceptions of recruitment sources.

The main objective of Study Two was to gain insight into how applicants look for

job and the role recruitment sources play as well as primarily how recruitment sources are

perceived. The first three series of questions asked were:

"1. How did you find your current job? What occurred?

What was the end result? ;

2. What things made it easier or harder to find a job? and;

3. Were there some sources you liked better than others? Why?"

As a result of these questions, some surprising perceptions of sources emerged as

applicants recounted their job searches. Previous literature on recruitment sources has

not found evidence of the type of perceptions of recruitment sources that my research

uncovered, or if it has, I was unable to locate any empirical reports of these findings.

Findings on perceptions of recruitment sources have been limited to the perceived

informativeness of sources (Ryan et al., 2005) and person-job and person-organization fit

(Saks & Ashforth, 1997).

5.4.2. Perceptions of recruitment sources.

There were strong opinions and perceptions for a wide variety of job sources over

others. There were also some interesting perceptions regarding what the use of various

sources indicates about a company. Although there has been substantial research on

applicant reactions from a selection point of view, the effects of recruitment sources

themselves on applicants have not been examined in detail. From an organizational

perspective, it may be very important to understand these effects, since they may make

the difference between candidates applying or not. In addition, if candidates the

organization is targeting have a negative perception of recruitment sources the

organization is using the organization may end up obtaining a smaller, weaker pool of

applicants for the position to be filed. The data from participants tends to show in general

that based on their perceptions of recruitment sources, participants target their job search

to some extent, primarily using certain sources, depending on the type of job they are

looking for and the type of industry and the type of organization for which they wish to

work.

Table 5.1

Summary of key dimensions of recruitment source perceptions

Category 1: Perception of Recruitment Sources	
Source types	Key themes/dimensions
5.4.2 Perception of Sources by type	a. Hierarchy of skills and experience b. Traditionalism and Modernism c. Efficiency and Influence

5.4.2. a. Hierarchy of skills and experience.

One of the most prevalent perceptions of recruitment sources was related to how

certain recruitment sources were perceived in terms of required skill and experience

levels and hierarchical/occupational prestige. There was overall a fairly negative

perception of newspapers. This was particularly interesting because two of my ten

participants actually reported having found jobs through newspapers and one reported

doing so on multiple occasions. Their mannerisms and hesitancy when revealing this

almost made it seem as if they were apologetic.

As previously alluded to, there were some negative perceptions regarding

newspaper ads and their usefulness and appropriateness as a job source among

professional and well-educated participants. Conversely, this bias did not seem to hold

for Internet postings. Further the "headhunter" recruitment source was seen as much more appropriate for professionals in mid-career and at higher experience and skill levels. There were definite perceptions regarding the hierarchy for certain recruitment sources as well as the possibility or not of various recruitment sources leading to "real jobs". In general, newspaper ads were perceived sources as reserved for low level, low requirement jobs, which are not career-oriented. Nearly all participants expressed perceptions related to newspapers as a recruitment source. When Britney, a 28 year old female visible minority working for the federal government with a Master's level education who was recruited initially on-campus and is at the start of her career was asked how she would look for a job, her response indicated that she did not see the value in newspapers as a recruitment source for her:

> *"I don't think I'll ever go to the newspaper and look for a job that way... Most of them [newspaper job ads] don't apply to me. I have looked before at them in the past when I was just searching for part time jobs that are there. It didn't seem to me, that those organizations and jobs I am interested in now advertise in the paper. They advertise through their own networks, so email list-serves or stuff like that. "* (Britney)

This utterance demonstrates the Britney did not seem to believe that newspaper job ads would be of any interest to her, she was quite clear in seeing these as basic low level part-time help wanted ads. She believes that the type of work and the type of organizations she is interested do not advertise in the paper

Later, regarding how she would recommend a friend look for work, Britney

discussed newspapers again and:

> *"Depending on what they want to look for, if they are looking for just a part-time job to make money for the summer, the newspapers are great. I don't think they [companies that advertise in newspapers] really care about your references or anything like that, or I don't know at least that's my impression. They are just going out to the public, grabbing anyone. Just a quick easy job. But for career-wise, definitely, I would direct them to the networks that I know."*(Britney)

Another example of a similar assessment of newspapers as being lower skill and

lower level or less prestigious was provided by Katherine, a 36 year old who has several

years work experience HR professional, is currently working in a public school board and

is approximately in the mid-career stage of her professional life. Her utterance indicated

that she believed newspaper ads were more likely to be used by organizations to search

for unskilled or skilled trades and individuals with lower computer literacy levels.

> *"I think they [organizations] try to cover themselves that way [by using newspapers] so that they to get certain skill levels that are maybe not, that don't have computers at home. You know if you're looking for a laborer or other individuals who don't have computer access, that's certainly how [through a newspaper ad] you would get to them. If you're looking for a carpenter, you wouldn't put an ad on the Internet, right?"* (Katherine)

Katherine qualified her perceptions of newspapers to specify her impressions of

various sections of the newspaper. For instance, although she indicated that newspapers

were lower skill in the previous utterance she did indicate that the "Careers" section of

the paper was more relevant to someone looking for professional positions. It was also

interesting how she justified her knowledge regarding this qualification in relation to

newspaper advertising and the different sections of the paper:

> *"I don't think the paper is really something; I mean I still look at it just to see who else is looking. I don't look at it for employment myself, but I'm always curious to see who is hiring via paper and that's just again, because it's HR and I'm interested in finding out the trends in recruiting, how people recruit these days. I find the progressive careers section in the Tuesday Herald, find it's much more relevant to more senior people than kind of the Wednesday, Thursday or weekend or whatever and classified recruiting otherwise."* (Katherine)

Another participant, Cash, a 36 year old sales manager in a large multinational

pharmaceutical company, supported Katherine's qualification regarding how different

sections of the paper could be perceived differently. He indicated that certain types of

professionals those who are more "conservative" might be targeted in the career section

of the newspaper.

> *"...but chances are if you're talking about accountants, very conservative, so that person will probably like, post a posting in a newspaper like Globe and Mail in the career section and try and to you know, look for another accountant."* (Cash)

Grace, a 32 year old executive director at a not-for-profit with a B.Com and a

B.A. in Psychology who has worked at several not-for-profit organizations indicated that

she had gotten every one of her jobs through a newspaper ad. This provided an interesting

contrast to Cash's view that very "conservative" organizations would use the newspaper

given that the not-for profit organization would not necessarily be considered

conservative or traditional in the sense Cash describes.

"It's kind of interesting because I've been in not for profit for a really long time I think it was my 5th in a row. And every one that I've worked for, I've gotten the job through a newspaper ad, which I know is like 17% of people get hired get a job through a newspaper ad and every one of mine have been through a newspaper ad so that's, I don't know... kind of funny." (Grace)

During the interview, it was apparent from her body language and mannerisms that Grace was a little embarrassed and apologetic to admit that she had for the most part obtained her jobs through newspaper ads. This was evident in her body language which appeared a bit sheepish. When she was asked how she would look for a job in the future, Grace supplemented her newspaper response with a statement about networking:

"I would probably let all of my friends know my close friends who I could confide in and see if they had heard of anything, I would get the Saturday newspaper since its been very successful for me, and being quite new to Halifax I've made quite a few partnerships and relationships with other not for profit organizations and I think I could confide in some of those organizations and let them know that I'm looking for something and if they could keep their eye out for something in that field and something that could be a good fit for me. That's probably what I would do." (Grace)

Marilyn, a female academic working on her doctorate, confided that she tells her students that newspapers are not a good place to look for a job, during this explanation she contradicted her opinion by admitting that she had obtained her previous teaching job as a result of an ad in the newspaper. Once she explains how she found that job, she further qualifies this information by indicating that although she had obtained a community college job via newspaper she does not think she could obtain a University job using this recruitment source because Universities are more likely to use their networking techniques.

"But everyone tells you like to get a job, that you can't just look in the newspaper and I tell my students that too, you know you really have to network and all that sort of thing… But my previous job, the community college job, I honest to god, I tell my students this never happens, but I honest, I looked in the newspaper, there was an ad, I cut it out and sent in an application and I got it and that's how I started, you know, being a teacher so it does happen, but maybe not in universities because they seem to be pretty network oriented." (Marilyn)

Similar to Marilyn, Katherine provided some self contradictory information even within during her discussion relating to newspaper advertising. In this case, Katherine stated that she did not look at the newspaper the whole time she had been looking for a job because she did not think there would be any job ads which would be directed at finding someone at her experience and skills levels. She qualified and corrected her assertion to indicate that she had looked at the careers section and seemed to contrast these two sections. She further indicated that in her role as an HR professional for the school board, she had on behalf of her organization advertised by paper.

"I don't think I even looked at the paper all the time when I was looking [for a job]. I looked at the, I think the Saturday and the Tuesday, but I wouldn't have looked every day, because I don't think anybody who would hire a more senior position would go to the paper other than you know, as I said, progressive careers, I think it's a good way to go in that section and the Saturday is somewhat interesting because I think a lot of people, if they are going to put an ad in for a day or two, they would definitely do it on Saturday, but, the trend certainly in my view is moving away from it, but I know at the school board, we do, you know we advertise by paper. (Katherine)

Human Resources Development Canada.

Only three participants mentioned the Human Resources Development Canada's job bank as a potential job source. However this was a recruitment source which seemed to show some divergent perceptions and views related to organizational hierarchy and assumptions regarding the skill and experience levels targeted by employers for jobs advertised using this recruitment source.

For instance, Cash, a sales manager at a large multinational indicated that he would use informal networks, headhunters and the Internet. When asked why these would be preferred over other types of sources, he provided some scathing opinions on newspapers and HRDC. In his view, HRDC was for lower level and lower paid jobs. He indicated that HRDC was a last resort in his opinion in terms of job search.

> "...that one [HRDC] is more like for, is more like for lower paid jobs. I don't think, you know, you can find a CEO position in there. It's more like waiter, waitresses, sales people, not even sales reps. I would say, like you know, if you've got a high school degree, or if you really run out of every single resources, like after you graduate from university, then you go there, but aside from that, don't even bother. Sorry, I might sound a little bit arrogant but..." (Cash)

In contrast, Mark, a 33 year old mechanic with 10 years experience and a community college certificate, perceived Human Resources Development Canada's (HRDC) job bank as good potential job source, better than newspapers in terms of detail and informativeness, possibly because of the costs of advertising in the newspaper. Mark indicated that he would likely in his own personal job searches use informal networks as

recruitment sources he also indicated that for someone new just starting out HRDC would

provide good leads on jobs which were currently available:

"...the information job bank seems to have the most because I think now they gotta pay to have it there maybe, I don't know, newspapers are usually a little blurb, it seems like it's expanded more if you go to the job bank to me... "I'd say the Human Resources Development one is the best. I think most employers go to that because they figure the majority of the people are going to, if they're laid off, they're already going to be in there to get their unemployment stuff so they're going to have a quick look at the job opportunities that might be there. So I would think that that would be the best starting spot." (Mark)

So there seems to be some diverging views on this recruitment source which may

be a function of type of occupation in which the respondent is working. Among my

participants, this was not a recruitment source which was considered very much in their

recounting of their personal job search experiences.

On-campus recruitment.

There was more discussion regarding on-campus recruitment among my

participants this may be a function of the education levels and professions of those I

interviewed. On-campus recruitment appeared to be perceived as a good recruitment

source for entry level positions, particularly in larger more formalized organizations. Ben

a 58 year-old Caucasian financial services manager nearing retirement recounted his

experiences getting his first job with on-campus recruitment right out of high school; he

had at that time been hired at a bank.

"I guess my very first job, which was with Bank X, was through a recruiting process through the school; actually the manager of the bank was at the high school and recruiting. That's how I got my first job." (Ben)

It was interesting to compare the similarities and differences between Ben's on-campus recruitment which was quite straightforward and simple with the more formal experience Britney had with the Federal government when she was also hired through on-campus recruitment more recently. It appeared for her that the personal contact involved in on-campus recruitment played an important role in how she perceived the organization and allowed her to better accept the lengthy hiring process in the federal government.

"... [Federal Organization] in particular they sent a person to come to the U of T, [name of recruiter] came to talk to us about [the organization] and about the [developmental training] program which is mainly geared toward economists. She talked about the program they have a recruitment program and it was an almost three year program with rotations and courses in-between. I went down there asked her a number of questions, I got her card, but you don't actually go to her you go through the post secondary recruitment program website for the government for anyone who wants to apply for the government and I sent in my resume CV, got an exam, and an interview and that's it." (Britney)

Cash also got his first professional job through on-campus recruitment. He believed that if you were starting out in an industry and did not have a lot of experience and wanted to work in a large company at a job in an entry-level position, on-campus recruitment was useful. For instance here are some of his sample responses to the question of what recruitment sources were useful. He indicated that for entry levels many companies are looking for people who have the right educational background but have never had any industry experience. In order to target these people, the companies go to

universities and the on-campus career centers or career fairs. He believed that these

postings were not postings which would be easily accessible to those outside the

universities.

> "... *those positions where you won't see it anywhere in the newspaper or on like
> you know on any job searching Internet site. But if you already have experience in
> the same type of job that you're looking for then it's no longer an issue... For
> simple entry level, I think it's helpful and especially with big companies and like
> international based companies like Proctor & Gamble, like IBM I guess, Proctor
> & Gamble, Deloitte & Touche, Johnson & Johnson, Goldman Saks, those pretty
> much unless if you go though on-line campus, they pretty much [close the] door.
> Like Morgan Stanley unless you [are already] in the industry for a long time and
> if you're really good, otherwise you know, they only recruit through a university."*
> (Cash).

Headhunters.

In addition to on-campus recruitment, my participants perceived headhunters as a

good potential job source. Several of them reported talking to headhunters during job

search although none reported finding their jobs though this source. In general, those

interviewed who were in the middle or the late stage of their careers tended to feel that

professional recruiters along with networking were the most effective source of jobs at

their level. This was their perception despite the fact none of them had found their current

job or previous jobs using recruiters. For instance, when Katherine was asked what she

would do if she were to look for a job tomorrow her response was:

> "... *if I were to look tomorrow, I would, for me I think in my level of my career, I
> would go through recruiters. The kinds of jobs that I'm interested in are very
> rarely advertised and so I would right away get on the phone and call probably
> three or four recruitment companies that I know specialize in HR jobs. I would
> have meetings with all of those individuals."* (Katherine)

Cash also seemed to believe career stage played an important factor in whether recruiters should be used, as can be seen by his response when asked what advice he would give a friend or family member if they were looking for a job. Cash also brought in the element of firm size and recruiting sources indicating that he perceived larger companies as more likely to use recruiters.

"I would say it depends, if that person is a fresh grad from university, then the Career Centre is definitely one thing I would tell them to use…if that person already has experience, then I guess I would tell that person to go to headhunters…a lot of the big companies, they always, you know like ask headhunters to basically to find people for them anyway so they tend to have the, I guess, the, all the, basically all the jobs, like they would have, you know, a huge job database for all the, basically all the big companies." (Cash)

As can be seen above in the last few sample utterances, much of the discussion regarding headhunters and on-campus recruitment as recruitment sources centered on the assumption that these sources offered information about jobs that could not be found elsewhere. This appeared to be a key consideration in participants wanting to use or having used these sources. There seemed to be an underlying assumption that there was a hidden job market and that the "really good jobs" might not be well advertised or easily available.

In contrast to the above sample utterances, Natasha a 31 year old nurse with ten years experience, expressed annoyance at how aggressively headhunters pursued her. This is in contrast to the perceptions provided by Katherine and Cash. This reaction may

need to be considered in light of the unique position she is in, as a result of the nursing

shortage and may be more typical of occupations where there are shortages.

> *"...I get calls all the time, I don't know how they [headhunters] get my name, oh this is such and such from travel nursing company, are you interested in, I mean that's aggressive and maybe if I was interested, they'd be, I'd be more apt to talk to them first, you know what I mean, like I have no choice, they call me so you know... I get emails, they must get it from professional organization lists, I don't know how they do it... "* (Natasha)

This indicates that there may be some overall patterns of perceptions of

recruitment sources and reactions to these. These overall perceptions should be

considered and interpreted in the context of individuals' personal experiences with the

particular recruitment sources in question.

In general, the recruitment sources which stood out most as showing a hierarchy

related perception were those for newspapers and HRDC as well as headhunters.

Newspapers and HRDC were perceived as a recruitment source for low level, low skill

jobs whereas in contrast headhunters appeared to be perceived as a recruitment source for

higher level jobs, for those job seekers with medium to high skills or experience. On-

campus recruitment exhibited a slightly different perception as high education but lower

experience where career-related job entry would be more likely.

5.4.2.b. Traditionalism-modernism.

Another prevalent dimension along which recruitment sources appeared to be

perceived was a traditional-modern continuum. It appeared in particular that newspapers

were perceived as more traditional and conservative while the Internet was perceived as

very modern and convenient. Use of the newspaper as a recruiting source also seemed to

be seen as signal of a traditional/conservative organization or of an organization looking

for a conservative employee whereas the Internet was seen as a more modern form of

recruitment source.

The newspaper seemed to be perceived as an obsolete method of advertising by several

participants.

Newspapers

An example of how newspapers are perceived as a traditional/conservative

recruiting source by job seekers is evident in Katherine's comment in relation to

newspaper advertising. She seemed to extend the idea that a company advertising by

newspaper was indicating it did not have sufficient technology and extending this to

refusing to provide email.

> *"...and I think it's [newspaper advertising] seen as old fashioned, I don't know if I'd be interested in a place that would say please mail your resume here, that wouldn't give me an email or something..."* (Katherine)

Following this utterance, Katherine even alluded to a newspaper ad giving the

impression that she would have to do her work using a typewriter. Katherine's utterance

regarding her impressions of newspapers contained inferences about access to

technology. She indicated not only that the organization advertising by using a certain

source may be targeting a certain type of employee, but also that she as a job seeker

might draw conclusions about an organization trying to hire that way if its intension was

not to target lower level or lower skill jobs or if it wanted to portray itself as progressive.

> *"But I think if you're a high tech organization, you pride yourself in being able to be progressive and forward looking, so then I think you want to display that also in the way that you recruit...I think it's the signal to people that are looking for jobs, like when I see, if I were to see an ancient newspaper article and it said can you mail this or fax it, I'd probably go hmm, what's wrong with that picture you know, so. If there is no email address or website, I'd be like, hmmm, not so sure, they probably have to use a typewriter at work or something, anyway."*
> (Katherine)

This utterance also alludes to another element which of the way the newspaper is

perceived as a recruitment source, as an indicator of a conservative industry or

organization and or an organization who is looking for someone who is conservative. An

interesting and different take on newspapers came from Harry, an IT professional who

when he was asked how he would look for a job right away if he had to indicated that if

we were to have to look for a job tomorrow, he would probably end up moving, and if he

wanted to move to another city he would buy some newspapers from various cities and

look through those as a first step in his job search.

> *"...next would definitely be where I want to go, if I want to just stay in the city then of course local newspapers local press would be the place to go, if I want to move out of the city and I actually have done this before, I go and buy papers from those cities because there are local news in there which I would start looking through. Let's say if I want to move to Toronto I would buy the Toronto Star or something like that and just go through the papers and see if they have jobs in there, the next would definitely be search for companies and businesses going to specific company websites to see if there are jobs available most of the times I would do that if I don't care as much where I'm going but what company*

I'm going to work for so that would be the first ones I guess and start personalizing every single resume and start sending them out as fast as I can. "
(Harry)

Imbedded in Harry's utterance is the fact that he would look at two different formal sources the Internet and newspapers, it is also interesting to find that someone very comfortable with computers and technology would turn to a newspaper, this is contrary to the negative perceptions of newspapers expressed by several interviewees. Cash indicated that there are certain industries who advertise via newspaper and they are not among the for profit business. Cash further stated that organizations should be hiring on the Internet if they want to find individuals who are comfortable with technology and who are comfortable with an ever-changing work environment.

"It's not the private sector that is posting [in the paper] and certainly you hardly see Procter and Gamble or Pfizer or IBM posting in a newspaper because the people who would tend to still look for this way [using the newspaper] to hunt jobs, would be the people who are less susceptible of using technology. The people who are open to technology already go on the Internet, so you're talking about somebody who is very, conventional and probably very resistant to change. Quite honestly, willingness to accept change is what a lot of companies have in mind for their employees. You don't want to hire somebody who is resistant to change. (Cash)

Some somewhat supporting testimony for newspaper advertising being industry specific has come from the two individuals who found jobs using the paper. Grace was an executive director for a not for profit that saw the newspaper as a great source of jobs for her and stated that she had found all her previous jobs in the newspaper. In addition, Marilyn admitted finding a job as a community college professor via newspaper.

Internet: convenient/modern.

There were strong views on the efficiency and influence afforded by the use of

networking and other informal job seeking techniques. Most participants appeared to be

strongly convinced that these sources were the best ones for obtaining a good job.

Networking seemed to be supplemented by the Internet as a recruitment source and there

seemed to be a strong tendency to report using multiple recruitment sources. In contrast

to newspapers, most candidates perceived the Internet as a very modern and convenient

job search technique and most all participants reported using the Internet to research

companies, to prepare for interviews as well as to form impressions of companies or

tailor resume and cover letter. Harry, an IT professional indicated that the first thing he

does when he wants to look for a job is look on the Internet.

> *"Career beacon.com, jobpress.com, I always start with on-line searches first, just because they are very convenient.* (Harry)

Grace who is the executive director of a not-for profit and has obtained all of her

jobs via newspaper, indicated that she too looks for jobs on the Internet. She indicated

that she found the Internet a comfortable source of information and that it is also very

convenient in that the information is all right there in your computer. This utterance also

foreshadows something which will be discussed in later detail in this study, that

recruitment sources serve multiple uses and are used in conjunction with each other. This

is particularly true for the Internet which serves as a resource for candidates wanting to

find out more about a job or an organization.

"I'm probably more comfortable using the web because most web ads have a link to their website so you can go look at the website and find out more about the corporate culture and the goals of the organization. Its' all right there. Whereas the paper is a stand alone thing and then you have to make the effort to find a computer and find their website" (Grace)

Mark, a mechanic with several years experience, also indicated that he found the Internet very convenient as a job search tool. He appreciated the fact that he could look for work in the comfort and privacy of his own home, as indicated by this utterance:

"...I find looking on the Internet now, it's just easier because it's just, it's home, you don't have to go nowhere, its right there." (Mark)

The Internet as a recruitment source is highly complex and has become highly segmented. There are still the large generic websites however, from the reports provided by my participants, they would be more likely to go to industry specific sites, government, not-for profit for instance and company specific websites. As well, many professional associations now have on-line postings, for example, the Human Resources Association of Nova Scotia, (HRANS).

"Honestly I think I just looked at Saturday Chronicle Heralds [newspaper] and on the web there is a website called charity village which just advertises not for profit jobs you know workopolis and some other things like that I would look at but I would also look at different companies, I would say I probably did more searching on the web but I actually found the job in the paper." (Grace)

Despite varying perceptions of the Internet and newspapers, these may be good ways to reach potential employees who are not actively need a job, but may be currently dissatisfied with their current positions. Ben for instance explained that when he has been dissatisfied with work he has looked at these sources to see what was available.

"...but I have in the past, when I wasn't real happy with something or something wasn't going right, I've looked and usually the way I've looked for a job is I've looked on the Internet and I'll look in the job ads that come out usually Saturday is a big paper day with a whole bunch of ads and whatever." (Ben)

5.4.2.c. Efficiency and Influence

Networking was seen as influential by the respondents in two ways: first by influencing the hiring manager toward hiring the job seeker and secondly, by influencing the job seeker to apply. All respondents asserted that networking was an essential source for job seekers. Respondents tended to see networking, family friends acquaintances, and meeting people in the right industry, association or company, as the best way to ultimately obtain the job they wanted. Across respondents there were varying degrees to how influential networking was perceived to be in obtaining a job. Some individuals felt it improved their chances of getting a job tremendously, others felt it just allowed you to become aware of opportunities more easily.

Networking/Referrals

Natasha a 31 year old nurse with ten years' experience indicated the following in

relation to networking:

> *"Networking is very important, more important than any other thing. Because if I*
> *know that person, automatically, I'm sold 50%, 50% chance I'm already sold if I*
> *like that person."* (Cash)

Networking also seemed to influence whether the job seeker chose to apply for a

job in some cases, particularly if the individual was not actively looking or was satisfied

with their current job. This was the case for Tania an academic who stated a strong bias

toward recruitment sources such as networking activities and employee referrals.

> *"I think the personal contact is important, that it makes a big difference whether*
> *you apply for or how you perceive something... its' more of somebody tells me*
> *about something or again if you get a dean who sends you an email saying you*
> *should apply you take it kind of seriously and you say well maybe I actually*
> *should apply...* (Tania)

This was confirmed by other respondents as demonstrated by the following

utterance that networking influenced. For instance, Ben a financial industry manager

indicated that when he received a personal communication from someone this influenced

his willingness to apply and confidence in obtaining a job:

> *""But I think that's the best way to learn about a job is someone actually giving*
> *you a call Every job I've had pretty well has come from somebody that's made a*
> *suggestion that hey maybe you should apply for this."* (Ben).

Natasha also strongly believed that networking and "word-of-mouth" was crucial

in finding a job. She felt that networking and being referred by someone else were the

best ways to find a job. When she was asked how she preferred to find a job she stated

the following:

> "*But my preference is word of mouth, it really is, I really, I guess if I have a choice, it's word of mouth...Because I just think it's the best reference, I just think it's the best, I really do, I really believe in those people that come out with their business cards and they have no advertisements and they say to you, oh you liked my service, well I have no advertisements, I don't advertise at all, but if you could tell family and friends, I'd really appreciate that...*" (Natasha)

Mark also indicated he believed informal networks were vital, particularly when

established in your career. When asked how he would look for another job if necessary,

Mark shared the following story regarding how he was recruited for his current job and

his awareness of how others in his profession are recruited locally:

> "*I'd probably call (colleague/acquaintance) at (Parts Supplies Company) and see who is looking, to tell you the truth, just because he talks to all the owners everyday so and I know (current boss) when he was looking, he also told the part supplier, you know, same as I called and he told me that he (current boss) was looking for somebody and I know all the other employers and most guys in the trade, or people in the trade, know that people tell him too, right?*" (Mark Mechanic)

In conclusion, there seems to be a variety of perceptions of several different

recruitment sources but there is consensus among all participants that networking is an

influential and important aspect of job search. Networking and referrals appear to provide

connections and indicated it was influential to encourage them to apply for a position

when there was a personal contact. Respondents also appear to have indicated a sense

that they felt they would have a better chance of getting the position if there was a

personal connection. That networking or referrals would somehow influence the

recruitment process in their favour.

The divergent and fairly strong perceptions regarding newspaper ads and other types

of recruitment sources were unanticipated and unexpected. These perceptions could

potentially have implications for organizations advertising job openings via paper. It may

be that certain types of potential employees would not use the newspaper at all as a job

source. Alternatively, if the job ad is seen candidates with similar perceptions to those

raised here might not apply due to potential assumptions they might make about the type

of organization which advertises by paper. Companies may want to pay closer attention

to where and when they advertise by paper. The questions raised by the perceptions of

newspapers as a recruitment source certainly should be scrutinized further to see if this is

generalizable to a larger number of job seekers and the relationship they may have with

applicant reactions to recruitment sources used.

5.3.1 Recruitment Information Perceptions

A second category in the analysis of perceptions is related to information acquired

within the recruitment process. Participants had a number of perceptions related to the

nature of the information provided by different job sources. They also indicated they

were highly aware of cues which they perceived during the recruitment process. These

issues may affect applicants' perceptions of the organization and their willingness to

work there. Table 5.2 summarizes the key dimensions and related concepts which

emerged from Study Two data as related to this second objective

Table 5.2

Summary of key dimensions of recruitment process perceptions

Category 2: Recruitment Information Perceptions	
Key Dimensions	Related concepts
5.4.3. Recruiting sources Informativeness	a. Combining source types b. Insider information vs. stated requirements
5.4.4 Recruitment process cues	a. Ongoing Organization fit evaluation b. "Being true" Self-Identity

One thing which became clear throughout the interviews was that most if not all

respondents reported using multiple recruitment sources and many of these reported

combining the use of both formal and informal sources. The combination of the Internet

with informal sources was particularly prevalent among several of my participants.

5.4.3.a. Combining recruitment sources.

One respondent, Tania, an academic working on her Ph.D., did not talk about any

recruitment sources other than informal sources such as networking and employee

referrals in her interview, except for the following utterance which shows that although

her focus and energy was mainly on informal sources, she too utilizes formal sources in

her job search on some level.

> *"So in some ways it was, I saw an ad and applied and got the job and other ways it was like years of keeping in touch with people and kind of deciding, yeah, that's where I wanted to go and finally ending up here."* (Tania)

Another example of the use of multiple search tools came from Marilyn who while she had indicated she thought networking was crucial and had strong opinions related to networking, indicated that she would use multiple different job sources to find a job:

> ... *"But I'm generally in a full fledged out search where I search for whatever is available, and apply for whatever is available...* (Marilyn)

Ben who is now well established, with a long career indicated that he too would combine a number of different job sources during his job search. Based on the utterance below he indicated in particular, that he would do networking and Internet searches:

> *"...I guess the first thing I would do is basically I'd again call people I know and I would check the web on areas of jobs then I would you know, that I would be interested in and see what's there and I may do some resumes and sort of hand them out in places you know like cold calls depending upon what the situation is..."* (Ben)

Another example of participants' use of multiple sources and in particular use of a combination of formal and informal sources comes from Natasha. During our interview, Natasha mentioned a job she was interested in that she had found out about as a result of word of mouth from a colleague. After hearing about the job in question she had subsequently done research on the Internet to find out more about the organization and the work. Her intension is to apply for this particular job which she knows will become

available in a year. During this utterance she states she will or has used word-of-mouth

or networking, the Internet and intends to use a walk-in to apply for this particular job.

> *"...so this was word of mouth and so I did more research, like I went on the Internet...My first step will be to get the resume in to them, get my cover letter in to them and then within the year, I will find a way to get in touch with them. If I'm driving through to Ontario to see my sister, I will stop in Quebec, I will go into the office and I will make my face be seen, you know what I mean like, if I really want it I can get it. Like I really believe that, if I'm aggressive enough, you know what I mean so...* (Natasha)

Although it is not possible to generalize from such a small sample of participants

it is noteworthy that their recounting of their use of recruitment sources differs from the

quantitative data gathered in Study One. These findings related to combining source

types contradicts findings from Study One using the WES data, where only 2-3% of

individuals reported using more than one job source to find a job but is in line with

findings from other researchers using quantitative methods (Rynes, 2001). This may

reveal the importance of question wording and measurement precision. Job seekers also

reported that after finding out about the job they continued their information gathering

very diligently from a variety of different sources.

5.4.3. b. Insider information vs. Stated requirements

The different types of recruitment sources were perceived as yielding vastly

different types of information. In the following utterance which illustrates an interesting

contrast between the type of sources Harry makes it clear that he sees the value and

importance of the different types of recruitment sources and that these sources combined

together to assist him in applying and obtaining his current job. In this utterance, initially

Harry states that he thinks formal recruitment sources provide the most useful

information because they tell you there is an opening but then he goes on to say that

informal "inside" information from those working in the organization tell you what the

job is really like. For instance he discusses how knowledge from those already working

inside the organization convinced him to apply in contradiction to if he had only used the

job ad as an information source:

> *"I think the most formal information which actually listed all the job requirements*
> *was the most useful. The official ones website, and application, that actually gave*
> *me everything which the company wanted. Other information from my friends*
> *which were in the job was also very important because they were actually able to*
> *help me focus on specific issues which they were looking for specific skills in a*
> *huge skill set they were looking for so especially in the IT where they say*
> *something like programming would be great you need to have programming skills*
> *you need to be able to do this in this or that programming language, yeah but*
> *when you talk to people doing the job its' not required in the job its just a really*
> *nice skill to have. If I didn't know or I didn't hear from my friends that really we*
> *don't use that at all you don't need it then I may not have applied for it because I*
> *did not have that skill at the time so informal information are very very important*
> *as well."* (Harry)

As mentioned earlier recruitment sources were seen as serving dual functions, not

just as information about an opening and where to apply but also about the organization

and the job requirements and even the nature of the job itself. These allow potential hires

to prepare for the interview. Participants in Study Two indicated they used formal and

informal sources extensively to prepare for the selection process and to assess

organizational fit. For instance, Katherine indicated that she used the company website to

find out about the organization, prepare for the interview and obtain realistic information

about the job and the organization.

Formal sources such as newspapers and particularly the Internet seemed to be

used by respondents to as indicators of company culture as well as job expectations and

surface requirements such as knowledge, skills and abilities required for the job as well.

> *"I think the website was pretty interesting. It was, it's a good website in terms of having a lot of information about the actual, the actual school, so the actual work environment and I think that's more probably I don't know, I guess you would call it quantitative data in terms of just the facts of, you know, what has been going on with this school board in terms of nominations, in terms of you know you could look at [union] contracts.* (Katherine, HR professional, School Board)

However, when these sources of information were lacking job seekers looked to

competing organizations for information, as can be seen here;

> *"I looked on [the company] website which is really outdated and not very good so I looked on some other websites in [same type of business] just to get a little bit of that background."* (Grace)

Almost all respondents reported a sense that networking and informal sources of

jobs were important because they provided insider information that was more realistic

and more useful than formal sources. When preparing for an interview participants

reported using informal and formal sources to gather information and to get an "in" with

the organization:

> *"I think it's much more useful I guess, for a better word, if someone calls you and says that there's a job open in such and such and such and he can give you a little bit of background."* (Ben)

"Yeah I had a colleague of mine who worked for (the same organization in a different location).... so she told me a bit about the different (organizational) affiliations and the type of education that they do. So I got a bit of inside information she knew a bit about some of the staff members here and told me a bit about them... " (Grace)

This so-called 'insider information' was used by applicants in a variety of ways, to prepare for interviews, to assess the organizational environment, job functions and expectations, and their fit with the organization and the job, and also to asses their potential boss and colleagues.

"I talked to some former colleagues on just what to expect when being interviewed for an executive director's position and talked to some other executive directors" (Grace)

Cash described his use of multiple sources of job information and how they helped him prepare gather "inside" information regarding the person he with which he was interviewing. In addition, he described his use of the Internet to support his information search. Cash also indicated that he called the human resources department for the organization and gathered information about policies and practices in the organization.

"I talked to one of my classmates who worked in the company, so I find out, first of all I find who will be interviewing me and basically ask her about you know, her opinion about that person, so I'm trying to paint the pictures, trying to figure out you know, like what type of criteria that person is looking for and then I went to the Internet. I go on Internet and research for the company, research both the company itself as well as the products. I also like called down to HR for the company and actually find out about a little bit more information about the company, the policy, how they treated the people. That's pretty much how I prepared for the interview. " (Cash)

This utterance and similar utterances such as these where multiple sources of

information are utilized by job seekers may indicated that job seekers are much more

sophisticated and strategic than organizations and researchers have anticipated in the past.

5.4.4. Recruitment process cues.

Surprisingly, one interesting finding was that job seekers attend to some

unexpected and often overlooked environmental factors. Employers should be aware of

this and keep it in mind during the recruitment process. For instance, one respondent

stated as an example that she felt the physical environment was indicative of the

organizational culture:

> "I think the physical means of not just having been interviewed in a boardroom
> where you meet, you sit on a chair you know, you talk to some people and leave.
> But actually being able to see what the office looks like and even how people, I
> don't know I'd sometimes even how people decorate, you know, is it a really
> formal setting or do people have pictures and plants and you know, I think a lot of
> that gives you a good feeling for do people make it homey, do people seem
> comfortable or seem relaxed, those kinds of things. (Katherine).

This was also supported in the following story Marilyn recounted regarding her

experience with a job talk she had participated in during a recent job search process in

which she had been involved .This participant suggested that she inferred a more

masculine environment from a small physical indicator during one of her interviews;

> "... for that job and there's one thing I forgot that surprised me was when I was
> waiting to go in to do my job talk I looked up at the pigeon holes, you know all the
> mail post things, and looked at the names and in my department there was about
> 15 people and I saw one female's name and do you know what I said to myself
> before I went into the job talk, there's no way I'm going to get this job, because
> they don't hire women. So that was interesting. Now as it happened, that round,

*they hired two females, myself and somebody else but I think it was a very
masculine department and in traditional notions I guess, so that was sort of
interesting"* (Marilyn)

While in this case Marilyn took the job regardless of her impression, other

candidates might not have done so; Marilyn further stated later in the interview that this

modified her expectations of the university;

*"...in most places I've worked, there's been lots of men, more men than women
but it did give me, it makes me think for a second as to what kind of place or
department it would actually be. It didn't influence, I don't think, my decision to
go, but it did certainly influence my expectations or what I, you know, my feelings
about it before I went..."* (Marilyn)

The actual job title in the recruitment ad can even play a role in whether or not a

candidate applies. For instance, Katherine indicated that the job title of one job almost

lead her not to apply because it gave the impression of a lower level job but after

speaking with a friend in that industry, she realized that different terminology was used

than she was accustomed to for jobs at that level in that industry:

*"I had seen it on-line and wasn't going to apply because I didn't know (how job
titles work in the school board), the title was one that I didn't think it was a senior job, it
was called coordinator of human resources and as you may know, HR coordinator
usually is the entry level job. In a school board it's basically the most senior job, just one
step below the director. Anyway, but I did put my application in."* (Katherine)

All of these small cues can lead applicants to make assessments as to perceived

organization and job fit. Organizations may therefore want to pay attention to these

during the recruitment process which continues to occur well beyond the initial ad which

attracts the job seeker.

5.4.4. a. Sources determine organization and job fit.

Although perceived organization and job fit are well researched concepts in

management and organization psychology literature, I did not anticipate participants

would discuss this concept as extensively as they did. Participants discussed perceived fit

and whether they would consider a job or an organization to be a good fit for them, but

they did not always fully clarify what they believed fit entailed. This is the case with

this utterance from Harry, it does appear that he is resigned to the fact that there may be

no "perfect" fit and seemed to indicate that there were tradeoffs to be made between job

fit and organization fit. It appears that participants deal with this uncertainty at least in

Harry's case, by gathering as much information about a job as possible. This may

ultimately explain the increased usage of the Internet in participants' job search activities:

> *"I would get as much information as I can from there for example I may see a job
> which I like for QEW company, right read the skills and what they require and
> then I would go to the QEW website and learn more about the company. See if the
> company would fit what I want to do, the job may fit but the company may not and
> that's where you have to do a trade off, I think. So definitely the web."* (Harry)

Katherine expressed how she hesitated prior to applying for a position because of

the nature of the industry and her fit concerns. She had believed that a school board job

might not be as fast paced and would provide a more limited number of opportunities for

advancement.

Despite these concerns Katherine decided to apply because of the education

related environment and the location:

"I was a little bit hesitant at the time because of the fact that it was the school board and I'd worked for private sector so I wasn't sure if it was going to be a cultural match for me."... my impression was, is that the, having worked for a for profit organization obviously there's more... that there's a little bit of, maybe a different tempo to the job, a different speed, maybe different opportunities of bonuses, those kinds of things, so compensation figured into it as well. I thought it would be too much 9-5ish for me and I think it was just my, my lack of knowledge of that type of industry so I wasn't sure if really the public organization was my cup of tea really. I thought I would be better suited for the corporate environment so, but having said that, then I looked at it and said you know education is interesting to me and the school environment and obviously the location."
(Katherine)

Natasha also expressed concern regarding organization fit. She was worried about

leaving privately owned American hospital setting for the Canadian socialized medical

system because she was concerned it would not be as modern and the standards may not

be as high:

"I mean I ended up pleasantly surprised with the hospital. I thought I was going to be going back into the dark ages, do you know what I mean? Because I had these misconceptions that America was so far ahead and I mean, [hospital] is one of the leading research facilities in Canada do you know what I mean, I didn't know that, things like that. No the money is not there and no the bells and whistles and the fancy this and the fancy that, but you know what, I had automated blood pressure cuff, whoopdedoo, now I just have to do a manual one..."(Natasha)

5.4.4. b. "Being true".

Being true to yourself and recognizing who you are and what you are willing to

do and not do for a particular job is an important concept which emerged in the data

related to organization fit and perceived cues. Tania recounted a story involving an

interview during a selection process which she felt she clearly needed to set boundaries in

order to remain true to herself. The interviewees were asking her if she was able to teach

a number of different undergraduate courses. In this case she chose to respond in a way

which allowed her to address directly what she was willing to do:

> *"I was quite frank with them and I said, well I've taught HR before here and I could teach it but it isn't my area of research anymore and it would require work for me to do it. So it was hard simply because I think it was that notion of trying to say what you thought was partially what they wanted to hear and that seemed difficult, but yet also be strong enough to say that I'm not teaching anything."* (Tania)

Ben also discussed how he felt it was important for him to clarify what he was

willing to do and not do in relation to work, even if it meant he would not get the job. He

indicated here that during his most recent interview he advised the interviewers that at the

current stage in his career he was not interested in advancement:

> *"....and I also made it very clear that I really didn't want to be the VP or anything like that, that I'd be very happy to be in the role that they were hiring me for the next two or three years and felt that I could do a very good job for them there but I really wasn't overly interested in I guess climbing the corporate ladder or as such..."* (Ben)

Participants' use of combinations of recruitment sources and their understanding

of the nature of recruitment sources as providing different types of information yields a

slightly different perspective   than previously provided in the recruitment source

literature. This literature indicated that informal sources provided a more realistic type of

information, thus explaining the relationship with more positive outcomes. The

information participants indicated was provided by formal sources was not necessarily

unrealistic but more requirements based and less intangible, organizational culture and

perceived fit related. This presents the potential for a slightly altered view of information

in relation to recruitment sources, based on the quantity and nature of information rather than its accuracy per se.

5.5 Study Two Conclusion and Discussion

Using a qualitative approach provided perspective on how applicants perceive recruitment sources and how they may interpret cues and events that occur during recruitment. It is clear from the data provided by my participants that there is some segmentation related to recruitment sources and how they are viewed. For instance, participants expressed a variety of perceptions relating to different recruitment sources and when they should, in their opinion, be used. Participants indicated that they considered certain types of sources more appropriate for certain types of occupations, career stages, experience levels and skill levels than others this was particularly the case for on-campus recruitment and headhunters where career stage was cited as impacting on source usage in these cases and in newspapers where skill levels and experience level and occupation types were perceived as lower level with the exception of the "careers" section. These findings regarding recruitment source perceptions were interesting because there has not been similar research on "applicant reactions" and or perceptions of recruitment sources themselves which raised these types of perceptions. These findings may further lead to the possibility that these non-neutral perceptions of recruitment sources could be related to candidates' view of the organizations using these sources and in turn could be correlated with job seeker's decisions to apply. This study has provided a fruitful avenue for future quantitative research. Source perceptions could be presented to

potential job-seekers to see if they hold true in a larger more empirical dataset. If there was evidence that these perceptions are consistent these results could be tested further to determine if the perceptions in question have a significant effect on actual decisions to apply.

Several participants also indicated that they considered informal sources to be the most informative about the job and the organization and productive for their job searches. Networking was considered a crucial element of the job search for most participants. Overriding these perceptions of recruitment sources there was evidence that when job seekers are truly looking for a job, they will look intensely wherever they can, using a multitude of recruitment sources. Although it is difficult to generalize, in this study informal recruitment supplemented with Internet searches for postings and to prepare for the selection process, were most popular. It was evident that while job seekers may perceive certain recruitment sources more favourably, they are in no way married to these sources and are willing to use sources perceived as less efficient, lower level, more traditional, as the case may be, in order to get the job they want.

Thus, the findings in this study indicates that regardless of where or how a company "advertises" its job openings, participants in this study almost all reported using informal sources to supplement any formal sources they may be using to find out about an opening. This was a surprising finding in light of the results of Study One which was based on three large data sample from Statistics Canada which surveyed around 24,000

employees each on recruitment sources used. The data in that indicated that very few participants used multiple recruitment sources to find their jobs. An examination of the question in Study One leads me to think that question wording may have influenced this result and I intend to use Study Three to verify the results of the first two studies with respect to types of recruitment sources use and verifying whether there are mixes of sources used. If respondents are indeed actively seeking informal information about jobs and organizations during their job searches, organizations would be wise to ensure to the extent possible that all of the potential informal sources of information used are of a positive nature. This could be a daunting task but could lead one to conclude that fair and equitable treatment of employees, clients and other stakeholders who could act as informal sources to potential employees could play an important role in the caliber of employees organizations may ultimately be able to attract.

Furthermore, there were indications that different recruitment sources were used by participants for information seeking purposes. In preparing for interviews, participants reported making substantial use of the Internet to find out about a company as well as frequently using networks of contacts. There was a strong perception that formal sources such as the job ad provided facts and surface requirements, whereas the informal sources provided "insider information" which could not be obtained by other means. Although some information in the business plan or on the Internet might provide a hint of company culture and expectations, direct communication with a friend or acquaintance working for the company appeared to be considered the most accurate and salient information. Data

from the interviews also indicated that there was on-going assessment of the organization

and the job for fit and making sure they were comfortable at work. Although related to

the previous literature on realistic information the view of formal and informal

recruitment sources as sources of information providing slightly different pictures

presents a slightly different light on how realistic information could be interpreted than

has been provided previously.

In conclusion, the data from the qualitative interviews revealed a variety of

perceptions of recruitment source and of cues that arise from the recruitment process

which should be examined more closely. There did not however appear to be any grand

theory underlying why certain recruitment sources are used over others and it is not clear

whether these recruitment source perceptions where related to decisions to apply. Several

of the issues raised brought to mind the complexities individuals face in searching for a

mate, but with the added layer of power imbalance. Several of the respondents, discussed

the job interview in similar terms to a first date, being nervous, unsure of whether the

interviewer "liked them", feeling the need to be honest and to "be themselves" because it

would not work out anyway otherwise, having the opportunity to show what they can do

and who they are was also important to interviewees' perception of the interview.

Looking at job seeking in this vein may be another potential avenue for research which

could lead to new and interesting discoveries.

The findings related to the different perceptions for different recruitment sources

and different categorizations they provided were somewhat unexpected and provide some

direction for future research. The findings related to the combination of recruitment

sources and the different purposes for which they are used related to information seeking

also provides a different angle from which to consider the previous recruitment source

literature. These findings will provide an important lens with which to approach Study

Three in search of a better understanding of recruitment source usage and its correlates.

Chapter Six

6.1 Literature Review —Study Three

In Study One, the archival data limited the extent to which a wide variety of recruitment sources could be examined and the nature of the research questions which could be asked. For instance, there were no questions related to job expectancies, realistic information gathering and perceived source informativeness. In addition, there were few informal recruitment sources and there was no information regarding whether "family and friends" were inside or outside the organization. These omissions may have attenuated the results and may explain the lack of strong effects found in many of the analyses in Study One. Since participants' responses could have referred to family or friends inside the company or outside the company, it is difficult to draw conclusions on the extent of "internal" and "informal" information job seekers obtained compared to other sources.

Additionally, Study One ignored the role that proximal intervening variables may have played in the relationships found between the different recruitment sources and outcomes. Proximal intervening variables may be more influential in establishing the outcomes related to different recruitment sources. For example, Moser (2005) proposed that job attitudes such as met expectations, organizational commitment and job satisfaction were more likely to be outcomes of recruitment sources than job performance or turnover. Based on Moser's work and previous information related to source

informativeness (Horvath, 2010; Ryan et al 2005) it could be hypothesized, in turn, the candidates' information about the organization gathered from various sources is associated with the candidates' job expectancies. Study Three explores potential explanatory mechanisms for outcomes related to recruitment sources, namely; perceived fairness, job related information gathered, job expectations and job attitudes, including organizational commitment. The explanatory mechanisms which may underlie the relationships that have been previously found for formal and informal recruitment sources have not been clearly examined or fully considered in the past because of the poor specification of the realistic information hypothesis (Horvath, 2010).

In addition to considering potential intervening and explanatory variables to clarify the mechanisms underlying recruitment source usage, the purpose of Study Three is also to help examine apparent contradictions between the findings of Studies One and Two regarding recruitment source usage. Specifically, Study One indicated that in almost all cases, only one recruitment source was used. In contrast, respondents in Study Two frequently reported using multiple recruitment sources concurrently. As a result of these contradictions regarding reported usage rates, the researcher decided to modify the wording of the recruitment sources usage question to ensure complete recruitment sources usage rates were determined. Furthermore, Study Three helped empirically determine the prevalence of recruitment source perceptions.

6.1.1 Use of Multiple Recruitment Sources?

The wording of the questions in Study One may have had a profound impact on how the respondents answered those questions. The WES questionnaire was designed mainly by labour economists with little regard for nuance. Different wording may have led to different outcomes. For example, the recruitment sources question in Study One asked: "When you were first hired, how did you learn about the job opening? (Check all that apply)." In Study One, I found little or no use of multiple recruitment sources. In contrast, the qualitative interview responses in Study Two indicated that job seekers used multiple recruitment sources to learn about the job opening and that these were used for a multitude of purposes. Recruitment sources were used to find out about job openings, to learn about the organization and its culture, and to identify job requirements and expectations, among others. Study Two suggested that if the questions on recruitment sources had been worded differently in Study One, candidates might have responded differently. This study also suggested that the question on use of various recruitment sources should be revised to ask: "Did you use any of the following sources to find out about the job opening for your current job? (Select yes or no as appropriate)." Similarly, the results from Study Two were used to revise the questions used in the Study Three survey in an effort to determine if the Study One results may have been attenuated due to the wording of the questions used in that study. As a result of this discrepancy, an additional research question for Study Three is: "Do job seekers use one recruitment source, as suggested by Study One, or multiple sources as suggested by Study Two?"

6.2 Perceptions of Recruitment Sources

A surprising finding from Study Two was that job seekers made inferences about

the job and the organization based on the organization's use of certain recruitment

sources and that they had distinct views and opinions on certain recruitment sources in

their own right. It was common for participants, all of whom had recent successful job

search experiences, to say that newspaper ads were old-fashioned and that they were

inefficient. Participants also perceived the Internet as a modern and efficient recruitment

source. An interesting question is whether these qualitative findings related to recruitment

source perceptions are widely held.

Previous research has examined applicant perceptions of the quality of certain

recruitment sources, the quality of recruiters, the information content of a newspaper ad,

or a website (Dineen et al. 2002; Reeve & Schultz, 2004; Rynes & Cable 2003; Saks,

2005; Schwab et al., 1987). Schwab et al. (1987) found that job posting content related to

working conditions, pay and job attributes and these were related to job attraction and

pursuit. The importance of job characteristics in relation to job attraction results were also

confirmed more recently by Chapman et al. (2005). Friendliness and interpersonal

treatment during the recruitment process is also important and may have greater impact

on applicants with more opportunities (Chapman et al. 2005; Chapman and Webster,

2006). With the exception of the Internet, little effort has been made to look at the

recruitment source itself (Allen et al., 2007). Allen et al. (2007) have also argued that

when generating applicants in the recruitment process, the key interactions which are

most prominent occur with respect to recruitment sources. There has not, however, been a

systematic review of how applicants perceive different types of recruitment sources.

Some studies have compared outcomes related to the Internet and newspapers for job

seekers (Marr, 2007; Rafaeli et al. 2005). These research comparisons did not examine

the perceptions of job seekers as related to the recruitment sources per se. In contrast, a

portion of the research presented by Marr (2007) did include a few perceptions of sources

from a small number of Human Resources practitioners who indicated they perceived the

Internet as cost-effective and useful. These Human Resources practitioners also

concurrently indicated that advertisement clutter could diminish the Internet's utility. The

Internet was also perceived by practitioners as an information storehouse for applicants

and organizations (Marr, 2007). Practitioners did not raise any other distinctions in

perceptions of recruitment sources, except in relation to newspapers. HR practitioners

perceived these as more likely to be used by older job applicants. When examined

together, Study Two and Marr's (2007) research indicate that both HR managers and job

seekers concur in their conclusion that newspapers attract the "old" in terms of either old-

fashioned conservative companies or older job applicants. Study Three will allow

quantitative testing of this tentative finding from Study Two. Prior to the recent work by

Marr (2007), Terpstra (1996) reported a small number of recruitment source effectiveness

ratings by HR managers; these indicated that employee referrals, college recruiting and

executive search firms were rated as the three best sources of employees whereas unions

and public employment agencies were rated as the two worst sources of employees.

In sum, none of the previous research examined applicant perceptions of

recruitment sources closely beyond perceived informativeness, effectiveness and content.

In this study, my intention is to test a number of different perceptions which were raised

in the Study Two to see if the reported perceptions are maintained and can be quantified.

Objective 6: To confirm and extend the information gathered from qualitative research about recruitment sources and applicant impressions using an empirical study of recruitment sources.

Signaling and informativeness in recruitment.

It has been argued consistently that individuals decide to pursue employment in

certain jobs or organizations as opposed to others in part based on the messages conveyed

by the organizations and the information potentially gathered from their recruitment

messages (Barber, 1998; Rynes et al. 1991). Signaling theory was originally proposed

from a labour market economics perspective, it was based on the tenet that organizations

have imperfect information about job applicants and must infer information from signals

(Spence, 1973). For example inferring intelligence from education levels, grades and test

scores and inferring performance from assessments and references (Spence, 1973). Rynes

and Miller (1983) expanded this notion when they proposed that job seekers also develop

impressions of potential employers based on incomplete information obtained during the

recruitment process. This information acts as signals of what the organization will be like

to work in (Rynes et al., 1991). Unfortunately what signals are used and how they could

potentially influence outcomes was not specified, although it was determined that signals

were most likely to be used if applicants had little concrete information about the

organization (Rynes et al., 1991). It may be very difficult to propose exactly which

signals might be used because of the power imbalance between the hiring organization

and job seeker. The job seeker is not in a position to subject the organization to formal

testing for instance, however the job seeker can obtain "references" by speaking with

current or past employees and could use visual features such as the layout of the office, as

well as interpersonal treatment and procedural fairness perceptions during the recruitment

process to make inferences about the organization. This is where information seeking by

job applicants could potentially relate to job expectations, and in turn, job satisfaction and

turnover intentions. It may also be wise for an organization to share its own information

to reduce false impressions based on other information which could be gathered outside

the organizations sphere of control.

Internet usage over time.

It has been argued that the Internet is becoming the primary recruitment source

for job applicants (Cappelli, 2002). There have been increasing reports of the use of the

Internet as a recruitment source as indicated by Ipsos-Reid (2002) and there has been an

increase in academic research on the Internet as a recruitment source in the last ten years

(Breaugh, 2008; Horvath, 2010). The results of Studies One and Two also indicated a

tangible increase in the use of the Internet as a recruitment source. In the 1999 WES data

the Internet was reported as having been used only 0.6% of the time among recent hires

in this large Canadian sample, this increased to 7.2% in the 2005 data for recent hires. As

such, it could be predicted that the same individuals would have increased their usage of

the Internet as a recruitment source over time. In addition to examining the general

questions discussed earlier, Study Three will also examine these specific hypotheses:

H1a: Informativeness ratings will be higher for informal sources than for formal

sources, with the exception of the Internet. Specifically, employee referrals

will be rated as a better recruitment source than newspapers, union job

postings or government recruiting agencies.

H1b: When the prior and most recent job source usage are compared, job seekers'

patterns of Internet usage will have increased significantly for the most

recent job search.

H1c: Job seekers will have non-neutral perceptions of different recruitment

sources. Internet postings will be perceived as more modern and efficient,

whereas newspapers will be perceived as more traditional.

6.2.1 Individual differences and recruitment sources

The individual differences hypothesis has been poorly delineated and fails to

specify exactly which individual differences for sources would be associated with certain

outcomes or how they achieved the hypothesized effects (Horvath, 2010). The poor

definition of this hypothesis has led to the examination of a multitude of individual

differences with no real direction (Horvath, 2010). Researchers have examined a panoply

of individual differences such as age, gender, education tenure, weight, height, race,

experience, number of prior jobs, nationality, employment status, prior quits, marital

status, income, and conscientiousness (Breaugh, 1981; Caldwell & Spivey, 1983;

Horvath et al. 2010; Taylor & Schmidt, 1983; Swarroff et al. 1985; Vecchio, 1995;

Weller et al. 2009). In contrast, few firm differences have been studied with the exception

of firm size (Barber et al. 1999). Study One showed, a linkage between individual differences and recruitment source use, once firm characteristics were taken into account. Appendix B postulates that individual and firm differences are related with the type of source used, type of source is associated with applicants' information about the job and the organization.

Furthermore, there are common assumptions among practitioners and job seekers that certain types of sources are used by certain types of job seekers, for instance, on-campus recruitment is commonly perceived by practitioners to be effective for recruiting younger, better educated applicants with less work experience. Study Three will continue the exploration of firm and individual differences as related to the types of recruitment sources used.

H2a: A combination of both job seeker and firm characteristics will be associated with the type of recruitment source used. Specifically, in the case of on-campus recruitment younger, university educated individuals will be more likely to use this recruitment source.

H2b: Job seekers who found positions in larger firms will be more likely to have used formal recruitment sources as part of their job search.

Self-efficacy and recruitment sources.

The individual difference variables studied have most often been those that are readily available with little explanation as to how they might be related to recruitment sources. Self-efficacy is one individual difference variable which is more difficult to

assess than the typical demographic variable but which may play a more important role in

recruitment source use. Self-efficacy is one's belief in one's own ability to succeed in a

variety of situations (Bandura, 1997). According to Bandura, those with high self-

efficacy view difficult tasks as challenges, whereas those with low self-efficacy tend to

demonstrate avoidance behavior (Bandura, 1997). Self-efficacy impacts how events are

perceived and interpreted by those experiencing the events in question (Bandura, 1997).

Self-efficacy has an impact on a wide variety of psychological attitudes and behaviours

such as task performance (Bandura, Caprara, Barbaranelli, Gerbino & Pastorelli, 2003)

and is correlated with job satisfaction and affective commitment (Brown, Ferris, Heller &

Keeping, 2007).

Self-efficacy has been studied in relation to job search success (Saks & Ashforth,

2000, Saks, 2006). Job search has been defined as an on-going process that occurs as a

result of dissatisfaction with one's current situation and requires goal-orientation and

self-regulation behaviours (Kanfer, Wanberg & Kantrowitz, 2001). In this context, self-

efficacy has been studied as a predictor of job search success (Eden & Aviram, 1993;

Saks, 2005; Saks & Ashforth, 2000, Saks & Ashforth, 1999; Wanberg, Kanfer &

Rotundo, 1999). Saks and Ashforth (2000) found that self-efficacy was related to job

search behaviours as well as the number of job offers a candidate received and their

successful employment. Saks (2006) also found evidence that self-efficacy is associated

with the number of interviews, the number of offers, employment status, and, person-job

fit perceptions that occur during a job search. As such, Saks (2006) suggested that self-

efficacy could potentially influence the use of job information sources.

More recently, perceived self-efficacy has been associated with job attitudes, job search intensity and success, either directly or as a moderator (Zikic & Saks, 2009). McNatt and Judge (2008) also found links between self-efficacy and job attitudes such as commitment, job satisfaction and intentions to quit. High self-efficacy interventions have resulted in improved job attitudes and decreased turnover over time (McNatt & Judge, 2008). Self-efficacy, along with information seeking by new employees, has also been correlated with numerous commonly-studied outcome variables for recruitment sources such as organizational commitment, satisfaction, turnover and performance (Bauer et al. 2007). Previous research on self-efficacy has shown that those with high self-efficacy tend to be higher in extroversion and tend to have higher self-confidence, self-esteem and academic achievement (Bandura, 1997; Bandura et al. 2003; Saks & Ashforth, 2000). Given self-efficacy's correlation with extroversion and achievement, it is hypothesized that those with high self-efficacy are more likely to use informal recruitment sources while those with lower self-efficacy are more likely to use formal sources. Study Three examines this proposed relationship between the use of recruitment sources and self-efficacy and its association with outcomes.

Strengths and weaknesses of research studies thus far.

Study One's strength was in providing a comprehensive number of variables related to individual and firm differences and a large representative sample; however it did not include any proximal intervening variables. Study One however lacked an assessment of the quantity of information participants gathered on the organization. In

turn, Study Two's strength was in providing a rich in-depth qualitative understanding of way job applicants believe they are taking certain actions and how they perceive the recruitment process and recruitment sources. This provided an account of recruitment source perceptions which had not been considered in detail in other research. Study Two was thus able to inform the research in Study Three on these issues and concerns.

Study Three builds on the two previous studies and examines how job seekers use recruitment sources as well as recruitment sources' relationship to job attitudes and to outcome variables. Study Three also seeks to confirm some findings regarding the perceptions of recruitment sources and their informativeness which were raised as a result of Study Two. Study Three attempts to address the mechanisms underlying recruitment source usage and perceptions, as well as how active information seeking by job seekers could relate to outcomes such as job expectations and in turn, affective commitment, turnover intentions, job satisfaction and promotion. In addition, Study Three attempts to show how type of recruitment source, amount of information about the job, and job expectations might operate together to relate to employee outcomes once individual and firm differences are controlled. This may help to explain the myriad of correlations which have been found for recruitment sources in past research and meta-analyses (Zottolli & Wanous, 2000). Based on types of sources used, findings from Studies One and Two appear to indicate that information and individual differences may be operating in concert to help explain some of the relationships which have been previously found between recruitment sources and outcomes.

If job seekers use multiple formal and informal recruitment sources in combination, as was suggested by Study Two, it may be difficult to determine the effects related to the individual differences and realistic information hypotheses. But if candidates' reported realistic information gathering is higher and if there are different characteristics of job seekers with different types of recruitment source usage, it may be possible to examine both individual differences and realistic information results concurrently. This could provide support for the notion that both processes are working together. Although a number of individual differences have been found for recruitment source usage, greater support has been shown for the realistic information hypothesis (Rynes, 1991, Barber 1998, Zottoli and Wanous, 2001).

6.3 Realistic information hypothesis and realistic job previews

The realistic information hypothesis and Realistic Job Previews (RJP) are distinctly different concepts (Marr, 2007). Despite differences between these concepts, there is an underlying theoretical link between the two concepts (Marr, 2007). Contrary to RJP, Realistic information hypothesis relates specifically to recruitment sources used. The realistic information hypothesis proposes that certain recruitment sources, specifically informal sources, will convey more correct and specific information about the job or organization (Reid, 1972). This more accurate information will ensure more met expectations for successful candidates and lead to better outcomes in terms of lower turnover, and higher satisfaction and commitment (Marr, 2007). Informal sources are thought to provide greater informational realism, better met expectations and improved

organizational adjustment and outcomes (Horvath, 2010; Kirnan et al., 1989; Moser, 2005; Saks et al., 1997). Specific testing of "informational accuracy" or "realism" has been limited (Marr, 2007). Much of the research testing the realistic information hypothesis used recent hires to rank the perceived accuracy of the information they received from the job information source(s) they used, reporting the degree to which they knew about the job/organization prior to hire (Breaugh & Mann, 1984; Quaglieri, 1982; Taylor, 1994), and linking these variables to outcomes. Those using referrals have generally reported higher subjective levels of job knowledge than those recruited from newspaper ads (Taylor, 1994). In a more unique study, Ryan et al. (2005) requested recruiters assess the informativeness of the sources used by actual applicants for a firefighter position, rather than current employees. They found that source informativeness, as assessed by organizational recruiters, was related to application behaviour but not to withdrawal from the selection process, intentions to remain an applicant, or success in the process. In their study of Internet recruitment, Allen et al. (2007) found that more specific organizational and job related information was related with positive attitudes to the organization, intentions to proceed with an application. Ryan and Delany (2010) concluded, based on their review of literature that more information about the job leads to greater levels of applicant attraction.

Realistic Job Preview (RJP) is also based on the concept that potential job candidates do not accurately perceive the jobs for which they have submitted an application. As such, they have inflated expectations that lead once in the job, to

dissatisfaction, turnover, reduced performance and other negative outcomes compared to those who have more accurate expectations (Breaugh, 2008; Breaugh & Starke, 2000). Typical RJPs include the presentation of a video or pamphlet on the organization which provide positive and negative information about a job. Interactive, in person RJPs have also been found to be effective (Phillips, 1998). Meta-analyses of RJP effects on turnover, commitment and job satisfaction have thus far yielded modest correlations (Meglino, Ravelin & DeNisi, 2000; Phillips, 1998; Saks, 2005). Breaugh (1983, 2008) has argued that RJPs are not manipulated or tested appropriately and that they should be most effective if the job is not well understood on the part of the applicant or if applicants tend to have unrealistically favourable expectations of the job and they have numerous other job opportunities. Breaugh (1983) therefore concluded that the "accuracy" of expectations is important. Phillips (1998) and Saks (2005) have both concluded that RJPs have a weak effect on turnover. Nonetheless, Saks (2005) has continued to recommend RJPs be provided as an organizational practice. In the context of employee socialization, researchers have stated that job previews are beneficial as they may reduce the number of employees who fit poorly with the organization or job, and that RJPs prevent unmet expectations (Bauer & Erdogan, 2010). Breaugh (2008) also suggested that the modest effects attributed to RJPs may be due to the fact that they were tested in conditions which were less likely to demonstrate strong effects, and because the manipulations of the RJP variable itself were weak. There is evidence to indicate that some types of RJPs are more effective than others, for example the use of one-on-one conversation compared to a pamphlet (Collarelli; 1984; Philips, 1998). Other potentially effective RJPs might include

work simulations (Iles & Robertson, 1989; Schmitt, Ford & Stults, 1986) or work site

visits (Breaugh, 1992). Breaugh (2008) advocates that in the future a combination of

different RJP activities and the development of a more comprehensive application of

RJPs should be used to test the effects of RJPs. Despite the natural links between RJP

theory and the realistic information hypothesis, there have been no real attempts to

integrate these ideas in a single study (Breaugh, 2008). There have not been any previous

attempts to assess job seekers' actual information seeking activities during a selection

process nor their exposure to RJPs in conjunction with recruitment sources during the

selection process as relates to outcome variables. The inclusion of information seeking

variables may clarify some aspects of the realistic information hypothesis and better

delineate the underlying concepts and how they relate to RJP research.

Based on potential RJP techniques from the literature, I will assess whether

applicant's perceived information gathered about the organization will have a positive

relationship with outcome variables. Therefore, gathering greater information about the

job prior to employment will contribute to participants' perception of more accurate job

expectations. In turn these job expectations will lead to more positive organizational

commitment and job attitudes and to a lesser extent other outcomes.

Met and Unmet Expectations and Perceived Fit.

RJP research has stimulated research on pre-entry and post-entry expectations of

job applicants including significant controversy over the measurement of those

expectations (Edwards, 2001; Griffith, Hom, Fink & Cohen,1997; Hom, Griffith, Palich

& Bracker, 2006; Irving & Meyer, 2005, Irving & Meyer, 1995). Research on met or

unmet expectations has not been extensively linked with recruitment source research,

although a few studies have relevance to this topic. Werbel & Landau (1996), in a

comparison of incumbent attitudes and applicant expectations, found some support for

the relationship between realistic information and met expectations. Similarly, Saks

(1994) found that those hired through informal sources reported more accurate job

information and greater met expectations. Rousseau (2010) argued that although the

details of the employee-employer relationship are usually not explicitly stated during the

hiring process, the conversations which occur during these periods create beliefs about

the organization's treatment. However, changing circumstances cause these beliefs to

evolve over time as individuals experience socialization within the organization. How

these beliefs are operationalized in various studies as promises, obligations or

expectations has been the source of significant controversy where promises in particular

were problematic to measure in relation to psychological contract issues (Rousseau,

2010). As of yet, recruitment sources outcomes have not been studied in relation to

promises or obligations, they have been studied to some degree in relation to expectations

and beliefs about organizational actions (Moser, 2005).

Moser's (2005) research provides the strongest support thus far for the

relationship between unmet/met expectations and recruitment sources. Moser (2005)

found that employees recruited through internal (informal) recruitment sources

experienced less unmet expectations than those recruited through external (formal)

recruitment sources. Moser (2005) found that unmet expectations mediated the

relationship between recruitment sources and job satisfaction. Results were relatively less

robust regarding the mediation between recruitment sources and organizational

commitment. Irving and Meyer (2005) in contrast have found job seekers' job

expectancies before and after job entry to differ and have concluded that job expectancies

are inaccurate.

In a similar vein, studies which assessed employees' and managers' accuracy of

perceptions have generally found them to be highly inaccurate (Mezias & Starbuck,

2003; Sutcliffe, 1994). In contrast to Irving and Meyer (2005), Mezias and Starbuck

(2003) concluded that inaccurate perceptions are not by default bad or lacking in utility;

even if perceptions are inaccurate, the important thing is how they influence action. In

fact, people frequently perceive things "inaccurately" yet take action based on these

perceptions, which often does not negate effective performance (Mezias & Starbuck,

2003). In many cases of human behaviour, it is not objective reality which influences

behavior but rather subjective perceptions of situations. The actions or intended actions

based on perceptions, whether accurate or not, is the variable of interest as it is in Study

Three. The measurement of expectations need not be "objectively accurate" to influence

behaviours or behavioural intentions.

Several decades of research have indicated that early recruitment and selection experiences are associated with subsequent attitudes and behaviours toward the organization (Riordan, Weatherly, Vandenberg, & Self, 2001). In addition to expectations, perceived organizational and job fit are believed to be a result of "realistic" information, which are associated with outcomes such as job satisfaction, commitment, intention to quit, turnover, tenure and performance (Kriskoff-Brown & Guay, 2010; Ryan et al. 2005; Saks, 2006). Kriskoff-Brown and Guay (2010) summarize the results from several meta-analyses related to these variables. Their summary shows that effect sizes range from .22 to .62 for person-organization (P-O) fit and job satisfaction and from .28 to .61 for person-job (P-J) fit and job satisfaction. Effect sizes for P-O fit and organizational commitment range from .23 to .77, with direct assessments having larger effect sizes than objective measures (Kriskoff-Brown & Guay, 2010). In addition, person-organization (P-O) fit and intent to quit are more strongly related in general than actual turnover and P-O fit with actual turnover effects ranging from -.12 to -.24 and intentions ranging from -.14 to -.58. P-O and P-J fit in a recruitment context, however, is more meaningful if it is tailored to the applicant (Cable & Turban, 2001; Dineen & Noe, 2009).

H3: Individual differences, type of recruitment source used, perceived information gathered, and the amount of job information received, will statistically predict job expectancies.

Perceived fairness and justice.

Psychologists' interest in fairness dates back to equity theory which focused on the perceived fairness of outcomes (Adams, 1963). Typically, individuals react negatively to treatment perceived as unfair, which may lead to many negative effects in the workplace (Fitness, 2000). Gilliland (1993), Gilliland et al. (2001), Colquitt et al. (2001) and Greenberg (1987) have greatly advanced research on organizational justice and perceived fairness in organizational psychology since the late eighties. Numerous types of organizational justice have emerged in the last twenty years, including distributive, procedural, interactional or interpersonal and informational justice (Cohen-Charash & Spector, 2001; Greenberg, 2010). Although fairness has not been studied extensively in recruitment source research, perceived fairness has been examined in the context of applicant reactions as was discussed in Chapter Four (Ryan & Ployhart, 2000; Ployhart & Harold, 2004). In addition, it has been demonstrated that amount of information provided in a selection process is associated with perceptions of fairness (Harris, Lievens & Van Hoye, 2004; Ployhart & Harold). The participants in Study Two frequently mentioned concepts of fairness in relation to their experiences with various recruitment processes despite their positive outcomes. Therefore, despite the fact that my population controlled for outcome favourability by only including those who had recently found a job, I concluded that in addition to examining recruitment sources, Study Three should examine the potential relationships between perceived fairness as a general variable, as well as the recruitment process and job attitudes outcome variables such as organizational commitment and job satisfaction. Distributive justice was not examined

specifically because it relates to the perceived fairness of the distribution of resources

(Cropazano & Ambrose, 2001) and given control of outcome favourability and study

design it was judged unlikely that distributive justice would show an effect in this

context.

Greenberg (2010) has deemed appropriate and even encouraged the tailoring of

perceived fairness measurement tools when no pre-established scale pertains to a specific

area of study to ensure appropriateness and face validity of fairness assessments.

Although there is a pre-established scale for human resources selection processes, this

scale pertains solely to the assessment tools, is extremely lengthy and is not relevant to

recruitment source related issues. As such, I included some aspects of perceived

procedural justice and perceived interactional justice in the measure of perceived fairness.

6.4 Outcomes; commitment, job satisfaction, turnover intentions and performance

Riordan et al. (2001) hypothesized that pre-entry job experiences, socialization

tactics, perceptions of fit and self esteem are associated with job attitudes such as

organizational commitment, job satisfaction and turnover intentions and ultimately

turnover itself. In their research Riordan et al. (2001) found links between perceived P-J

fit and job attitudes but not between these and turnover as an outcome, however there was

significant range restriction for turnover in the research.

Meyer and Allen (1990, 1991) conceptualized organizational commitment as a three component variable which included continuance commitment, normative commitment and affective commitment. Continuance commitment denotes commitment predicated on the cost of leaving an organization. Normative commitment refers to employees' feelings of obligation toward the organization and affective commitment relates to employees' identification with and emotional attachment to their organizations. Meyer and Allen (1990, 1991) found that each of these three components were separate constructs of organizational commitment with different correlates.

Justice and fairness perceptions have been found to be an antecedent to commitment (Colquitt et al., 2001). Commitment is also an important job attitude which has also been correlated with Job satisfaction, turnover, turnover intentions and performance (Bowling & Hammond, 2008; Cooper-Hakin & Viswevaran, 2005; Harrison, Newman & Roth, 2006; Tett & Meyer, 1993). The relationship between commitment and turnover intentions and turnover is stronger than the relationship between commitment and performance or absenteeism (Scheleicher et al., 2010). Affective commitment in particular has been found to be a strong correlate of these variables and there has been a frequently utilized component of the organizational commitment scale (Scheleicher et al., 2010).

Organizational commitment has been considered a job attitude similar to job satisfaction and could be considered a more proximal outcome variable of recruitment sources and job expectations (Harrison, Newman & Roth, 2006; Moser, 2005; Thoresen, Kaplan, Barsky, de Chermont and Warren, 2003)). Harrison et al. (2006) demonstrated that overall job attitudes including organization commitment and job satisfaction can statistically predict several key organizational behaviours such as turnover, performance, absenteeism and lateness. Tett & Meyer (1993) found that both job satisfaction and commitment statistically predicted turnover intentions although job satisfaction was found to be a stronger predictor. Other meta-analytic research has also found links between negative job attitudes and turnover intentions (Thoresen et al., 2003).

There are numerous links between recruitment sources and outcomes such as commitment, job satisfaction and turnover as well as turnover intentions (Allen et al, 2007; Breaugh, 1981; Gannon, 1971; Griffeth et al., 1997; Horvath, 2010; Latham & Leddy, 1987; Moser, 2005; Saks, 1994; 2006; Weller et al, 2009; Zottoli & Wanous, 2000; see Appendix A for details). This research began with Ullman (1966) and Reid (1972) and has continued through today. There are a number of discrepancies and inconsistent results leading some to question whether there are true effects that flow from recruitment sources (Rynes, 1991). Empirical meta-analytical results however, have continued to show a relationship between recruitment sources and turnover and performance (Zottoli & Wanous, 2000). Moser (2005) reported positive findings for the effects of recruitment sources on unmet expectations (d=.30), job satisfaction (d=.31) and

organizational commitment (.21), although the relationship with organizational

commitment became non-significant after controlling for demographics. Latham and

Leddy (1987) found that those hired through referrals had higher job satisfaction,

organizational commitment and job involvement than those hired through newspaper ads.

Recent research on the use of certain type of recruitment sources and turnover has

concluded that the effect is stronger for more recent hires and dissipates over time

(Weller, et al., 2009).

Schleicher, Hansen and Fox (2010) indicated that there were a multitude of

measures which could be considered job attitudes, and that all job attitudes involve an

assessment of aspects of the organization or job. Job satisfaction, commitment, perceived

organizational support and justice perceptions or perceived organizational fairness are

commonly assessed job attitudes (Schleicher et al., 2010). There are numerous

antecedents of job satisfaction including job characteristics, fairness perceptions, role

conflicts, and psychological contract breach which are related to expectations and

promises, as well as individual characteristics such as self-efficacy (Schleicher et al.,

2010). The meta-analytic relationship between job satisfaction and self-efficacy, which

included twelve studies, is .45 (Schleicher et al., 2010). Affective commitment and job

satisfaction have a true meta-analytic relationship of between .60 and .77 (Schleicher et

al., 2010). Turnover intentions relate more strongly to job satisfaction as outcomes than

actual turnover. Meta-analytic studies report the correlation between job satisfaction and

turnover as ranging from -.14 to -.19 and from -.48 to -.52 for turnover intentions

(Schleicher et al., 2010; Thoresen et al., 2003). As such, it has been postulated that job

attitudes are associated with feelings of self-efficacy and similar self-evaluations

(Colquitt et al., 2001; Judge & Bono, 2001; Judge et al., 2002; Judge et al., 1998;

Thoresen et al., 2003).

Other potential outcome variables of interest in many recruitment source studies

have been job performance and absenteeism. Numerous studies have examined

recruitment sources and performance (Caldwell & Spivey, 1983; Swarroff et al., 1985;

Zottoli & Wanous, 2000) and recruitment sources and absenteeism (Taylor & Schmidt,

1983). See the Table in Appendix A for greater detail. Job performance and absenteeism

have been commonly studied outcomes of job satisfaction correlations. Meta-analytic

results have been moderate for job attitudes and performance (Schleicher et al., 2010;

Judge et al., 1998; Judge & Ilies, 2002; Judge & Larsen, 2001). Correlations for job

satisfaction and performance have ranged from .05 (three studies examined) to .30 (312

studies examined) and meta-analytic relationships have varied similarly (Schleicher et al.,

2010). For absenteeism, correlations have ranged from -.12 to -17 (Schleicher et al.,

2010). Given the above reported relationships and previous discussions related to job

attitudes and outcomes, it is feasible to hypothesize that less proximal outcomes such as

job performance and absenteeism would likely be related to recruitment sources to a

lesser extent, as was postulated by Moser (2005) previously.

H4: There will be a statistically significant relationship between the job seeker's perceived information gathered and received, job expectations, affective commitment and perceived fairness on job satisfaction.

H5: There will be a significant relationship between the job seeker's perceived information gathered and received, job expectations, perceived fairness, affective commitment, and turnover intentions.

H6: Relationships between promotions and recruitment sources will be weaker than those for job attitudes (job satisfaction and expectations variables).

6.4.1 Hypotheses

The main objective of study Three is, as stated earlier, to explore possible potential explanatory mechanisms for outcomes related to recruitment source usage as well as to extend the information gathered from qualitative research about recruitment sources and applicant impressions using an empirical study of recruitment sources. Also of interest in this research is also to look at whether job seekers have a greater tendency to use single sources as demonstrated in Study one or multiple sources as indicated during the interviews conducted in study Two. For ease of reference, below is a summary of all of the hypotheses for study Three.

H1a: Informativeness ratings will be higher for informal sources than for formal

sources, with the exception of the Internet. Specifically, employee referrals

will be rated as a better recruitment source than newspapers, union job

postings or government recruiting agencies.

H1b: When the prior and most recent job source usage are compared, job seekers'

patterns of Internet usage will have increased significantly for the most

recent job search.

H1c: Job seekers will have non-neutral perceptions of different recruitment

sources. Internet postings will be perceived as more modern and efficient,

whereas newspapers will be perceived as more traditional.

H2a: A combination of both job seeker and firm characteristics will be associated

with the type of recruitment source used. Specifically, in the case of on-

campus recruitment younger, university educated individuals will be more

likely to use this recruitment source.

H2b: Job seekers who found positions in larger firms will be more likely to have

used formal recruitment sources as part of their job search.

H3: Individual differences, type of recruitment source used, perceived information gathered, and the amount of job information received, will statistically predict job expectancies.

H4: There will be a statistically significant relationship between the job seeker's perceived information gathered, job expectations, affective commitment and perceived fairness on job satisfaction.

H5: There will be a significant relationship between the job seeker's perceived information gathered and received, job expectations, perceived fairness, affective commitment, and turnover intentions.

H6: Relationships between promotions and recruitment sources will be weaker than those for job attitudes (job satisfaction and expectations variables).

7.1 Chapter Seven —Study Three

Method

Participants were recruited using a secure reputable on-line survey participant

recruiting system through the University of Syracuse, called the Study Response project.

Prior to the full study being conducted, a pre-screening study was used to ensure that only

employed individuals who had found a job in the last five years. A copy of the pre-

screening study is available in Appendix H. This pre-screening study was sent to 1500

individuals, 1356 of whom responded and 903 of which met the screening criteria. Of the

903 individuals meeting the initial screening criteria, 838 individuals actually received

the full survey and could choose whether or not to respond. This was the reachable

sample which received the survey. The discrepancy between the eligible and reachable

sample is a result of rejected email due to email address changes and withdrawal from the

entire computer recruiting system. The original on-line survey was sent to the 838

individuals with a response rate of 54.8%. Of the 459 respondents, four respondents were

deleted because they had not completed more than 85% of the survey. All other

respondents completed all or most aspects of the survey. Participants in the pre-screening

study and the final study were provided with chances to win one of several $50

Amazon.com gift certificates when they participated in the survey. Demographic

characteristics of the full sample are in Table 7.1. Table 7.2 presents the distribution of

the variable age which was the only significantly different variable in the respondent vs.

non respondents' samples. Table 7.3 presents the characteristics of the respondent sample

Table 7.1

Comparison of full sample, respondents and non-respondents[#]

Characteristic	Full sample (eligible and reachable sample)	Responding Sample	Non Respondents
Sample size	838	424	375
Females	58.4%	60.1%	56.8%
Males	41.6%	39.9%	43.2%
Age	Mean=35.46 SD=10.49	Mean=36.4 SD=10.49	Mean=34.5 SD=10.58
Less than High school	1%	0.7%	1.3%
High School	17.5%	17.3%	17.5%
Associates degree	10.1%	7.6%	12.6%
Some College	23.7	21.8	26.1%
Bachelor's	28.6%	32.9%	23.1%
Some grad school (no degree)	3.7%	4.7%	2.4%
Master's	12.6%	12.1%	14%
Ph.D., MD, JD or other advanced degree	2.8%	2.8%	3.0%
Caucasian	72.7%	72.5%	71.5%
Visible minority	20%	18.3%	20.8%
Native American	0.4%	0.0%	0.7%
U.S. Residency	47.9%	50.2%	45.4%

[#] Based on data provided by the survey response project data base of respondents.

Table 7.2 Age groups of matched respondents and non-respondents

	Respondents	Non-respondents
Lowest to 25	14.9%	24%
26-35	36.6%	34.9%
36-45	27.4%	22.7%
46-55	16%	15.2%
56 plus	5.2%	3.2%

Age was the only significantly different variable in demographics assessed

between respondents and non respondents, using the data provided by the study response

project. On average, non-respondents were younger than respondents, (t=-2.48, df =783,

p<.05). It is difficult to know how this could affect the sample but should be kept in mind

when interpreting the results.

It is difficult to compare the full possible sample with the responding sample

because of differences in nomenclature used by my study and the available study

response data. It can be concluded that the data appears to be substantially similar in

gender, age and education levels. The response rate appears to be lower amongst visible

minorities and aboriginal people. It could be that these groups self-identify differently

based on the nomenclature used by my survey as compared with the questions posed by

the study response project. The nomenclature used for my study was suggested by

Canadian human rights legislation, whereas that used by the study response project is that

of the United States. It is important to note that only 47.9% of respondents in the study

were Unites States residents, the other respondents were from a wide variety of different

countries.

Table 7.3

Demographics of full respondent sample[#]

Demographics N=455	Frequency Distribution	Percentage
Gender		
Females	281	61.8%
Males	174	38.2%
Education		
Less than High school	6	1.3 %
High School	92	20.2%
Technical diploma	49	10.8%
College diploma	72	15.8%
University certificate	25	5.3%
Bachelor's	138	30.3%
Master's	67	14.7%
Doctorate	7	1.5%
Designated group		
Visible minority	66	14.5%
Aboriginal	24	5.3%
Persons with disabilities	46	10.1%
Relationship Status/Life partner		
Single	136	29.9%

Demographics N=455	Frequency Distribution	Percentage
Separated	14	3.1%
Divorced	44	9.7%
Widowed	6	1.3%
Common law	28	6.2%
Married	227	49.9%
Having a dependent child	213	46.8%

[#] Based on participant responses to questions in survey with participants with substantial missing data deleted.

7.1.2 Procedure

The questionnaire was based on the findings of the first two recruitment studies. The questionnaire items assessed the following: applicant characteristics, employer characteristics, applicant's information about the organization or job, the type of source(s) used, and other human resources practices. The questionnaire is presented in Appendix I. Once completed, the on-line version of the questionnaire was piloted with a small number of experienced human resources professionals and academic researchers in order to test for question clarity and appropriateness, flow and timing as well as proper data transfer. Any issues uncovered as a result of this pilot test were corrected.

Variables.

Please note that details of questions used for each of the scales are available in Appendix I.

Demographic characteristics.

Variables included age (continuous), gender (female=1, male=2), tenure in current job (<5 years), previous work experience (<1yr=1; over 25 years=7), education (less than high school=1, doctorate=6), relationship status (life Partner; yes=1/no=0), family status (dependent child no=0, yes=1), designated group membership (no=0, yes=1). Organizational variables included firm size (1=1-19; 4 =>500) and industry of the organization (1=natural resources; 13=not for profit) and the occupational group of the candidate (1=manager, 6=production worker).

Source preference.

Participants were asked the degree to which they preferred using certain sources to find out about a job. The sources were listed with a likert-type scale ranging from least preferred=1 to Most preferred=5.

Perceived source helpfulness.

Participants were asked to rank sources from 1 to 12 in order of how much a source was most helpful or least helpful information provided about a job.

Perceived Source Informativeness.

Participants were asked the degree to which they considered certain sources informative in preparing for a job interview and in terms of actually doing a job itself.

Both of these questions were scored on likert-type scales from not informative=1 to very informative=5.

Perceived expectancies of the Job.

Concordance between the job and expectations of the job prior to accepting it were assessed by 4 items. For instance, "In reality, my job is not what I had initially expected it to be." The Cronbach alpha was .64.

Applicants' perceived information gathered.

Six items assessed the degree to which participants perceived they had gathered information about the job. Participants were provided with a listing of items and asked whether they did any of these to prepare for their assessment for their current job. The items asked participants if they had reviewed company website, discussed the organization with current or former employees, discussed the position with people in similar positions, looked for information on the company's industry, discussed the requirements with the hiring manager and requested a copy of the job description. The Kuder-Richardson 20 which measures internal consistency for dichotomous data similar to the Cronbach alpha was .68.

Applicants' perceived information received.

Participants were asked if the hiring manager or an organizational representative provided the potential employee with any information about the job. Five items assessed whether participants experienced receipt of information from the organization. Participants were asked if prior to accepting their current position, the hiring manager did any of the following: Introduce you to potential colleagues, provide a tour of the work

location, provide information about working conditions, provide information regarding

positive and negative aspects of the job, provide a simulation of the job. The Kuder-

Richardson 20 alpha was .67. Applicants "perceived information received" was

developed based on the research related to the types of information organizations could

and should present for realistic job preview. The types of measures were suggested by the

research of Breaugh (1992) which recommended tours of the worksite be considered in

RJP, Collarelli (1984) who argued that individual conversations would provide more

personally-relevant job previews and Iles & Robertson (1989) who suggested that work

simulations would provide the best job previews. The reasoning for this scale is well laid

out in the literature review by Breaugh (2008).

Impressions of sources.

Participants were asked to rate various sources on a number of different

dimensions in order to form and overall impression of the source and how it is perceived

by job hunters. For example "Newspaper help wanted ads are: Traditional 1 2 3 4 5 6 7

Modern. " Participants in the study were told to treat "4" as a midpoint if they believed

neither adjective described the recruitment sources in question. These questions were

created in the tradition of work of Osgood, Suci and Tannenbaum (1957) using semantic

differential scales and were based on the dimensions brought forward by participants

interviewed in Study Two, to reinforce and verify the findings of the qualitative research.

Source Usage.

Participants were asked which combination of job sources they used to find their

current job. "Did you use any of the following sources to find out about the job opening

for your current job?" A listing of twelve potential recruitment sources was then provided. This was a dichotomous measure.

Organizational commitment.

Participants completed an 8 item modified version of affective commitment (Allen & Meyer, 1990; Meyer and Allen, 1984). Reliability for this scale has ranged from .77 to .88. In the current study the reliability Cronbach alpha was .81. Sample items for affective commitment include: "I really feel this organization's problems are my own" and "I think that I could easily become as attached to another organization as I am to this one". This item was reverse scored.

Satisfaction.

Participants were asked a number of satisfaction questions. These pertained to satisfaction with the job itself, the organization, pay level, and work environment. In the current study the reliability Cronbach alpha was .88 for this measure. Job satisfaction was assessed through a single item measure on a likert- type scale "I am satisfied with my job".

Perceived fairness.

Perceived fairness for the recruitment process as a whole was assessed using four items assessing perceived procedural fairness of recruitment sources used; assessment tools used and perceived overall fairness of the recruitment process. A sample question for perceived fairness was: "I feel I was treated fairly during the recruitment for my job." These items were based on the work of Macan, Avedon, Paese and Smith (1994) and

Smither, Reilly, Millsap, Perlman and Stoffey (1993). The Cronbach alpha for this study

was .85.

Turnover intentions.

Turnover intentions were assessed in this study using a single-item question: "I

intend to leave this job within one year" which was responded to using a likert-type scale

ranging from 1 to 5 where 1=strongly disagree and 5 = strongly agree.

Promotion.

Promotion was assessed by asking participants to report whether or not they had

received a promotion since they started their current job.

Self-efficacy.

General self-efficacy was also assessed using an eight item scale by Chen, Gully,

& Eden (2001). The internal consistency for this scale has been found to be between .85-

.90 (Henson, 2001) and the stability for a trait-state type of scale has been reasonably

good, between r=.62 and r=.65 (Chen et al., 2001, 2004). The Cronbach alpha for the

current study was .95.

7.1.3 Data Analysis

SPSS 17.0 was used to determine frequencies, descriptives, correlations and

multivariate analysis. Missing values analysis was conducted and no patterns to the

missing values were detected. Less than 1.5% of the data was missing except where valid

missing values were recorded where respondents were not required to respond if not

applicable.

7.2 Results

In this study, the largest respondent groups were in professional occupations

(31.9%) followed by clerical and administrative (18%) and managerial (17.1%)

occupations (see Table 7.4). As can be seen in Table 7.5, 41.1% of the sample was from

individuals working in firms larger than 500 people. The respondents were distributed

across all 14 industries, largest portion of respondents came from the following

industries; services (14.5%), health care (13.6%) and education (10.1%) (See table 5.5).

Participants reported coming from organizations with 500 or more employees in 41% of

the cases (see Table 7.6).

Table 7.4 Distribution of occupational groups

Occupational Group	Frequency	Percentage
Manager	78	17.1%
Professional	145	31.9%
Technical trade	60	13.2%
sales	49	10.8%
Clerical & administrative	82	18%
Production worker	41	9%

Table 7.5 Distribution of respondents by the size of the firm for which they work

Firm size	Raw count	Percentage of sample
Very small (1-19 people)	85	18.7%
Small (20-99)	88	19.3%
Medium (100-499)	95	20.9%
Large (500+)	187	41.1%

Table 7.6 Distribution of industries within the sample

Industry	Raw count	Percentage
Natural resources	13	2.9%
Manufacturing	43	9.5%
Construction	23	5.1%
Transportation	25	5.5%
Communication	14	3.1%
Retail	44	9.7%
Financial	36	7.9%
Education	46	10.1%
Health Care	62	13.6%
Information Technology	36	7.9%
Government	28	6.2%
Services	66	14.5%
Non-profit	12	2.6%
Other	7	1.5 %

7.2.1 Hypothesis 1a & b

Descriptives of recruitment source usage & informativeness

Actual usage of recruitment sources to find jobs varied significantly from the reported previous job search to the current job search (Table 7.7) for several of the recruitment sources. As demonstrated by the McNemar tests, there were significantly higher levels of usage for Internet ads, professional networks of contacts, employee referrals, and prior experience as recruitment sources (see Table 7.7).

The single most preferred recruitment sources reported by respondents was the Internet job posting (mean=4.01, SD=1.13). This was followed by employee referrals (mean=3.78, SD=1.14), and use of professional contacts (mean=3.73, sd =1.11). The least preferred recruitment sources were union postings (mean=2.44, sd=1.2), on-campus recruitment (mean=2.67, sd=1.24 and walk-ins (mean=2.75, sd=1.32). Of all the sources rated, Internet ads were ranked as providing the most helpful information about a job, followed by help wanted ads and employee referrals (see Table 7.7). Not surprisingly, when responding to the questions of which sources were most informative to help prepare for an interview and the job itself, participants rated prior experience highest (3.45 and 3.62 respectively).

Informal sources such as employee referrals and networks of contacts, were fairly highly-rated (3.41, 3.34, respectively) for interview informativeness, and (3.37 and 3.34, respectively) for job informativeness. There were no significant differences for these two

types of informativeness for these recruitment sources. Only the Internet showed

significantly different ratings for perceived informativeness for the interview stage and

the job stage, once Bonferroni corrections were applied for multiple testing. The Internet

and recruiting agencies were rated as relatively more informative to prepare candidates

for the interview, while prior experience was rated as more informative in preparing

candidates for the job itself. There were no significant differences for perceived

informativeness for interviews or jobs in any of the informal recruitment sources such as

employee referrals, networks of contacts or family and friends.

The source rated lowest on informativeness to prepare for an interview or the job

itself was union job postings (2.11 and 2.15, respectively) contrasting with the rated

informativeness of Internet postings (3.33 and 3.06, respectively), which were more

highly rated. Even walk-ins as a recruitment source (2.38 and 2.44, respectively) were

more highly rated for interview and job informativeness than union postings.

Interestingly, Internet job postings were rated as more informative than help

wanted ads for both interviews and jobs. Counter-intuitively, 42.2% of participants

reported using help wanted ads to find out about the job opening for their current job. In

addition, when participants were asked to rank sources according to which job source

they believed gave the most helpful information about a job, on average, they ranked help

wanted ads second, after Internet job postings but before employee referrals. While

62.2% of participants ranked Internet advertising in the top three most informative job

sources, 54.5% ranked help wanted ads in the top three most informative and help wanted

ads were ranked 4th most informative overall. Walk-ins were ranked the least helpful

source to find information about a job. Employee referrals and use of a network of

contacts were ranked third and fourth respectively (see Table 7.7 for details on rankings).

However the ranking results should be interpreted with caution. Although participants

appeared to understand the question, there may be effects related to the order of the

placement of the sources in the list to be ranked, help wanted ads were placed first on the

list, followed by Internet ads, whereas walk-ins were placed last on the list. This pattern

of source informativeness where newspaper help wanted ads are ranked highly does not

fully follow the hypothesis which expected that informal recruitment sources, other than

the internet, would be rated and ranked as most informative and most helpful. An

examination of the reported incidence of source usage revealed that Internet postings,

employee referrals, contacts and help wanted ads were the most highly-used recruitment

sources by participants to find their current job.

There also appears to be greater willingness to use multiple recruitment sources to

find jobs and to use a mix of formal and informal recruitment sources as indicated in

Study Two. A large percentage (44.2%) of respondents reported that they used a mix of

both to find their current job (see Table 7.8). This is in contrast to the results found in the

Statistics Canada research question where only a small percentage of participants

reported using both formal and informal sources. However, these questions were worded

slightly differently in the two studies. As discussed earlier, the WES survey asked "when

you first found your job which sources did you use? (Check all that apply)". Many

participants responded using only one or two sources.

Table 7.7: Incidence of Source Used to find Employment, source preference and informativeness ratings and rankings

Type of Source	Current job	Prior job	McNemar test	Average interview Informativeness	Average job Informativeness Rating	t-test	helpful information Rank	Preferred source
Internet postings	53.2%	34.9%	33.77**	3.33	3.06	4.04**	1	4.01
Employee referrals (Family/friends inside company)	47.5%	38.3%	7.39**	3.41	3.37	.76	3	3.78
Network of contacts (professional assn, colleagues)	45.7%	30.3%	23.71**	3.34	3.34	0.00	4	3.73
Help wanted ads	42.2%	41%	0	2.82	2.72	1.73	2	3.53
Family and friends (outside company)	37.4%	29.4%	5.68	2.82	2.76	1.02	8	3.28
Prior experience	32.2%	16.3%	28.31**	3.45	3.62	-2.61	6	N/A
Recruiting agency	26.2%	20.6%	5.25	3.09	2.97	2.00	5	3.09
Walk-in	23.3%	20.2%	.20	2.38	2.44	-.94	12	2.75
Government recruiting agency	17.6%	13.5%	1.70	2.61	2.50	1.79	7	2.99

Type of Source	Current job	Prior job	McNemar test	Average interview Informativeness	Average job Informativeness Rating	t-test	helpful information Rank	Preferred source
Job fair	13.4%	8.3%	2.44	2.66	2.55	1.88	9	2.85
On-campus recruitment	11%	7.5%	1.83	2.39	2.33	.87	10	2.67
Union	7.9%	8.5%	0	2.11	2.15	-0.51	11	2.44
Other	4.8%	3.7%	N/A	N/A	N/A	N/A	N/A	N/A

Note: All non-significant unless indicated otherwise, ** = $p<.01$, Bonferroni corrected, 2-tailed. N/A indicates this question was either not asked or analysis was deemed inappropriate in this case.

As can be seen in Table 7.8, there were clear differences in the number of recruitment sources candidates used to find a job between their current job search and their previous job search, those who reported previous job searches, there was significantly higher use of multiple recruitment sources in more recent job searches than in prior job searches. There was also an increasing tendency for of successful applicants to use a combination of both informal and formal sources (44.2 %).

Table 7.8

Evolution of number of sources used between prior and current job search

Number of sources used	Current job	Prior job
Responded that they did not use any recruitment source	2.2%	6.7%
Only one recruitment source used	24%	42.1%
Two recruitment sources used	19.6%	21.3%
Three recruitment sources used	13.8%	10.8%
Four recruitment sources used	13.2%	8.3%
Five or more sources used	27.2%	10.8%
Percentage using only informal sources	19.8%	24.1%
Percentage using only formal sources	28.4%	38.6%
Percentage using both formal and informal	44.2%	28.9%

Since the Internet is the most recent addition to recruitment sources, Tables 7.9 and 7.11 provide a more in-depth examination of this recruitment source and provide details regarding the intensity with which job seekers report conducting Internet searches. For instance 57.4% of those using the Internet to find a job reported conducting a job search once a day and 54.3% of respondents reported requesting automatic mailings of job opportunities. As shown in Table 7.10, the more geographically and occupationally-

targeted websites were preferred over company-specific websites and large international

websites by job seekers using the Internet.

Table 7.9

Internet job search usage behaviours

Reported frequency of Internet searches during job search	Percentage
Once a day	57.4%
2-3 times a week	26.8%
Once a week	9.5%
Never	6.2%
Use automatic Internet job emails	54.3%

Table 7.10

Type of website preferred by participants using the Internet for job searches

Type of website	Rank	Mean ranking	% ranking in top 2
Large and international (i.e. Monster)	3	2.96	44.2%
Targeted to a specific occupation	1	2.49	58.7%
Targeted to a specific geographic region	2	2.69	49.2%
Targeted to a specific industry	4	3.06	33.2%
Company specific sites	5	3.46	27.5%

Note: 1= most preferred, 5=least preferred

7.2.2 Hypothesis 1 c

Descriptives and t-tests of perceptions of recruitment sources.

In order to test the findings of Study Two regarding non-neutral impression of recruitment sources, a semantic differential scale was used to empirically test these differences in an exploratory fashion. Table 7.11 provides a summary of the average ratings of participants of semantic differential questions regarding their perceptions of various recruitment information sources. These ratings indicate that as a whole, participants do perceive Internet job postings as more modern than help wanted ads. The average ratings also indicated that participants perceived headhunter recruiting agencies and the Internet as most targeted of the recruitment sources and walk-ins and family and friends as the two least targeted among the recruitment sources. Walk-ins, on-campus recruitment and help wanted ads were perceived as yielding more low-level positions while recruiting agencies, the Internet and network of contacts were rated closer to high-end positions. Walk-ins and family and friends were rated closer to the no informative range of the scale whereas the Internet and was rated highest on average in the informative portion of the scale. Walk-ins were rated lowest on the low-skill vs. high-skill semantic differential and headhunters were rated highest. Walk-ins were also rated more towards the inefficient end of the scale and Internet more toward the efficient. Walk-ins were also perceived as more difficult whereas the Internet was rated as closer to the easy end of the scale. In addition, walk-ins were perceived as more likely for small companies. Government recruiting agencies were perceived as closest to the passive end

of the scale and the Internet was on the more active end of the scale. There did appear to

be a tendency for participants to rate several recruitment sources at or around 4 for

several of the semantic differential questions which indicates a trend toward central

tendency in the perception ratings, but the order of rating and trends in the ratings lent

support to much of the information on recruitment source perceptions provided by

participants in Study Two.

In addition, one sample t-tests were conducted to determine whether ratings were

significantly different from the mid-point. In the case of ratings of traditional vs. modern,

all ratings were significantly different from 4 at p <.001 (2 tailed) except networking, and

on campus recruitment. Headhunter was rated as significantly different from 4 at p<.05

(t=2.67, p=.007). In response to whether a source was targeted or not targeted, all sources

were found to be significantly different from 4 at the p<.001 levels except help ads which

was significant at the p<.05 level (t=2.97, p<.05, 2-tailed) and walk-ins which was not

significant. When asked if a source was entry-level or high-level, all were found to be

statistically-significantly different from the mid-point at the p<.001 except union postings

which were significant at p<.05 and government recruitment agencies which were non-

significant.   When asked to rate sources as informative or not informative, all sources

were found to be statistically-significantly different from the mid-point at the p<.001

except help wanted ads which were significant at p<.05 and family and friends which was

non significant. Ratings of low skill vs. high skill showed the least distinction from the

mid-point family and friends, help wanted ads and union postings were all non-

significant and government recruiting agencies, job fairs on-campus recruiting were all

only significant at the p<.05 level (2 tailed).   When participants were asked to rate

relative effectiveness (effective vs. not effective) of recruitment sources all of these

sources were statistically different from the mid-point at the p<.001(2-tailed) level except

networking and family and friends and union postings which was significant at the p<.05

level. When asked to determine whether the sources were easy or difficult, all sources

were statistically different from the mid point at the p<.001 (2-tailed) except walk-ins

which were significant at p<.05 and government recruiting and union postings which

were non significant. For perceptions of large vs. small company, all of the sources were

significantly different from the mid-point at p<.001 (2-tailed) except family and friends.

All sources were rated as active vs. passive, and all were statistically significantly

different from the mid-point at p<.001 (2-tailed) except help wanted ads, family and

friends and union postings. These ratings appear to indicate that job seekers have non-

neutral impressions and perceptions of recruitment sources and in particular it was

interesting to note that perceived informativeness ratings did not necessarily follow the

formal vs. informal sources dichotomy provided in previous literature regarding

recruitment sources to explain differences in outcomes such as turnover intentions, job

satisfaction and performance. This was evidenced not only in tables 7.11 and 7.12 but

also in the results of informativeness ratings and helpful information rankings in Table

7.7. In this case, although numerous tests were conducted the Bonferroni correction was

not applied due to the highly exploratory nature of this portion of the study. The

Bonferroni correction can be applied to prevent Type I error when a large number of tests

are being conducted, however the Bonferroni correction has been found to over correct

and reduce power thus increasing Type II error (Hayes, 1994; Tabachnick & Fidell, 2007;

Thompson 2006). In cases where research is exploratory and there is little prior research

or theory, such as is the case here, broad testing is appropriate (Thompson, 2006).

Therefore although these results should be approached cautiously, the fact that the results

were consistent for Study Two and this test in Study Three may indicate there are some

non-neutral impressions for recruitment sources themselves which had not been

considered in the past.

Table 7.11

Summary of average perception ratings by recruitment source

Source perceptions	Modern(7) Traditional (1)	Targeted (7) Not (1)	High level (7) position Low (1)	Informative (7) Not(1)	High skill(7) Low(1)	Efficient (7) Inefficient (1)	Easy (7) Difficult(1)	Large company (7) Small (1)	Active (7) Passive (1)
Help ad	2.55 (1.75)	4.25 (1.80)	3.66 (1.46)	4.17 (1.66)	3.93 (1.29)	4.34 (1.50)	4.75 (1.43)	4.19 (1.18)	4.02 (1.54)
Internet	6.11 (1.28)	5.41 (1.43)	4.60 (1.26)	5.20 (1.35)	4.79 (1.20)	5.28 (1.40)	5.15 (1.44)	4.80 (1.20)	5.17 (1.42)
Recruiting Agency (Head-hunter)	4.22 (1.78)	5.21 (1.59)	4.73 (1.54)	4.96 (1.44)	4.81 (1.44)	4.87 (1.44)	4.36 (1.48)	4.75 (1.33)	5.06 (1.48)
Government Recruiting agency	3.58 (1.60)	4.42 (1.57)	4.04 (1.36)	4.37 (1.40)	4.16 (1.29)	4.25 (1.46)	4.08 (1.43)	4.52 (1.34)	4.20 (1.34)
Network of contacts	3.89 (1.84)	4.84 (1.68)	4.52 (1.35)	4.95 (1.47)	4.63 (1.29)	3.94 (1.63)	4.56 (1.51)	4.35 (1.14)	4.91 (1.45)
Employee referrals (inside)	3.73 (1.74)	4.92 (1.54)	4.27 (1.24)	4.86 (1.41)	4.34 (1.23)	4.74 (1.40)	4.60 (1.47)	4.33 (1.17)	4.72 (1.38)
Family and friends (outside)	3.09 (1.79)	3.68 (1.78)	3.74 (1.37)	3.90 (1.66)	3.91 (1.34)	3.86 (1.64)	4.48 (1.65)	4.00 (1.20)	4.08 (1.62)

Source perceptions	Modern(7) Traditional (1)	Targeted (7) Not (1)	High level (7) position Low (1)	Informative (7) Not(1)	High skill(7) Low(1)	Efficient (7) Inefficient (1)	Easy (7) Difficult(1)	Large company (7) Small (1)	Active (7) Passi-ve (1)
Union postings	3.24 (1.62)	4.49 (1.67)	3.86 (1.31)	4.31 (1.43)	4.01 (1.31)	4.18 (1.34)	4.11 (1.42)	4.31 (1.30)	4.12 (1.43)
Job fair	4.33 (1.75)	4.56 (1.75)	3.75 (1.45)	4.93 (1.47)	4.16 (1.32)	4.62 (1.46)	4.46 (1.43)	4.53 (1.25)	4.78 (1.44)
On campus recruitment	3.88 (1.76)	4.78 (1.59)	3.57 (1.73)	4.75 (1.43)	4.21 (1.39)	4.62 (1.38)	4.51 (1.39)	4.51 (1.25)	4.69 (1.40)
Walk-in	2.95 (1.82)	4.14 (2.05)	3.29 (1.61)	3.71 (1.72)	3.58 (1.56)	3.76 (1.76)	3.78 (1.87)	3.75 (1.41)	4.60 (1.75)

Note: Standard deviation is provided in parentheses

Table 7.12

Summary of t-tests of difference of average perception from mid-point for recruitment sources

Source perceptions	Modern (7) Traditional (1)	Targeted (7) Not (1)	High level (7) position Low (1)	Informative (7) Not(1)	High skill(7) Low(1)	Efficient (7) Inefficient (1)	Easy (7) Difficult (1)	Large company (7) Small (1)	Active (7) Passive (1)
Help ad	-17.58	2.97*	-4.94	2.20*	-1.12N.S.	4.85	11.27	3.38	0.34N.S.
Internet	35.29	21.03	10.15	18.96	14.05	19.50	17.08	14.16	17.55
Recruiting Agency (Head-hunter)	2.69*	16.26	10.11	14.32	11.95	12.86	5.24	12.01	15.27
Government Recruiting agency	-5.53	5.66	.69 N.S.	5.67	2.72*	3.67	1.21N.S.	8.32	3.21
Network of contacts	-1.30 N.S.	10.59	8.20	13.76	10.40	-.081 N.S.	7.90	6.56	13.48
Employee referrals (inside)	-3.28	12.76	4.61	13.08	5.93	11.31	8.63	6.06	11.07
Family and friends (outside)	-10.86	-3.81	-3.94	-1.33N.S.	-1.36N.S.	-1.86N.S.	6.24	.12 N.S.	1.02 N.S.

Source perceptions	Modern (7) Traditional (1)	Targeted (7) Not (1)	High level (7) position Low (1)	Informative (7) Not(1)	High skill(7) Low(1)	Efficient (7) Inefficient (1)	Easy (7) Difficult (1)	Large company (7) Small (1)	Active (7) Passive (1)
Union postings	-9.96	6.20	-2.22*	4.62	0.11N.S.	2.93	1.61N.S.	5.13	1.77N.S.
Job fair	3.96	6.76	-3.63	13.40	2.63*	9.15	6.88	8.95	11.59
On campus recruitment	-1.49N.S.	10.48	-5.25	11.21	3.17*	9.65	7.85	8.66	10.41
Walk-in	-12.29	1.49 N.S.	-9.31	-3.58	-5.72	-2.95*	-2.48*	-3.73	7.32

Note: DF=454 All significant at p<.001 (2-tailed) unless otherwise noted, * = p< .05, n.s. =non-significant. Note: The Bonferroni correction not applied here due to the exploratory nature of this portion of research.

7.2.3 Hypotheses 2a and 2b

Cross-tabular analyses of individual and firm differences.

There were several individual and firm differences found in type of source used in the data. Cross-tabs of recruitment source type used and identification as a visible minority indicated that, on average, visible minorities were proportionally more likely to use formal recruitment sources or a combination of formal and informal sources than individuals who were not visible minorities, (χ^2 =7.89,df=3, p<.05). In fact, 83.3% of visible minorities reported using either formal sources alone or a combination of formal and informal sources to find their current job vs. 70.7% of Caucasian participants. This pattern was similar with individuals self-identifying as Aboriginal. Of these individuals, 87.5% reported using a combination of both formal and informal sources (χ^2 =19.42, df=3, p<.001). No significant differences were found in type of sources used for gender, persons with disabilities, relationship status (presence of life Partner or not), occupational group, or education level when eight levels were examined. However when education level was recoded into a smaller number of categories, and high school or less, college, and university where compared, there were significant differences in source type by educational level with university graduates more likely to use a combination of formal and informal sources (χ^2 =9.72, df=4, p<.05). In general, the use of both formal and informal sources combined was most frequently-reported by participants. There was a significant difference in types of recruitment source used by self-efficacy (χ^2 (4) =9.70, p<05).

There was also a significant difference in types of recruitment source used by firm

size (χ^2 (9) =18.40, p<. 05). As hypothesized, those in larger firms were more likely to

use formal sources (χ^2 (4) =13.86, p<. 05) or a combination of formal and informal

sources (χ^2 (6) =16.28, p<. 05). Those in small and medium size firms were more likely

to have used newspaper ads however when the Bonferroni correction was applied the

difference was not quite significant at the p<.05 level. Those working in larger firms were

significantly more likely to have used the Internet to find their job as well as on-campus

recruitment (see Table 7.13 for details).

There were significant differences in industry type and recruitment source usage

(χ^2 (9) =69.93, p<. 01). Despite this difference, in most cases, respondents across all

industries reported using a combination of both formal and informal sources. Those

working in natural resources industries reported using only informal sources more often

and those in transportation, government and non-profit reporting using a mixture of

formal sources alone and formal and informal sources more frequently.

Some cross-tabular analyses were also conducted with outcome variables and to

determine if recruitment source was associated with exposure to perceived information

gathered and received from the organization. Those who had used formal recruitment

sources and those who had used a combination of formal and informal recruitment

sources were more likely on average to have been exposed to information provided by the

organization (χ^2 (6)=12.52, p=.05). There were also significant differences in the degree

to which job seekers using different types of recruitment sources sought to gather

information about the job. Those using multiple types of recruitment sources to find their

jobs (formal and informal) were more likely to seek out a higher level of information

about the job (62.7%) as opposed to those using only formal sources (28.7%) and those

using only informal sources (8.9%) reported the highest level of information gathering

(χ^2 (6)= 76.22, p<.001).

There also were significant differences in when numbers of promotions by type

of recruitment source were examined. Of those using the Internet as a recruitment source,

16.1% obtained more than one promotion, compared to 7.3% who did not use the

Internet. However of those who did not use the Internet 19.1% obtained one promotion

compared with 16.5% of those who had used the Internet ($\chi^2(2)$=7.39,p < .05). Of those

who reported using only formal sources 6.2% reported receiving more than one

promotion. Of those reporting using only formal sources, 6.7% reported more than one

promotion. When using a combination of formal and informal sources, 18.9% reported

obtaining more than one promotion ($\chi^2(4)$=16.15 p<.05). In the case of obtaining one

promotion, those in the informal group reported receving at least one promotion more

frequently (21.1% informal vs. 16.3% in the formal group and 16.9% in when both types

of sources were used).

Cross-tabular analyses indicated that those using formal and both formal and informal recruitment sources were more likely to be receive information about the job from the organization χ^2 (6) =12.52, p<.05, and to have gathered more information about the job χ^2 (6)= 76.22, p<.001.

Table 7.13

Proportion of Source Type Usage by firm size

Firm Size	Recruitment source							
	All Formal	News-paper Ad	Internet	Head-hunters	Job fair	On-campus	Govern-ment Ad	referral
Very small (1-19)	56.5%	35.3%	36.5%	18.8%	7.1%	3.5%	12.9%	54.1%
Small (20-99)	75%	50%	48.9%	27.3%	18.2%	19.3%	25.0%	47.7%
Medium (100-499)	74.7%	53.7%	53.7%	25.3%	13.7%	14.7%	22.1%	48.4%
Large (500+)	77.5%	35.8%	62.6%	29.4%	13.9%	**8.6%**	13.9%	43.9%
% Total Use in Source	72.5%	42.2%	53.2%	26.2%	13.4%	11.0%	17.6%	47.5%
χ^2 (df=3)*	13.86*	12.11 ns	16.81**	3.49 ns	4.73 ns	13.57*	7.69 ns	2.53 ns

Note: χ^2 (df = 3), significant at **p<.01, *p<.05, ns= non-significant, Bonferroni corrected, 2-tailed.

Correlations.

Correlations of key variables are as shown in Table 7.14. Given there was a mix of dichotomous, ordinal and continuous variables both the Spearman and Pearson correlations were run, both types of correlations were similar and fairly low overall. Correlations between continuous variables were usually slightly inflated in Spearman. The more conservative Pearson correlations are reported here (although the Spearman correlations are available in Appendix J for review if desired). The correlation between perceived fairness and job satisfaction were fairly high ($r=.49$, $p<.001$) perceived fairness and self-efficacy were also highly correlated ($r=.47$, $p<.001$) as were job satisfaction and job expectancies ($r=.41$, $p<.001$). Firm size was correlated with promotion ($r=.15$, $p<.01$) as well as with the use of the Internet as a recruitment source ($r=.19$, $p<.001$) and use of formal sources ($r=.15$, $p<.001$) but not with the use of informal sources. Firm size was significantly correlated with the use of formal sources using the Spearman correlation ($r=.14$, $p<.05$). Self-efficacy was significantly correlated with affective commitment ($r=.21$, $p<.001$) and gender ($r=.16$, $p<.001$) as well as job satisfaction ($r=.29$, $p<.001$) and use of informal sources ($r=-.10$, $p<.05$).

Reported perceived information received from the organization was correlated with perceived information gathered about the job by job seekers ($r=.33$, $p<.001$). Job expectancies were significantly correlated with perceived information received from the organization ($r=.13$, $p<.01$) and informal recruitment source ($r=.18$, $p<.001$). Job

expectancies were not significantly correlated with perceived information gathered about

the job (r= -.04, p=.41). Job expectancies were however strongly correlated with

perceived fairness (r=.40, p<.001), affective commitment (r= .41, p<.001), self-efficacy

(r=.19, p<.001), and job satisfaction (r=.41, p<.001).

Table 7.14: Correlations between predictor and criterion variables for Study 3 (continued on next page)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 Firm size	2 84	1 15	---																				
2 Self-efficacy	33 36	5 87	05	---																			
3 Perceived info received	2 95	1 53	06	11	--																		
4 Perceived info gathered	9 04	1 89	21	05	33	---																	
5 Affective commit	26 11	6 51	- 01	21	12	- 06	----																
6 Gender[a]	1 62	0 49	- 01	16	- 06	- 14	12	---															
7 Designated group[b]	0 25	0 44	- 06	00	08	12	- 04	- 09	-----														
8 Life partner[c]	1 56	50	01	03	03	01	00	- 06	- 08														
9 Dependent Child[d]	1 53	50	- 04	- 07	- 13	- 14	- 01	- 01	05	- 40													
10 Education	4 61	1 87	16	- 00	02	21	- 07	- 14	07	02	06	---											
11 Occupation Group[e]	3 08	1 63	- 16	- 05	- 03	- 21	00	11	- 00	- 09	02	- 37	----										
12 Age	38 07	10 65	- 07	12	00	- 06	07	- 00	- 01	20	- 07	- 03	- 03	----									
13 Previous Experience	2 22	1 20	04	21	-02	02	09	03	- 06	21	- 13	03	- 05	41	----								
14 Promotion[f]	1 21	1 01	15	14	10	00	10	- 04	10	- 03	02	02	- 10	- 01	01	----							
15 Number promotions	1 48	0 98	09	04	04	07	03	- 13	08	- 04	03	09	- 18	- 11	06	- 68	--						
16 Job Satisfaction	3 88	1 01	04	29	13	-01	59	13	- 02	- 07	- 07	- 06	05	11	09	09	02	---					

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
17 Formal[g]	72	45	15	- 06	09	23	- 11	- 08	13	- 04	- 03	08	- 01	- 03	01	- 02	02	- 05	---				
18 Internet[h]	0 53	0 50	19	- 06	14	23	- 06	- 08	10	- 04	- 04	13	- 05	- 07	- 03	04	06	- 01	66	----			
19 Informal[i]	0 64	0 48	01	- 10	18	27	- 04	- 08	- 04	- 04	- 09	11	- 09	- 09	- 05	- 00	07	- 06	- 10	01	---		
20 Turnover	2 57	1 43	- 06	- 10	۰ 05	07	- 53	- 20	12	- 06	- 03	07	- 01	- 11	- 06	- 03	02	- 43	14	15	04	---	
21 Perceived Fairness	16 33	3 22	08	47	15	- 05	36	23	- 11	03	- 12	- 10	04	09	12	10	- 05	49	- 04	- 03	- 09	- 19	---
22 Job Expectancies	14 02	3 28	02	19	13	- 04	41	12	- 05	06	- 07	- 07	02	07	11	01	- 08	41	- 03	- 05	- 04	- 38	40

Note All significant at $p < 001$ (2-tailed) if $r \geq 15$, p< 01 if r≥ 12 and at p< 05, if r ≥ 10, otherwise N S = non significant,
[a] 1=male,2=female [b] 0=not designated group, 1=designated group [c] 0=no life partner, 1=life partner [d] 0=no dependent child,, 1 dependent child [e] 1=manager, 6=production worker
[f to i] 0=source not used, 1=source used

Logistic Regressions of Source Usage.

A series of sequential logistic regressions were used to predict the use various recruitment sources of interest. Specifically, I examined these variables as predictors of the use of informal sources, a mix of both formal, the Internet as well as employee referrals, networking and on-campus recruitment. The individual characteristics were: age, previous work experience in a similar/related job, education level (7 categories) designated group membership and relationship status (presence of life partner or not, two categories). The organizational characteristics were: industry type (13 categories), firm size (four categories) and occupational group (six categories).

Informal recruitment sources usage.

A sequential logistic regression was used to predict the use of informal recruitment sources only by successfully-recruited employees. Recruitment sources were specified as dependent variables and organizational and individual characteristics were entered as independent variables. There was a good model fit when the firm characteristics were entered alone (χ^2 (21, n =455) = 39.58, p< .01).This result indicated that the predictors as a set reliably distinguished between whether or not the "informal" recruitment source was used for successful job seeking. The classification rates were improved from the constant only to the introduction of firm characteristics. When only the constant was included, approximately 80.2% were correctly predicted overall and 0%

of informal source usage was predicted and 100% of non-informal. When the firm

differences predictors were included only, the classification rate improved minimally

overall but the informal source usage classification improved, from 0% to 3.3% of those

using informal sources. The variance accounted for was small; the Nagelkerke R^2 was

.13. With the exception of firm size, none of the other organizational variables were

significant. The Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8,

n=455) =6.08, p= .64), indicating the model is a good fit to the data.

When the individual difference variables were added on the second step the

overall model for the coefficients was a good fit (χ^2 (38, n =455) = 57.50, p< .05) and the

variance accounted for improved; the Nagelkerke R^2 was .19. The Hosmer-Lemeshow

goodness of fit tests was also non-significant (χ^2 (8, n=455) =7.53, p=.48). A non-

significant Hosmer-Lemeshow indicates the model is an indicator that the model is a

good fit to the data. For the demographic variables, none of the variables were

significant, except the university certificate level at p=.05. Overall classification did not

change from the firm characteristics although the classification for informal usage did

improve to 14.4% correct. There was a tendency for under-classification in the informal

source category. The odds ratios indicated that those in the smallest organizations were

three and half times more likely to use informal sources than those in the largest

organizations. Table 7.15 shows the regression coefficients, chi square tests, odds ratios

and confidence intervals.

Table 7.15

Logistic regression for Informal recruitment as a function of firm and individual differences

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Firm size			13.56	3	.05			
Firm size (1-19)	1.27	.37	12.13	1	.001	3.56	1.74	7.28
Firm size (20-99)	.17	.38	.19	1	ns	1.11	.56	2.50
Firm size (100-499)	.49	.37	1.78	1	ns	1.63	.80	3.32
Industry			13.76	13	ns			
Natural Resources	1.63	.95	2.94	1	ns	5.10	.88	33.77
Manufac-turing	-.06	.85	.01	1	ns	.94	.19	5.13
Construc-tion	-1.23	1.07	1.33	1	ns	.29	.29	2.65
Transpor-tation	.41	.88	.21	1	ns	1.50	.28	8.56
Commu-nications	-19.60	103.75	.00	1	ns	1.00	.00	.00
Retail	.38	.83	.21	1	ns	1.46	.30	7.49
Financial	-.46	.92	.25	1	ns	.63	.12	3.94
Education	-.14	.83	.03	1	ns	.87	.18	4.42
Health Care	.37	.78	.23	1	ns	1.45	.33	6.58
Informati-on tech	-.31	.90	.12	1	ns	.73	.13	4.35
Govern-ment	-.57	.96	.35	1	ns	.56	.10	4.13
Services	-.04	1.40	.001	1	ns	.96	.06	14.20
Other	.40	.77	.27	1	ns	1.49	.35	6.99

	B	S.E.	Wald	df	Significance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Occupation			3.78	5	ns			
Manager	.32	.54	.36	1	ns	1.38	.52	4.15
professional	.21	.53	.16	1	ns	1.23	.46	3.49
Technical trade	-.04	.61	.00	1	ns	.97	.33	3.49
Sales	-.75	.63	1.42	1	ns	.47	.14	1.60
Administrative	-.10	.54	.04	1	ns	.90	.32	2.61
Age	-.02	.01	.02	1	ns	1.00	.97	1.03
Previous Work Experience			2.75	6	ns			
< 1yr	.05	.71	.00	1	ns	1.05	.26	4.20
1-3 years	.25	.70	.13	1	ns	1.28	.33	5.04
4-5 years	-.07	.70	.01	1	ns	.93	.23	3.68
6-10 years	.07	.69	.01	1	ns	1.07	.28	4.14
11-15 years	.38	.69	.30	1	ns	1.46	.38	5.66
16-25 years	-.47	.73	.41	1	ns	.63	.15	2.63
Self-efficacy	.03	.03	1.06	1	ns	1.03	.98	1.08
education			10.01	7	ns			
Less than High school	-.55	1.42	.15	1	ns	.58	.04	9.28
High School	-.46	.98	.22	1	ns	.63	.09	4.27
Technical diploma	-1.20	1.04	1.34	1	ns	.30	.04	2.31
College diploma	-.29	.97	.09	1	ns	.75	.11	5.02
University certificate	-2.95	1.42	4.30	1	.05	.05	.00	.85

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Bachelor's	-.54	.95	.32	1	ns	.57	.09	3.75
Grad school	-1.12	.99	1.28	1	ns	.33	.05	2.28
Gender[a]	-.10	.29	.11	1	ns	.91	.51	1.58
Life partner[b]	.07	.28	.06	1	ns	1.07	.59	1.74

Note: [a] 1=female;2=male. [b] 0=no life partner; 1=life partner. Reference groups: firm size=over 500; Industry=not for profit; occupation group=production workers; work experience=over 25 years; education=doctorate

Use of a mixture of formal and informal recruitment sources.

A sequential logistic regression was used to predict the use of a mixture of formal and informal recruitment sources only, by successfully-recruited employees. The 'mixture' recruitment source was specified as dependent variables and organizational and individual characteristics were entered as independent variables. There was a good model fit when the firm characteristics were entered alone (χ^2 (21, n =455) = 47.09, p<.001). This result indicated that the predictors as a set reliably distinguished between whether or not a mix of formal and informal recruitment sources were used for successful job seeking. The classification rates for mixture of formal and informal improved from the constant only to the introduction of firm characteristics. When only the constant was included, approximately 55.8% were correctly predicted overall and 0% of a mix of formal and informal source usage was predicted to be used. When only the firm

differences predictors were included, the classification rate improved overall to from

55.8% to 62.2% and the mix of formal and informal source usage classification

improved, from 0% to 50.2% of those using a mix of sources. The variance accounted for

was small; the Nagelkerke R^2 was .13. Unfortunately none of the organizational

variables were significant save one industry (Communications) where the Exp (B) was

12.91. There were also some organizational variables which approached significance;

firm size, for very small organizations, and the information technology industry. The

Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8, n=455) =6.20, p=

.63), indicating the model is a good fit to the data.

When the individual difference variables were added on the second step the

overall model for the coefficients was a good fit (χ^2 (38, n =455) = 67.41, p< .01) and the

variance accounted for improved; the Nagelkerke R^2 was .18. The Hosmer-Lemeshow

goodness of fit test was also non-significant (χ^2 (8, n=455) =14.25, p=.08). A non-

significant Hosmer-Lemeshow is an indicator that the model is a good fit to the data. For

the demographic variables, none of the variables were significant except self-efficacy

p=.05. Overall classification improved slightly from the firm characteristics (from 62.2%

to 64.8%) and the classification for a mixture of informal and formal source usage did

improve from 50.2% to 53.7%. Table 7.16 shows the regression coefficients, chi square

tests, odds ratios and confidence intervals. The results show that those in the

communications industry were more likely to use a mixture of formal and informal

sources as were those with higher self efficacy scores. Those in the IT industry were also

more likely to use a mixture of sources however the statistic only approached

significance. Those from smaller firms (less than 20) people were less likely to report

using a mixture of recruitment sources than those in larger firms.

Table 7.16

Logistic regression for use of both Informal and formal recruitment sources as a
function of firm and individual differences

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Firm size			3.59	3	ns			
Firm size (1-19)	-.60	.32	3.45	1	.06	.55	.29	1.03
Firm size (20-99)	-.09	.30	.09	1	ns	.92	.51	1.65
Firm size (100-499)	-.12	.28	.19	1	ns	.88	.51	1.54
Industry			20.27	13	ns			
Natural Resources	-.20	1.13	.03	1	ns	.86	.09	7.40
Manufac-turing	1.42	.88	2.64	1	ns	4.14	.75	23.02
Construc-tion	1.68	.93	3.23	1	ns	5.34	.86	33.20
Transpor-tation	.59	.93	.41	1	ns	1.81	.30	11.13
Commu-nications	2.56	1.06	5.84	1	.05	12.91	1.62	102.70
Retail	.64	.88	.52	1	ns	1.89	.33	10.68
Financial	1.20	.89	1.82	1	ns	3.31	.58	18.84
Education	1.37	.87	2.48	1	ns	3.92	.72	21.42
Health Care	1.20	.85	1.99	1	ns	3.31	.63	17.47
Information tech	1.67	.89	3.49	1	.06 ns	5.31	.92	30.62
Govern-ment	1.46	.91	2.59	1	ns	4.29	.73	25.33

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Services	.90	1.18	.59	1	ns	2.47	.25	24.95
Other	.60	.86	.50	1	ns	1.83	.34	9.80
Occupation			4.45	5	ns			
Manager	.09	.46	.04	1	ns	1.10	.44	2.72
professional	.05	.44	.01	1	ns	1.05	.44	2.50
Technical trade	.35	.49	.50	1	ns	1.41	.55	3.66
Sales	.72	.49	2.18	1	ns	2.06	.79	5.39
Administrative	-.04	.46	.01	1	ns	.96	.39	2.37
Age	-.01	.01	1.24	1	ns	.99	.97	1.01
Previous Work Experience			2.50	6	ns			
< 1yr	-.44	.60	.54	1	ns	.64	.20	2.08
1-3 years	.08	.57	.02	1	ns	1.08	.35	3.32
4-5 years	-.24	.58	.17	1	ns	.79	.25	2.44
6-10 years	-.15	.57	.07	1	ns	.86	.28	2.66
11-15 years	-.28	.58	.23	1	ns	.76	.25	2.35
16-25 years	.02	.58	.001	1	ns	1.02	.33	3.17
Self-efficacy	-.04	.02	4.87	1	.05	.96	.92	1.00
education			7.49	7	ns			
Less than High school	.15	1.27	.01	1	ns	1.16	1.00	13.84
High School	-.20	.87	.05	1	ns	.82	.15	4.48
Technical diploma	.10	.90	.01	1	ns	1.11	.19	6.49

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
College diploma	-.19	.87	.05	1	ns	.83	.15	4.56
University certificate	.92	.95	.94	1	.05	2.50	.39	15.94
Bachelor's	.17	.85	.04	1	ns	1.18	.23	6.20
Grad school	.54	.87	.34	1	ns	1.71	.31	9.41
Gender[a]	.17	.23	.54	1	ns	1.19	.75	1.86
Life partner[b]	-.15	.22	.46	1	ns	.86	.56	1.33

Note: [a] 1=female;2=male. [b]0=no life partner; 1=life partner. Reference groups: firm size=over 500; Industry=not for profit; occupation group=production workers; work experience=over 25 years; education=doctorate

Use of the Internet as a recruitment source.

A sequential logistic regression was used to predict the use of the Internet as a recruitment source by successfully-recruited employees. The Internet was specified as a dependent variable and organizational and individual characteristics were entered as independent variables. There was a good model fit when the firm characteristics were entered alone (χ^2 (21, n =455) = 61.87, p<.01). This result indicated that the predictors as a set reliably distinguished between whether or not the Internet as a recruitment source was used for successful job seeking. The classification rates for Internet improved from the constant only with the introduction of firm characteristics. When only the constant was included, approximately 53.2% were correctly predicted overall and 100% were classified as using the Internet. When only the firm differences predictors were included only, the classification rate improved overall to from 53.2% to 64.0%, and the non-

internet source usage classification improved as well (from 0% to 54.9% of those using

or not using the Internet as a recruitment source). The variance accounted for was small;

the Nagelkerke R^2 was .17. Firm size was significant; those recruited in larger firms

were more likely to have used the internet than those in smaller firms. Those working in

smaller firms were less likely to have used the internet during their job search (Exp (B)

.273). Type of industry was significant as a whole, however only those in the IT

industry were significantly more likely to have used the Internet to find a job (Exp (B)

=7.67). The Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8, n=455)

=9.43, p= .31), indicating the model is a good fit to the data.

When the individual difference variables were added, the overall model for the

coefficients remained a good fit (χ^2 (38, n =455) =86.82, p< .001) and the variance

accounted for improved; the Nagelkerke R^2 was .23. The Hosmer-Lemeshow goodness

of fit test was also non-significant (χ^2 (8, n=455) =11.55, p=.17) indicating that the model

is a good fit to the data. For the demographic variables, none of the variables as a whole

were significant although some levels of previous work experience were significant.

Overall classification improved (67%) and the classification for those not using the

Internet improved (from 54.9% to 61.5%). Table 7.17 shows the regression coefficients,

chi square tests, odds ratios and confidence intervals. Age and education did not appear to

have a significant relationship with the use of the Internet to find a job although there was

a relationship for previous work experience, those with 1-3 years, 6-10 years and, 16-25

years previous work experience were significantly more likely to have used the Internet

as a job source to find their current job than those with more than 25 years previous

experience.

Table 7.17

Logistic regression for use of the Internet as a recruitment source as function of firm
and individual differences

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Firm size			16.01	3	.001			
Firm size (1-19)	-1.30	.33	15.57	1	.001	.27	.14	.52
Firm size (20-99)	-.55	.30	3.28	1	.07 ns	.44	.32	1.05
Firm size (100-499)	-.56	.29	3.70	1	.05	.57	.32	1.01
Industry			25.52	13	.05			
Natural Resources	-1.11	1.04	1.15	1	ns	.33	.04	2.51
Manufac-turing	.30	.75	.17	1	ns	1.35	.31	5.84
Construc-tion	1.54	.83	3.43	1	ns	4.67	.91	23.92
Transpor-tation	.19	.80	.06	1	ns	1.21	.25	5.77
Commu-nications	1.59	.95	2.77	1	ns	4.88	.76	31.49
Retail	.11	.74	.02	1	ns	1.12	.26	4.82
Financial	.69	.77	.82	1	ns	2.00	.45	8.94
Education	.51	.74	.48	1	ns	1.66	.39	7.03
Health Care	.03	.71	.00	1	ns	1.03	.25	4.18
Informati-on tech	2.04	.84	5.95	1	.05	7.67	1.49	39.41
Govern-ment	.65	.79	.67	1	ns	1.91	.41	8.95
Services	.20	1.10	.03	1	ns	1.21	.14	10.55

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Other	.61	.71	.74	1	ns	1.85	.46	7.46
Occupation			6.01	5	ns			
Manager	.11	.46	.05	1	ns	1.13	.45	2.74
professional	.02	.44	.001	1	ns	1.02	.43	2.40
Technical trade	.68	.50	1.87	1	ns	1.97	.75	5.19
Sales	.80	.49	2.62	1	ns	2.21	.85	5.80
Administrative	.39	.45	.73	1	ns	1.47	.61	3.56
Age	.00	.01	.01	1	ns	1.00	.98	1.02
Previous Work Experience			11.02	6	ns			
< 1yr	.74	.62	1.46	1	.09 ns	.23	.63	7.04
1-3 years	1.19	.60	3.93	1	.05	3.27	1.01	10.55
4-5 years	1.00	.60	2.77	1	ns	2.73	.84	8.89
6-10 years	1.16	.60	3.74	1	.05	3.18	.99	10.24
11-15 years	.57	.60	.91	1	ns	1.77	.55	5.75
16-25 years	1.64	.62	7.04	1	.01	5.14	1.53	17.21
Self-efficacy	-.02	.02	.89	1	ns	.98	.95	1.02
education			10.92	7	ns	.14		
Less than High school	1.64	1.33	1.51	1	ns	5.15	.38	70.28
High School	.48	.97	.25	1	ns	1.62	.24	10.78
Technical diploma	.70	1.00	.49	1	ns	2.01	.28	14.22
College diploma	.78	.97	.64	1	ns	2.18	.32	14.67

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
University certificate	1.10	1.04	1.12	1	ns	2.99	.39	22.74
Bachelor's	1.02	.95	1.16	1	ns	2.78	.43	17.91
Grad school	1.70	.98	3.02	1	ns	5.49	.80	37.50
Gender[a]	.01	.24	.00	1	ns	1.01	.64	1.61
Life partner[b]	-.35	.23	2.34	1	ns	.71	.45	1.10

Note: [a] 1=female;2=male. [b] 0=no life partner; 1=life partner. Reference groups: firm size=over 500; Industry=not for profit; occupation group=production workers; work experience=over 25 years; education=doctorate

Use of referrals as a recruitment source.

A sequential logistic regression was used to predict the use of the referrals as a recruitment source by successfully-recruited employees. Use of referrals was specified as a dependent variable and organizational and individual characteristics were entered as independent variables. The model fit when the firm characteristics were entered alone was non-significant (χ^2 (21, n =455) = 21.44, p=.43). This result indicated that the predictors as a set did not reliably distinguish between whether or not referrals recruitment sources were used for successful job seeking. The classification rates for referrals improved from the constant only with the introduction of firm characteristics. When only the constant was included, approximately 52.5% were correctly predicted overall and 100% were classified as not using referrals. When the firm differences predictors were included only, the classification rate improved overall to from 52.52% to

58%, and the referral source usage classification improved as well (from 0% to 52.3% of those using referrals as a recruitment source). The variance accounted for was small; the Nagelkerke R^2 was .06. The Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8, n=455) =6.20, p= .63), indicating the model is a good fit to the data however since the overall model was non-significant and the Pseudo R-Square is small this result may not be meaningful in this case.

When the individual difference variables were added on the second step the overall model for the coefficients remained poor (χ^2 (38, n =455) =38.60, p= .44) and the variance accounted for improved; the Nagelkerke R^2 was .11. The Hosmer-Lemeshow goodness of fit test was significant (χ^2 (8, n=455) =19.54, p<.01), indicating that the model is not a good fit to the data. Overall classification remained the same (57.6%) and the classification for those not using the referrals remained similar and lowered somewhat (50.9%). Given the lack of model fit and effect for the individual and firm difference variables the regression coefficients, chi square tests, odds ratios and confidence intervals were not shown for this variable.

Use of networking as a recruitment source.

A sequential logistic regression was used to predict the use of the networking as a recruitment source by successfully-recruited employees. Networking was specified as a dependent variable and organizational and individual characteristics were entered as independent variables. The overall model fit when the firm characteristics were entered alone was significant (χ^2 (21, n =455) = 41.05, p<.01). This result indicated that the

predictors as a set reliably distinguished between whether or not networking was used for successful job seeking. The classification rates for networking improved from the constant only with the introduction of firm characteristics. When only the constant was included, 54.3% were correctly predicted overall and 100% were classified as not using networking. When the firm differences predictors were included only, the classification rate improved overall to from 54.3% to 60.9%, and the networking usage classification improved as well (from 0% to 56.3% of those using networking as a recruitment source). The variance accounted for was small; the Nagelkerke R^2 was .12. The Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8, n=455) =10.08, p= .26), indicating the model is a good fit to the data. When the individual difference variables were added on the second step the overall model for the coefficients remained significant (χ^2 (38, n =455) =61.62, p< .01) and the variance accounted for improved; the Nagelkerke R^2 was .17. The Hosmer-Lemeshow goodness of fit test was non-significant (χ^2 (8, n=455) =5.76, p=.68), indicating that the model is a good fit to the data. Overall classification improved slightly (62.4%) and the classification for those using networking also improved somewhat (55.3%). Despite these positive results, none of the variables in the final equation were significant. When firm variables were entered alone, the overall result for industry was significant Wald=23.06, p<.05, the overall occupation group approached significance, Wald=10.47, p=.06 and the managerial occupation group was significant, Wald=4.40, p<.5). However when individual difference variables were added none of the variables in the equation were significant. Given the lack of significance in this case for the individual and firm difference variables, the regression coefficients, chi

square tests, odds ratios and confidence intervals were not shown for networking as there is nothing to interpret.

On-campus recruitment.

A sequential logistic regression was used to predict the use of on-campus recruitment as a recruitment source by successfully-recruited employees. On-campus recruitment was specified as a dependent variable and organizational and individual characteristics were entered as independent variables. The overall model fit when the firm characteristics were entered alone was significant (χ^2 (21, n =455) = 47.83, p<.01). This result indicated that the predictors as a set reliably distinguished between whether or not networking was used for successful job seeking. The classification rates for on-campus recruitment improved from the constant only with the introduction of firm characteristics. When only the constant was included, 89% were correctly predicted overall and 100% were classified as not using on-campus recruitment. When the firm differences predictors were included only, the classification rate overall remained at 89%, and the on-campus recruitment source usage classification only improved marginally (from 0% to 2% of those using on-campus as a recruitment source). The variance accounted for was small; the Nagelkerke R^2 was .20. The Hosmer-Lemeshow goodness of fit tests were not significant (χ^2 (8, n=455) =11.81, p= 16) indicating the model is a good fit to the data. When the individual difference variables were added on the second step the overall model for the coefficients remained significant (χ^2 (38, n =455) =93.63, p< .001) and the variance accounted for improved; the Nagelkerke R^2 was .37. The

Hosmer-Lemeshow goodness of fit test was non-significant (χ^2 (8, n=455) =3.66, p=.89), indicating that the model is a good fit to the data. Overall classification remained the same (89.2%) but the classification for those using on-campus recruitment improved (20.0%). It should be noted that only 50 of the 455 participants reported using on-campus recruitment. A number of firm and individual differences variables were significant in the equation. Table 7.18 shows the regression coefficients, chi square tests, odds ratios and confidence intervals. Based on the information below, as expected, those who were younger were more likely to have used on campus recruiting to find their jobs. Contrary to expectations, education levels were not found to significantly relate to on-campus recruitment and those reporting 6-10 years previous work experience were more likely to report using on-campus recruiting. In addition, findings indicated that males and those with higher self-efficacy were more likely to report using on-campus recruiting to find their jobs than females and those with lower self-efficacy scores.

Table 7.18

Logistic regression for use of on-campus recruitment source as function of firm and individual differences.

	B	S.E.	Wald	df	Significance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Firm size			14.41	3	.01			
Firm size (1-19)	-.41	.73	.43	1	ns	.62	.15	2.59
Firm size (20-99)	1.66	.51	10.69	1	.001	5.27	1.95	14.28
Firm size (100-499)	.69	.48	2.06	1	ns	2.00	.78	5.15
Industry			11.16	13	ns	.60		

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Natural Resources	-18.63	10206.7 3	.00	1	ns	1.00	.00	.00
Manufac-turing	-.77	1.37	.31	1	ns	.58	.03	6.83
Construc-tion	.61	1.38	.20	1	ns	1.85	.12	27.68
Transpor-tation	-1.67	1.62	1.07	1	ns	.19	.01	4.49
Commu-nications	.38	1.49	.06	1	ns	1.46	.08	26.78
Retail	-.75	1.39	.29	1	ns	.47	.03	7.25
Financial	.15	1.33	.01	1	ns	1.16	.09	15.58
Education	.90	1.26	.51	1	ns	2.46	.21	29.27
Health Care	-.41	1.33	.10	1	ns	.66	.05	8.91
Informati-on tech	.64	1.29	.24	1	ns	1.89	.15	23.72
Govern-ment	-1.13	1.65	.47	1	ns	.32	.01	8.2
Services	-.62	1.74	.13	1	ns	.54	.02	16.33
Other	-.17	1.34	.02	1	ns	.84	.06	11.53
Occupation			3.12	5	ns			
Manager	.25	.86	.08	1	ns	1.28	.24	6.84
professional	.39	.82	.23	1	ns	1.48	.30	7.39
Technical trade	-.05	.88	.00	1	ns	.95	.17	5.32
Sales	.76	.87	.76	1	ns	2.14	.39	11.80
Administrative	-.57	1.00	.36	1	ns	.57	.09	3.68
Age	-.05	.02	3.67	1	.055 ns	.96	.91	1.00

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Previous Work Experience			12.12	6	.06ns			
< 1yr	-2.24	1.11	4.09	1	.05	.11	.01	.93
1-3 years	-1.89	.99	3.67	1	.056ns	.15	.02	1.05
4-5 years	-.92	.97	.90	1	ns	.40	.06	2.67
6-10 years	-2.65	1.04	6.55	1	.01	.07	.01	.54
11-15 years	-1.88	1.01	3.49	1	.062ns	.15	.02	1.10
16-25 years	-1.32	1.02	1.68	1	.01	.27	.04	1.96
Self-efficacy	-.06	.03	4.29	1	.05	.94	.89	1.00
education			7.88	7	ns			
Less than High school	-18.08	15481.42	.00	1	ns	.00	00	.00
High School	-.31	1.29	.06	1	ns	.73	.06	9.12
Technical diploma	-.42	1.40	.09	1	ns	.66	.04	10.14
College diploma	-1.65	1.39	1.42	1	ns	.19	.01	2.90
University certificate	.39	1.34	.09	1	ns	1.48	.11	20.44
Bachelor's	-1.01	1.25	.65	1	ns	.37	.03	4.26
Grad school	-.06	1.27	.00	1	ns	.94	.08	11.36
Gender	1.43	.41	12.21	1	.001	4.16	1.87	9.24
Life partner	-.24	.41	.36	1	ns	.78	.35	1.75

Note:[a] 1=female;2=male. [b]0=no life partner; 1=life partner. Reference groups: firm size=over 500; Industry=not for profit; occupation group=production workers; work experience=over 25 years; education=doctorate

7.2.4 Hypothesis 3

Hierarchical regression of job expectations.

Hierarchical regressions were conducted to determine the relationship between

individual difference variables, information gathered and received, job expectations,

perceived fairness, affective commitment and type of recruitment source on outcome

variables such as turnover intentions, job satisfaction and whether promotions occurred.

Order of entry for the regressions were as follow; individual differences as a control,

recruitment source type because it has been hypothesized in the literature that recruitment

sources formal vs. informal are related to the amount of realistic information candidates

have and allow them to have more realistic information and attitudes toward the job,

which in turn relate to outcomes such as turnover intentions and job satisfaction as well

as promotion. In this latter case the presence of a promotion and number of promotions

were used as a proxies for performance.

The source type variable was recoded into two vectors formal and informal

because it contained 3 categories; the no specified source condition was eliminated from

the analysis. Although work experience and education are ordinal they contain seven and

eight categories respectively. For the current analyses, I was interested in the overall

relationships of more vs. less work experience and more vs. less education and the data

are normally distributed. O'Brien (1979) has concluded that using Pearson's r with

ordinal data is appropriate and does not affect results in any substantive manner for

categories above 5, if the data is normally distributed which is the case here.

Prior to conducting these hierarchical regressions, an initial hierarchical

regression was conducted to determine the relationship between the amounts of

information gathered and received about the job and job expectations. Individual

differences were entered initially as a control, followed by recruitment source type,

amount of information gathered and received in accordance with past conceptualizations

for the relationship between the of type of recruitment source and job expectations as

well as subsequent outcome variables. Table 7.19 displays the correlations between the

variables, the unstandardized regressions coefficients (B) and standard error, the

standardized regression coefficients and the changes in variance explained for each step.

R was significantly different from zero following the entry of individual differences and

realistic information but not after the entry of the type of recruitment source. The overall

equation after step 3 with all of the predictors in the equation explained little variance (R^2

=.09, $F (11,408) = 3.56$, $p<.001$). This indicates that 8.8% of the variance in job

expectancies was attributable to the individual differences entered and the amount of

information gathered and received. After step 1 with the individual differences entered, $F_{change} (7,412) =4.24$, $p<.001$, $R^2=.07$. After step 2, with type of recruitment source added

to the equation, $R^2 =.07$, $F_{change} (2,410) =0.53$, $p=.59$. Addition of type of recruitment

source only improved variance explained R^2 by .02. At step 3, after the amount of

information gathered and received was entered, R^2 was .09, $F_{change} (2,408) =3.56$, $p<.05$.

Given the significance of the coefficients, the pattern of results suggests that most of the

variability is predicted by gender, self-efficacy and information received.   Table 7.20

displays very similar results with a weak effect for the Internet as a recruitment source

Table 7.19

Hierarchical Regression Analysis predicting job expectations from type of recruitment source, job information gathered and received.

	B	SEB	Beta
Step1			
Education level	.08	.09	.04
Previous Work experience	.13	.09	.07
Gender[a]	.83	.33	.12*
Designated group[b]	-.14	.37	-.02
Partner[c]	.22	.35	.03
Dependent child[d]	-.49	.35	-.07
Self-efficacy	.08	.03	.15*
Change Statistics	$R=.26$ $R^2=.07$, SEE $=3.19$, Adjusted $R^2 = .05$, $\Delta R^2 =.07$ F_{change} (7,412)=4.24, p<.001		
Step 2			
Source type			
Formal	-.19	.23	-.03
Informal	.15	.27	.04
Change Statistics	$R=.26$ $R^2=.07$, SEE $=3.19$, Adjusted $R^2 = .05$, $\Delta R^2 =.00$ F_{change} (2,410)=0.53, p=.59		
Step 3			
Information Gathered	-.32	.16	-.11
Information Received	.41	.17	.12*
Change Statistics	$R=.30$ $R^2=.09$, SEE $=3.17$, Adjusted $R^2 = .06$ $\Delta R^2 =.02$ F_{change} (2,408)=4.03, p<.05		
Model summary	F (11,408)= 3.56, p<.001 8.8% of variance explained		

Note * $p < .05$, ** $p < .01$, *** $p < .001$. [a] 1=male,2=female [d] Designated group, no=0, yes=1 [c] life partner, no= 0, yes=1 [d] Dependent child no=0, yes=1

Table 7.20

Hierarchical Regression Analysis predicting job expectations from use of Internet recruitment source, job information gathered and received.

	B	SEB	Beta
Step1			
Education level	.08	.09	.05
Previous Work experience	.13	.09	.07
Gender[a]	.83	.33	.12*
Designated group[b]	-.15	.37	-.02
Partner[c]	.22	.35	.03
Dependent child[d]	-.50	.35	-.08
Self-efficacy	.08	.03	.14*
Change Statistics	$R=.26$ $R^2=.07$, SEE $=3.19$, Adjusted $R^2 = .05$, $\Delta R^2 =.07$ F_{change} (7,412)=4.24, p<.001		
Step 2			
Source type			
Internet	-.21	.33	-.03
Change Statistics	$R=.26$ $R^2=.07$, SEE $=3.19$, Adjusted $R^2 = .05$, $\Delta R^2 =.00$ F_{change} (1,411)=0.84, p=.36		
Step 3			
Information Gathered	-.32	.16	-.11
Information Received	.42	.17	.12*
Change Statistics	$R=.30$ $R^2=.09$, SEE $=3.16$, Adjusted $R^2 = .07$ $\Delta R^2 =.02$ F_{change} (2,409)=4.17, p<.05		
Model summary	F (10,409)= 3.93, p<.001 8.8% of variance explained, 6.7 from individual differences.		

Note $* p < .05$, $** p < .01$, $*** p < .001$. [a]1=male,2=female [d]Designated group, no=0, yes=1 [c]life partner, no= 0, yes=1 [d]Dependent child no=0, yes=1

7.2.5 Hypothesis 4

Hierarchical regression of job satisfaction.

A hierarchical regression was conducted to predict job satisfaction from job expectations, perceived fairness and affective commitment. Table 7.21 displays the correlations between the variables, the unstandardized regressions coefficients (B) and standard error, the standardized regression coefficients and the changes in variance explained for each step. R was significantly different from zero following the entry of information gathered and received but not after the entry of the type of recruitment source. After step 4 with all of the predictors in the equation, $R^2 = .45$, $F(14, 405) = 23.20$, $p < .001$. This indicates that 45% of the variance in job satisfaction was attributable to the individual differences entered, information gathered and received, job expectancies, perceived fairness and affective commitment toward the organization.

After step 1, with the individual differences entered, $F_{change}(7, 412) = 6.16$, $p < .001$, $R^2 = .11$. After step 2, with type of recruitment source added to the equation, $R^2 = .10$, $F_{change}(1, 410) = .28$, $p = .75$. At step 3, after amount of information received was entered along with information gathered, R^2 was .10, $F_{change}(2, 408) = 1.63$, $p = .20$. Recruitment source type, information gathered and received did not significantly improve prediction. At Step 4, R^2 was .45, $F_{change}(3, 405) = 83.18$, $p < .001$. According to the results, 34% of the variance in job satisfaction was predicted by the last step, job expectancies, affective commitment and perceived fairness. Given the significance of the coefficients, the pattern of results suggests that most of the variability is predicted by the final three variables entered, perceived fairness, affective commitment and job

expectancies. Table 7.22 displays similar results for the use of the Internet as a

recruitment source.

Table 7.21

Hierarchical Regression Analysis predicting job satisfaction from type of recruitment source, job information, perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	-.01	.02	-.02
Previous Work experience	-.01	.02	-.02
Gender[a]	-.01	.08	-.01
Designated group[b]	.11	.09	.05
Partner[c]	.09	.09	.04
Dependent child[d]	-.02	.09	-.01
Self-efficacy	.01	.01	.06
Change Statistics	$R=.31$ $R^2=.10$, SEE $=0.97$, Adjusted $R^2 = .08$, $\Delta R^2 =.11$ $F_{change}(7,412)=6.16$, p<.001		
Step 2			
Source type			
Formal	.04	.06	.03
Informal	-.00	.06	.00
Change Statistics	$R=.33$ $R^2=.10$, SEE $=0.98$, Adjusted $R^2 = .08$, $\Delta R^2 =.00$ $F_{change}(1,410)=.28$, p=.75		
Step 3			
Information Gathered	.02	.02	.04
Information Received	-.02	.04	-.02
Change Statistics	$R=.32$ $R^2=.10$, SEE $=0.97$ Adjusted $R^2 = .08$,$\Delta R^2 =.01$ $F_{change}(2,408)=1.63$, p=.20		
Step 4			
Affective commitment	.07	.01	.41***
Perceived fairness	.08	.02	.25***
Job expectations	.05	.01	.17***
Change statistics	$R=.67$ $R^2=.45$, SEE $=0.77$, Adjusted $R^2 = .43$, $\Delta R^2 =.35$ $F_{change}(3,405)=83.18$, p<.001		
Model summary	F (14,405) = 23.20, p<.001 45% of variance explained,34% (step 4)		

Note * $p < .05$, ** $p < .01$, *** $p < .001$. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c]life partner; no= 0, yes=1. [d]Dependent child no=0, yes=1.

Table 7.22

Hierarchical Regression Analysis predicting job satisfaction from Internet recruitment source, job information gathered and received, perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	-.01	.02	-.03
Previous Work experience	-.01	.02	-.02
Gender[a]	-.01	.08	-.00
Designated group[b]	.11	.09	.05
Partner[c]	.09	.09	.05
Dependent child[d]	-.02	.09	-.01
Self-efficacy	.01	.01	.06
Change Statistics	$R=.31$ $R^2=.10$, SEE $=0.97$, Adjusted $R^2 = .08$, $\Delta R^2 =.11$ $F_{change}(7,412)=6.16$, p<.001		
Step 2			
Source type			
Internet	.07	.08	.03
Change Statistics	$R=.31$ $R^2=.10$, SEE $=0.97$, Adjusted $R^2 = .08$, $\Delta R^2 =.00$ F_{change} (1,411)=.36, p=.55		
Step 3			
Information Gathered	.01	.02	.03
Information Received	-.03	.04	-.03
Change Statistics	$R=.32$ $R^2=.10$, SEE $=0.97$ Adjusted $R^2 = .08$,$\Delta R^2 =.01$ F_{change} (2,409)=1.49, p=.23		
Step 4			
Affective commitment	.07	.01	.41***
Perceived fairness	.08	.02	.25***
Job expectations	.05	.01	.17***
Change statistics	$R=.67$ $R^2=.45$, SEE $=0.77$, Adjusted $R^2 = .43$, $\Delta R^2 =.35$ F_{change} (3,406)=83.70, p<.001		
Model summary	F (13,406) = 25.06, p<.001 44.5% of variance explained, 34% (Step 4)		

Note * $p < .05$, ** $p < .01$, *** $p < .001$. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c]life partner; no= 0, yes=1. [d]Dependent child no=0, yes=1.

Hierarchical regression of satisfaction with the organization.

A hierarchical regression was conducted to predict overall satisfaction with the organization from job expectations, perceived fairness and affective commitment. Table 7.23 displays the correlations between the variables, the unstandardized regressions coefficients (B) and standard error, the standardized regression coefficients and the changes in variance explained for each step. R was significantly different from zero following the entry of individual differences but not after the entry of the type of recruitment source and job information received and gathered. After step 4, with all of the predictors in the equation, $R^2 = .51$, F (14,405) = 30.00, p<.001. This indicates that 51% of the variance in overall satisfaction was attributable to the individual differences entered, job expectations, perceived fairness and affective commitment toward the organization.

After step 1, with the individual differences entered, F_{change} (7,412) =6.21, p<.001, $R^2=.10$. After step 2, with type of recruitment source added to the equation, R^2 =.10, F_{change} (1,410) =.13 p=.88. At step 3, after job information gathered and received, R^2 was .11, F_{change} (2,408) =2.23, p=.11. Recruitment source type, information gathered and received did not significantly improve prediction. At Step 4, R^2 was .51, F_{change} (3,405) =110.93, p<.001. According to the results, 34 % of the variance in overall satisfaction was predicted by the last step, job expectancies, affective commitment and perceived fairness. Given the significance of the coefficients, the pattern of results suggests that most of the variability is predicted by the final three variables entered,

perceived fairness, affective commitment and job expectancies. Table 7.24 displays

similar results for the use of the Internet as a recruitment source.

Table 7.23

Hierarchical Regression Analysis predicting overall satisfaction from type of recruitment source, job information gathered and received, perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	-.02	.07	-.01
Previous Work experience	.07	.08	.03
Gender[a]	-.25	.29	-.03
Designated group[b]	.37	.32	.04
Partner[c]	.13	.16	.03
Dependent child[d]	-.30	.30	-.04
Self-efficacy	.01	.03	.02
Change Statistics	R=.31 R^2=.10, SEE =3.65 Adjusted R^2 =.08, ΔR^2 =.10 $F_{change}(7,412)$=6.21, p<.001		
Step 2			
Source type			
Formal	.11	.20	.02
Informal	-.08	.22	-.02
Change Statistics	R=.31 R^2=.10, SEE =3.66, Adjusted R^2 =.08, ΔR^2 =.00 F_{change} (1,410)=.13, p=.88		
Step 3			
Information Gathered	.04	.08	.02
Information Received	-.09	.15	-.02
Change Statistics	R=.33 R^2=.11, SEE =3.65 Adjusted R^2 =.08, ΔR^2 =.01 F_{change} (2,408)=2.23, p=.11		
Step 4			
Affective commitment	.27	.02	.47***
Perceived fairness	.33	.05	.29***
Job expectations	.19	.05	.16***
Change statistics	R=.71 R^2=.51, SEE =2.71, Adjusted R^2 =.49, ΔR^2 =.40 F_{change} (3,405)=110.93, p<.001		
Model summary	F (14,405)= 30.00, p<.001 51% of variance explained, 43% (step 4)		

Note * p < .05, ** p < .01, *** p < .001. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c]life partner; no= 0, yes=1. [d]Dependent child no=0, yes=1.

Table 7.24

Hierarchical Regression Analysis predicting overall satisfaction from Internet recruitment source, job information gathered and received, perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	-.03	.07	-.01
Previous Work experience	.08	.08	.04
Gender[a]	-.24	.29	-.03
Designated group[b]	.37	.32	.04
Partner[c]	-.06	.30	-.01
Dependent child[d]	-.29	.29	-.04
Self-efficacy	.02	.03	.02
Change Statistics	$R=.31$ $R^2=.10$, SEE =0.97, Adjusted $R^2 = .08$, $\Delta R^2 =.10$ $F_{change}(7,412)=6.21$, p<.001		
Step 2			
Source type			
Internet	.14	.28	.02
Change Statistics	$R=.31$ $R^2=.10$, SEE =3.65, Adjusted $R^2 = .08$, $\Delta R^2 =.00$ F_{change} (1,410)=.09, p=.76		
Step 3			
Information Gathered	.03	.08	.01
Information Received	-.10	.15	-.02
Change Statistics	$R=.31$ $R^2=.10$, SEE =3.66 Adjusted $R^2 = .08$,$\Delta R^2 =.01$ F_{change} (2,409)=2.22, p=.11		
Step 4			
Affective commitment	.27	.02	.45***
Perceived fairness	.34	.05	.29***
Job expectations	.19	.05	.16***
Change statistics	$R=.71$ $R^2=.51$, SEE =2.71, Adjusted $R^2 = .49$, $\Delta R^2 =.40$ F_{change} (3,405)=111.32, p<.001		
Model summary	F (13,406) = 23.20, p<.001 51% of variance explained,40% from step 4		

Note * $p < .05$, ** $p < .01$, *** $p < .001$. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c]life partner; no= 0, yes=1. [d]Dependent child no=0, yes=1.

7.2.6 Hypothesis 5

Hierarchical regression of turnover intentions.

A hierarchical regression was conducted to predict turnover intentions from job expectations, perceived fairness and affective commitment. Table 7.25 displays the correlations between the variables, the unstandardized regressions coefficients (B) and standard error, the standardized regression coefficients and the changes in variance explained for each step. R was significantly different from zero following the entry of individual differences and the type of recruitment source but not after the entry of the amount of job information gathered and received. After step 4 with all of the IV in the equation, $R^2 = .38$, $F (14,405) = 23.43$, $p<.001$. This indicates that 38 % of the variance in turnover intentions was attributable to the individual differences entered, job information gathered and received, job expectancies, perceived fairness and affective commitment toward the organization.

After step 1 with the individual differences entered, $F_{change} (7,412) = 4.66$, $p<.001$, $R^2 = .07$. After step 2, with type of recruitment source added to the equation, $R^2 = .08$, $F_{change} (2,410) = 1.50$, $p=.23$. At step 3, after the amount of job information gathered and received was entered, R^2 was .08, $F_{change} (2,408) = 1.69$, $p=.19$. The amount of job information gathered and received did not significantly improve prediction. On Step 4, R^2 was .38, $F_{change} (3,405) = 64.19$, $p<.001$. According to the results, 38% of the variance in turnover intentions was predicted by the last step, job expectancies, affective commitment and perceived fairness. Given the significance of the coefficients, the pattern of results suggests that most of the variability is predicted by the final three variables

entered, perceived fairness, affective commitment and job expectancies. Table 7.26

displays similar results for the use of the Internet as a recruitment source. It was

surprising to find a positive relationship between turnover intentions and perceived

fairness, this relationship was also noted in the correlations table. It is unclear why this

would be the case. The variable coding was double checked to ensure this finding was not

due to a coding error, this finding may be a result of variable suppression as a result of

the strong inter-correlations between affective commitment, job expectations and

perceived fairness.

Table 7.25

Hierarchical Regression Analysis predicting turnover intentions from type of recruitment source, job information gathered and received perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	.03	.03	.04
Previous Work experience	.01	.03	.01
Gender[a]	-.36	.12	-.12*
Designated group[b]	.34	.14	.10*
Partner[c]	-.19	.13	-.07
Dependent child[d]	-.28	.13	-.10*
Self-efficacy	.01	.01	.02
Change Statistics	$R=.27$ $R^2=.07$, SEE $=1.40$ Adjusted $R^2 = .06$ $\Delta R^2 =.07$ F_{change} (7,412)=4.66, p<.001		
Step 2			
Source type			
Formal	.01	.09	.01
Informal	-.11	.10	-.06
Change Statistics	$R=.28$ $R^2=.08$, SEE $=1.39$, Adjusted $R^2 = .06$ $\Delta R^2 =.01$ F_{change} (2,410)=1.50, p=.23		
Step 3			
Information Gathered	-.02	.04	-.02
Information received	.03	.06	.02
Change Statistics	$R=.29$ $R^2=.08$, SEE $=1.39$, Adjusted $R^2 = .06$ $\Delta R^2 =.00$ F_{change} (2,408)=1.69, p=.19		
Step 4			
Affective commitment	-.09	.01	-.38***
Perceived fairness	.05	.02	.11**
Job expectations	-.14	.02	-.32***
Change statistics	$R=.62$ $R^2=.38$, SEE $=1.15$, Adjusted $R^2 = .36$ $\Delta R^2 =.30$ F_{change} (3,405)=64.19, p<.001		
Model summary	F (14,405) = 23.43, p<.001 38% of variance explained		

Note $* p < .05$, $** p < .01$, $*** p < .001$. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c] life partner; no= 0, yes=1. [d] Dependent child no=0, yes=1.

Table 7.26

Hierarchical Regression Analysis predicting turnover intentions from the use of Internet recruitment source, job information, perceived fairness, job expectations and affective commitment.

	B	SEB	Beta
Step1			
Education level	.03	.03	.03
Previous Work experience	.01	.03	.02
Gender[a]	-.36	.12	-.12*
Designated group[b]	.34	.13	.10*
Partner[c]	-.19	.13	-.07
Dependent child[d]	-.29	.13	-.10*
Self-efficacy	.01	.01	.02
Change Statistics	R=.27 R²=.07, SEE =1.40 Adjusted R² = .06 ΔR² =.07 F_{change} (7,412)=4.66, p<.001		
Step 2			
Source type			
Internet	-.22	.12	.08^
Change Statistics	R=.29 R²=.08, SEE =1.39, Adjusted R² = .07 ΔR² =.01 F_{change} (1,411)=4.03, p< .05		
Step 3			
Information Gathered	-.02	.04	-.02
Information Received	.03	.06	.02
Change Statistics	R=.29 R²=.09, SEE =1.39, Adjusted R² = .06 ΔR² =.00 F_{change} (2,409)=0.86, p=.42		
Step 4			
Affective commitment	-.09	.01	-.38***
Perceived fairness	.05	.02	.11**
Job expectations	-.14	.02	-.32***
Change statistics	R=.62 R²=.38, SEE =1.15, Adjusted R² = .36 ΔR² =.30 F_{change} (3,406)=64.56, p<.001		
Model summary	F (13,406) = 19.25, p<.001 38% of variance explained		

Note ^ p=.066, * $p < .05$, ** $p < .01$, *** $p < .001$. [a] 1=male;2=female. [d] Designated group; no=0, yes=1.[c]life partner; no= 0, yes=1. [d]Dependent child no=0, yes=1.

7.2.7 Hypothesis 6: Promotion

Logistic regression of promotion.

A sequential logistic regression analysis was run to predict the presence of promotions vs. no promotion as related to type of recruitment source and individual characteristics. Promotions were specified as the dependent variable and individual characteristics were entered as independent variables. Specifically, I examined these variables as predictors. The first block examined individual characteristics these were: education level (8 levels), work experience (7 levels) and gender, life partner, dependent child, designated group membership (2 levels each), the second block examined source type (3 levels), the third block examined the amount of job information gathered and received and the final block examined affective commitment, perceived fairness and job expectations. Promotions were specified as the dependent variable and individual characteristics were entered as independent variables. A second similar sequential logistic regression analysis was run to predict the presence of promotions vs. no promotion as related to the Internet (2 levels) as a recruitment sources.

Promotions and type of recruitment source.

Tests of the full model against a model containing only the constant was statistically significant, (χ^2 (25) =41.22 p<.05). This result indicated that the predictors as a set reliably distinguished between whether or not they statistically predicted promotion. The classification improvement rates were unimpressive. When only the constant was

included, approximately 78.3 % were correctly predicted overall but none of the cases in

promotion were predicted. When the individual differences variables were entered, the

overall prediction was lower (77.9%) but the prediction for actually receiving a

promotion improved slightly from zero (2.2%). The first block results were significant

(χ^2 (18, n =420) = 30.26, p< .05). The Pseudo-R square results were small (Nagelkerke

R^2=.11, -2LL=408.77, Cox & Snell=.07), but the Hosmer-Lemeshow test was non-

significant, indicating good model fit (χ^2 (8) =3.23, p=.92). The introduction of the type

of recruitment source was not significant based on the test of model coefficients (χ^2 (2)

=31.02, p=.055) at the p<.05 level although it approached significance, the block itself

was non-significant. Classification rates remained the same as the first block and pseudo

R-Square remained low (Nagelkerke R^2=.11, -2LL=408.01, Cox & Snell=.07), but the

Hosmer-Lemeshow test was non-significant, indicating good model fit (χ^2 (8) =2.19,

p=.98). When job information gathered and received were added to the equation,

classification rates for the presence of a promotion improved but the omnibus test of

model coefficients was again non significant (χ^2 (2) =33.76 p=.052) at the p<.05 level

and the block itself was non significant, and the Hosmer-Lemeshow was significant (χ^2

(8) =16.99, p<.05), classification rates improved slightly overall classification was 78.6%

but classification for promotion was 4.4% improved from 2.2%. When the final block

was entered the omnibus test of model coefficients was significant (χ^2 (25) =41.22 p<.05)

and the Hosmer-Lemeshow was non significant indicating good model fit (χ^2 (8) =17.74,

p=.46) the Pseudo R^2 were still small (-2 LL=397.81; Cox & Snell=.09 and Nagelkerke

$R^2 =.14$). The overall classification for promotion or not was 79.3% but the classification

in the category "was promoted" improved from zero at the beginning to 8.8% on the final

block. It should be noted however that the predicted group probabilities clustered below

.5 in most cases. Table 7.27 shows the regression coefficients, Wald statistics, odds

ratios and 95% confidence intervals for the data on the final step.

Promotions and the Internet.

Tests of the full model against a model containing only the constant was

statistically significant, (χ^2 (24) =41.75 p<.05). This result indicated that the predictors as

a set, reliably distinguished between whether or not they statistically predicted

promotion. The classification rates were unimpressive. When only the constant was

included, approximately 78.3 % were correctly predicted overall but none of the cases in

promotion were predicted. When the individual differences variables were entered, the

overall prediction was lower (77.9%) but the prediction for actually receiving a

promotion improved (2.2%) slightly from zero. The first block results were significant

(χ^2 (18, n =420) = 30.26, p< .05), although the Pseudo-R square results were small

(Nagelkerke R^2=.11, -2LL=408.77, Cox & Snell=.07), the Hosmer-Lemeshow test was

non-significant indicating good model fit (χ^2 (8) =3.23, p=.92). The introduction of the

Internet as a recruitment source was significant based on the test of model coefficients (χ^2

(1) =32.14, p<.05). Classification rates and pseudo R-Square remained similar

(Nagelkerke R^2=.11, -2LL=406.89, Cox & Snell=.07) and the Hosmer-Lemeshow was

non significant (χ^2 (8) =3.50, p=.90). Classification rates were 78.1% overall but

prediction for promotion improved minimally (3.3%). When the amount of job

information gathered and received were added to the equation, classification rates for the

presence of a promotion improved and the omnibus test of model coefficients remained

significant (χ^2 (2) =34.63 p<.05) and the Hosmer-Lemeshow was non-significant (χ^2 (8)

=7.45, p=.49). Overall classification rate in this block was 78.6% but classification rate

for promotion increased minimally 4.4%. When the final block was entered the omnibus

test of model coefficients was significant (χ^2 (24) =41.75, p<.05) and the Hosmer-

Lemeshow was non significant indicating good model fit (χ^2 (8) =10.21, p=.25) the

Pseudo R^2 were still indicating a small effect (-2 LL=397.28; Cox & Snell=.10 and

Nagelkerke R^2 =.15). The overall classification for promotion or not was 78.8% but the

classification in the category "was promoted" improved from zero to 7.7%. It should be

noted that the predicted group probabilities clustered below .5 in most cases. Table 7.28

shows the regression coefficients, Wald statistics, odds ratios and 95% confidence

intervals for the data on the final step.

Table 7.27

Logistic regression analysis of promotions as a function of individual difference and type of recruitment source

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Self-efficacy	.04	.03	2.77	1	.10	1.05	.99	1.10
Education			7.39	7	.39			
Life partner[a]	.02	.28	.00	1	.95	1.02	.58	1.77
Designated group[b]	-.80	.29	5.84	1	.05	.50	.28	.88
Gender[c]	.51	.28	3.28	1	.07	1.66	.96	2.88
Previous Work experience			9.34	6	.16			
Dependent child[d]	-.22		.28	1	.65	.42	.80	.39
Source type			.67	2	.71			
Information Received	.17	.15	1.29	1	.26	1.18	.89	1.58
Information Gathered	-.02	.08	.06	1	.82	.98	.84	1.15
Job expectations	-.05	.05	1.17	1	.28	.95	.87	1.04
Affective Commitment	.05	.02	3.97	1	.05	1.05	1.00	1.10
Perceived fairness	.08	.05	2.39	1	.12	1.08	.98	1.20

Note: # Categorical variable with multiple levels Wald statistic reported for variable as a whole
[a] life partner, no= 0, yes=1 [b] Designated group, no=0, yes=1 [c] female=1, male=2 [d] Dependent child no=0, yes=1

Table 7.28

Logistic regression analysis of promotions as a function of individual difference and Internet as a recruitment source

	B	S.E.	Wald	df	Signi-ficance level	Exp(B) ODDS	95 % confidence Interval	
							Lower	upper
Self-efficacy	.04	.03	2.71	1	.10	1.04	.99	1.10
Education			7.63	7	.37			
Life partner[a]	.02	.28	.01	1	.94	1.02	.59	1.78
Designated group [b]	-.66	.27	5.24	1	.05	.52	.30	.91
Gender[c]	.51	.28	3.33	1	.07	1.67	.96	2.90
Previous Work experience			9.44	6	.15			
Dependent child[d]	-.33	.29	1.28	1	.26	.72	.41	1.27
Internet	-.30	.28	1.20	1	.27	.74	.43	1.27
Information Received	.16	.15	1.24	1	.27	1.18	.89	1.58
Information Gathered	-.02	.08	.04	1	.85	.99	.84	1.15
Job expectations	-.05	.05	.99	1	.32	.95	.87	1.04
Affective Commitment	.05	.02	3.90	1	.05	1.05	1.00	1.10
Perceived fairness	.08	.05	2.14	1	.14	1.08	.98	1.20

Note: # Categorical variable with multiple levels Wald statistic reported for variable as a whole
[a] life partner, no= 0, yes=1 [b] Designated group, no=0, yes=1 [c] female=1, male=2 [d] Dependent child no=0, yes=1

7.3 Discussion

The research in Study Three has provided new information about job seekers' perceptions of recruitment sources. This study used a large number of different recruitment sources and studied individuals across occupations and industries in an effort to determine whether there was a relationship between recruitment sources, information gathered and received and job expectations and whether these in turn were related to popular outcome variables where effects had been found in the past. The research in this study did not find any strong support for recruitment sources on their own or for the amount of information gathered by job applicants or received by them from the organization prior to hire. It may be that the contradictory findings for sources on outcome variables found in the past were a result of idiosyncrasies related to specific types of occupations or industries. There may be specific types of recruitment strategies which reach better candidates in certain professions. This study did not find an overall statistical effect of recruitment sources using the popular formal vs. informal typology.

Some support was found for certain individual differences variables, in particular self-efficacy. Future research could consider whether it may be worthwhile to examine personality variables such as conscientiousness, extraversion in addition to self efficacy to determine whether they may be better able to predict recruitment source usage, particularly since they have been linked to job performance in some cases (Barrick & Mount, 1993; Tett, Jackson & Rothstein, 1991).

This study did show some evidence that applicants have non-neutral perceptions of recruitment sources and of the perceived informativeness of recruitment sources, this information should be used to determine whether these perceptions influence applicants' decisions to apply or applicant success. This study did present some evidence that expectations, affective commitment and perceived fairness are stronger predictors of turnover intentions, job satisfaction and tendency to be promoted, but the links between recruitment sources, information gathered and received and job expectations were not supported in this study.

7.3.1 Hypothesis 1

This hypothesis proposed that that perceived source informativeness would follow the dichotomy set out in the literature regarding formal and informal recruitment sources, in that informal sources would be rated as more informative than formal sources. Table 7.7 indicated some recruitment sources (i.e. Internet postings, and recruiting agencies) were perceived as significantly more informative for the job interview, than for the actual job. No significant differences were found in perceived informativeness for job interview or the job itself on any of the informal recruitment sources or any of the other recruitment sources with the exception of prior experience which was perceived more significantly more informative for the job itself than the job interview. Specifically this hypothesis stated that employee referrals would be rated more highly than newspapers and union postings or government recruiting agencies. Average ratings of informativeness were higher for many of the informal sources but not all of them. Prior experience was

perceived as providing most information for the job and the interview, followed closely by employee referrals and professional contacts, in addition, the Internet was also rated quite highly and as being more informative than friends and family or recruiting agencies. Although recruitment sources such as networks of contacts and employee referrals were rated higher on informativeness, the inclusion of the Internet, walk-ins and family and friends indicated that perceived informativeness did not follow the pattern set out in the literature which is the explanatory basis for some differences which have been found in many recruitment sources studies, specifically, that informal sources provided more accurate information than formal sources which provided less accurate information.

The Internet was also rated as the most preferred recruitment source and ranked highest in terms of the most helpful recruitment source. Surprisingly however, help wanted ads were ranked second, not surprisingly, walk-ins were ranked last in providing helpful information. It may be that help wanted ads provide an immediate lead on an available job and this is why they were ranked so highly, this should be pursued in subsequent research.

Hypothesis 1b was that there would be a change in the patterns of recruitment source usage for participants in the study between their most recent job search and their previous job search. For instance, I anticipated a higher level of usage of the Internet as a recruitment source. The descriptive findings of Study Three may indicate that previous popular classifications and comparisons of recruitment sources as formal or informal may be inappropriate. In addition the descriptive results from Table 7.7 also indicate that other less used forms of categorization such as inside and outside sources (Zottoli and Wanous,

2000) may also be inappropriate. Internet job postings were, for instance, rated as quite

informative and as providing the most helpful information when finding a job but do not

qualify as an inside source and yet provide a high amount of information about the job.

When trying to use the realistic information hypothesis to explain differences in

outcomes related to recruitment sources, it may be more appropriate to assess the

informativeness of different recruitment sources and use this information to determine

categorization.

Table 7.7 displays the percentage of recruitment source usage reported for most

recent and previous job searches. McNemar test results indicated strong increases in the

use of the Internet as a recruitment source; this may indicate greater acceptance and usage

rates of the Internet. There were also significant increases in reported use of prior

experience, networks of contacts, employee referrals and recruiting agencies. These

results may indicate that job seekers become more sophisticated in their job search

techniques over time or may be a result of demographic changes of participants over

time. The Research in Study One found that in most cases respondents used only one

recruitment source, however indications in Study Two and the data in Study Three

showed that participants use multiple recruitment sources the majority of the time, see

Table 7.8.

Based on information discovered in Study Two I decided to test whether there

were differences in perceptions for various recruitment sources. As hypothesized, it

appears that participants had a variety of non-neutral impressions regarding recruitment

sources. In order to test differences in this exploratory semantic differential scale, a

comparison was conducted with the mean because of the two dimensional nature of the

question. As indicated in Table 7.9 and 7.10, the Internet was perceived as more modern

than newspaper ads as a recruitment information source. Recruiting agencies, networking

contacts and the Internet were rated as providing higher level positions. Whereas walk-

ins and help wanted ads were perceived on the lower level position portion of the scale.

The Internet was also perceived as easier on average, whereas walk-ins were perceived as

more difficult. Walk-ins were associated more with small companies than headhunters.

On campus recruitment and walk-ins were perceived as recruitment sources for lower

level positions more so than using a headhunting recruitment agency or a network of

contacts. Most recruitment sources were rated significantly different from the neutral

mid-point on most of the adjectives in the semantic differential ratings. One exception

was family and friends as a recruitment source, for this recruitment source, 5 of 8 of the

semantic differential questions were not significantly different from the neutral mid-

point. This may indicate that this is not considered a particularly good or bad recruitment

source by respondents. In contrast, Internet and recruiting agency headhunting as

recruitment sources were rated as significantly different from the neutral point in all of

the adjective pairings. Internet recruiting was rated as most modern, most targeted; most

informative and most high skill along with headhunting. Internet recruitment was also

rated as most efficient, highest on the large company end of the spectrum and most

active. The information gathered using this semantic differential scale may indicate that

further research is required on applicant reactions and perceptions toward different types

of recruitment sources. Companies' use of recruitment sources and whether these act as

signals regarding the job and company they are advertising which deter applications is an

area of research which should be pursued further. Hypotheses H1a, b and c were

therefore supported. Participants in the study did express a variety of different

perceptions of recruitment sources. These findings were also consistent with the findings

of Study Two which showed that different types of sources could be informative in

different ways.

7.3.2 Hypothesis 2

This hypothesis stated that a combination of job seeker and firm characteristics

will statistically predict the type of recruitment source used. This hypothesis was tested

using logistic regression and cross-tabular analyses. The analyses conducted indicated

relatively few significant individual and firm differences related to the use of recruitment

sources. The only significant firm predictor of use of informal sources was firm size,

those working in smaller firms were more likely to use informal sources, one education

level variable was also significant those with a university certificate were more likely to

have used informal sources. Regarding those using a combination of formal and informal

sources, those in smaller firms were less likely to have used a combination of formal and

informal sources. In contrast those in the communications industry were more likely to

have used a combination of recruitment sources and those with higher levels of self

efficacy were also more likely to have used a combination of recruitment sources. With

regard to the use of the internet as a recruitment source, larger firm size, type of industry

in particular information technology and certain levels of previous work experience (10-

3 years; 6-10 years and 16-25 years were more likely to be related to the use of the

internet as a recruitment source. Referrals and networking analyses did not reveal any

particular firm or individual difference variables of significance. For on-campus

recruitment those working in mid-sized firms were more likely to have used on-campus

recruitment age and work experience overall approached significance, those most likely

to have used on-campus recruitment were those reporting having 6-10 years work

experience. In addition those with higher reported self-efficacy were more likely to use

on-campus as a recruitment source   Overall, the results of these analyses show there are

some individual differences which are associated with different types of recruitment

sources used. The Pseudo-R^2 indicates that these associations do not account for a great

deal of variance. Therefore, this hypothesis was partially supported.

7.3.3 Hypothesis 3

This hypothesis specified that individual differences, type of recruitment source

used and information will statistically predict the variance in job expectancies.

Hierarchical regression analyses were performed to address this hypothesis. The

combination of individual difference variables, type of recruitment source and job

information gathered and received was able to predict 8.8% of the variance. None of the

variance explained came from type of recruitment source and only around 2% was

explained by the information gathered and received step in the equation. Similar results

were obtained using the Internet as the recruitment source of interest. Therefore, this

hypothesis was supported but with very little variance explained. A similar analysis was

performed with use of the Internet as a recruitment source alone. This analysis yielded

the same amount of variance explained indicating that the Internet as a recruitment source

did not contribute any variance when individual differences were controlled and the

amount of job information gathered and received had a very small statistical effect.

7.3.4 Hypotheses 4, 5 & 6

These hypotheses specified that individual differences, type of recruitment source,

information gathered and received, job expectancies, affective commitment and

perceived fairness would predict outcomes such as overall satisfaction, satisfaction,

turnover intentions and less proximal performance related outcomes such as promotions

to a lesser extent. It was also predicted that the Internet would yield similar results in the

prediction of the equation to type of recruitment source. A series of hierarchical

regressions were used to address this hypothesis for each of the potential outcomes with

the exception of the presence of promotion which due to the nature of the data was tested

using a sequential logistic regression.

For job satisfaction, the equation predicted 45% of the variance, once again affective commitment, perceived fairness and job expectations as well as individual differences the explained nearly all of the variance. This time the change in R^2 for type of source was zero and that for the information step was 1%. The results for the Internet as a recruitment source were similar. For overall satisfaction with work, 51% of the variance was explained, and again little or no variance was explained neither by type of source and information gathered and received (1%) nor by the use of the Internet as a recruitment source.

For turnover, the equation explained 38% of the variance whether type of recruitment source or the Internet was used. Most of the variance was due to individual differences and the variables of affective commitment, perceived fairness, and job expectations, the change in R^2 was approximately 1% for the type of recruitment source variable and there was no change in the variance as a result of information gathered and received. Although there were some differences in the coefficients, the result for the Internet was the same.

For promotions, a sequential logistic regression was performed using the same variables as the hierarchical regressions, while the model was a good fit the classification rates were unimpressive and variance indicators provided by the Pseudo-R^2 indicated that very little variance was accounted for in these equations as well.

As expected, the statistical contribution of recruitment source was not as strong as that of information gathered, nor of well known predictors of turnover, and job satisfaction such as affective commitment, job expectancies and perceived fairness. This hypothesis was that the type of recruitment source would have contribute less to statistical prediction than information and job expectations on outcome variables and more proximal variables such as turnover intentions and job satisfaction would be better predicted statistically by information than by more distal variables such as promotions. Based on the analyses in tables 7.21 to 7.31, type of recruitment source had little or no statistical relationship between job expectancies and outcome variables, no change in R^2 was found on any of the outcome variables save turnover intentions (Tables 7.25 and 7.26), where there was a change of 1% of the variance when type of recruitment source was entered in the equation. A change of 1% of the variance when information gathered and received were entered in the equation to predict job satisfaction and overall satisfaction as well, but none of the p values for F change were significant. Therefore, hypothesis 6 was partially supported in that the effects of turnover intentions, job satisfaction and overall satisfaction were better predicted than promotions and the effects of job expectancies, affective commitment and perceived fairness were stronger than either recruitment source or information. When a non occupation specific or organization specific sample was used, no effects were found to support the hypothesized link between recruitment source and the outcome variables which have been found in studies previously.

Overall, the results of Study Three did not support a link between type of recruitment source, job information gathered and received and subsequent job expectations. The effects of individual differences were stronger than those of Information gathered and received. This may indicate that previous findings were a result of a third variable which was specific to the population studied and may help explain the contradictory findings related to type of recruitment source used.

There was lack of consistent effects found for formal vs. informal sources overall, and the lack of overall demonstration of effects of information for informal sources. Given this I wondered if there might be a different dimensionality or commonality between recruitment sources which might be more useful and consequently provide more meaningful effects. As such, I conducted a factor analysis on perceived participants' perceived job informativeness ratings for 12 recruitment sources for the sample of 455 participants; I obtained a 4 Factor solution of sources informativeness. I conducted 6 different analyses; Principle Components Analysis, Principle Axis Factoring, Maximum Likelihood, with both oblique and varimax rotations. The initial solution was 3 factor solution (situational, insider, and written) but scree plot indicated might be a 4th factor. Therefore, I re-ran the analysis specifying a 4 factor solution. All of the different analyses yielded very similar results. The Principle Axis Factoring with Varimax rotation reported here. The first factor explained 19.70 % of variance and was composed of more situation specific recruitment sources such as on-campus recruitment, job fairs, walk-ins, and finally union postings. The second factor explained 18.22% of variance, this factor was very similar to the 'informal' recruitment sources, it included employee referrals,

networking, and obtaining job leads from family & friends, and prior experience. The

third factor explained 11.49% of variance and was composed of written recruitment

sources which were more non-committal and anonymous in nature the two recruitment

sources included here were newspaper help wanted ads and the Internet. The final factor

was made up of recruitment agencies and explained 9.14% of variance. The two

recruitment sources included here were headhunters & government recruiting agencies. It

should be noted that the government recruiting agency had a bit of overlap with

situational in the factor matrix, the initial Eigenvalues were 4.74 for the first factor, 1.72

for the second factor, 1.20 for the third factor and .98 for the fourth factor. The lowest

communality value was .504; it was for family and friends within the more informal

second factor. All factors were internally consistent and well defined by the variables

although there was some overlap for government recruiting agency in situation factors.

When the oblique rotation was requested results were similar, in sum the four factors

were Situational sources, Insider Sources, Written Sources and Recruiter Sources. An

illustration of the factor analysis results can be found in Appendix K.

7.4 Summary of Study Three

The results of Study Three showed that there are a variety of non-neutral impressions of recruitment sources which were present in job seekers' evaluations of different sources. Study Three also uncovered that job seekers perceived informativeness of various recruitment sources differ in some cases if the information required is for the interview or about the job. This study also found that perceived informativeness ratings and rankings did not necessarily follow the typical dichotomy of "formal" and "informal" source laid out in past research. This was particularly the case for the use of the Internet as a recruitment source which is a rich interactive resource for job seekers and recruiters in today's labour market.

Similar to Study One, Study Three found that once individual differences were controlled, recruitment source was not related, or in the case of turnover intentions, were very weakly related, to the outcome variables that were examined in this study. In addition, individual differences were not in and of themselves very strongly correlated with recruitment sources. Although there were some interesting findings related to the use of on-campus recruitment and the use of a combination of formal and informal recruitment sources and self-efficacy. There were also some indications that firm size was related to the use of informal vs. formal sources and a combination of formal and informal sources.

Finally, the type of recruitment source used was not found to be associated with the amount of job information gathered and received or job expectations. Job expectations, perceived fairness and affective commitment were found however to be strongly associated with turnover intentions and job satisfaction as well as overall satisfaction similar to previous research on these outcomes.

The effects for type of recruitment source have typically been found in studies examining one single organization or one single type of occupation. By their nature the studies have also usually compared a small number of recruitment sources used by that organization or in that occupation. Once found, either the individual differences or the realistic information hypothesis were used to explain the results. Both Studies One and Three differed in the type of sample and sample size, as well as the way in which some of the questions were posed. Study Three included constructs and scales such as affective commitment, perceived fairness and expectations and measured the amount of job information gathered and received. While some of the findings differed (i.e. the proportion of type of recruitment sources used and present of use of multiple sources), many of the findings including the lack of effect of recruitment source were consistent. Neither study resulted in the finding of a significant effect for the type of recruitment sources used in the recruitment process, whether formal, informal or both or the internet on its own.

7.5 Limitations of the Research Studies

This discussion on limitations will focus primarily on the two quantitative studies because questions related to research validity and confidence in findings for Study Two were discussed within Chapters four and five and are conceptualized somewhat differently than that of quantitative research. This research project as a whole has a number of potential limitations which may reduce the validity and generalizability of results. These potential limitations include: the nature of the samples used, the use of retrospective measures, the use of ad-hoc measures and proxy measures, potential for common method variance, potential for self report bias, and use of non-experimental correlational or non-experimental qualitative research designs which do not allow causal conclusions to be drawn. However, because the research as a whole is comprised of three separate but related studies, some of these limitations are mitigated to some extent in the subsequent studies. The use of the different methodologies and samples to draw overall conclusions and the similarities and links between results allows greater confidence in the results.

Study One has the strongest sample terms of size, representativeness and response rate. It is a very large sample, representative of the Canadian working population with a high response rate across all sample years from 1999 to 2005. Despite this, it is also limited by the fact that it does not include government employees, many of which may have been recruited through internet job postings and it excludes certain small pockets of

northern Canada. The sample of organizations was drawn from the Business Register, thus limiting the sample to those who file tax forms however; those firms which do not file tax forms would likely be too small to have employees or could possibly not be legal business entities.

Study One includes a matched employee and organizational data which is a further strength of the sample and which allowed me to link firm variables such as revenue, industry and firm size and employee variables with greater accuracy and reduced the level of same source data. Study One examined data across a number of years in order to determine differences and similarities in recruitment source usage thus lending credence to consistent findings of lack of recruitment source effects and providing a pattern of recruitment source usage over time. A further limitation of Study One is that due to its archival nature it did not include as wide a variety of informal recruitment sources as desired by the researcher and a number of psychometric and personality variables of interest to explaining any recruitment source effects found were not included in the questionnaires including affective commitment, perceived fairness, expectations, self-efficacy personality differences. Study One also included many individuals some who had been working for organizations for an extended length of time which may have effects on their responses, however, where appropriate, this was mitigated by also looking only at those employees who had been hired in the last year.

The sample in Study Three is smaller and is not as representative as Study One. It is also comprised of individuals who have signed up to be participants in research studies for a chance to win a prize, through an on-line participant recruiting website. This participant recruiting technique provided a good broad sample of employed workers this time including government employees and employees outside Canada. Study Three included a wider variety of recruitment sources and of psychometric variables of interest which were not possible to measure in Study One due to the archival nature of that study. However, it did not provide access to data directly from the employees' firm and thus provided single source data. In Study Three there was also a potential for bias towards use of the Internet as a recruitment source, since the survey was conducted exclusively on-line and thus the sample may have included a higher number of individuals who were more comfortable with the Internet than Study One or Study Two. This would explain the vast difference in rates of use of the internet as a recruitment source between studies One and Three and discussed in Study Two. However despite this only about half of the sample reported using the Internet as a recruitment source.

The results of this research may be limited and non-representative because it excluded those who were unemployed and did not currently have a job, and included those who recently found a job. This choice was made deliberately to avoid inadvertently assessing some of the stressors related to unemployment in the job search processes as discussed earlier.

The three studies on recruitment all sampled recent hires rather than applicants to positions or ideally potential applicants. This means that data on quality of the applicant pool for instance could not be obtained and that data was obtained retrospectively. The study of recent hires is an extremely common occurrence in recruitment research because of the difficulties getting access to a sample of applicants or potential applicants (Breaugh, 2008; Breaugh & Starke, 2000; Saks 2005). In his 2008 review of literature, Breaugh cited only 3 recruitment source studies which involved actual applicants rather than recent hires or undergraduate student populations. It is difficult even for veteran researchers to obtain access to samples of applicant populations and to gain access to reliable organizational recruitment data. Most organizations in fact fail to systematically track recruitment related data and applicant pool information (Catano et al. 2009), further reducing the researcher's ability to reach these ideal populations. When access is obtained, the trade off is usually in the form of other limitations to the research. For instance, although I work for the federal government and might have, albeit with great difficulty, gained access to my department's applicant data, applications and job advertisements are delivered and gathered almost entirely through Internet recruiting and it would have been impossible to examine multiple recruitment sources simultaneously in any meaningful way which was the focus of this research. I also would not have had the opportunity to examine multiple industries, multiple organization sizes and multiple occupations as I was able to do in this research.

A related potential limitation of the research across all studies is the use of

retrospective data. The main argument against the use of retrospective data is one of

failure of memory which may bias results. It is true that applicants were asked to recall

behavior in their most recent job search which may have occurred usually at least a year

ago or in some cases longer, and participants' recall may be less than perfect, thus

limiting the reliability of the data. There have been conflicting reports on how much and

whether the passage of time effects recall, it has typically been concluded that the amount

of time elapsed between an event and the time to recall it is related to the accuracy of

memory (Beckett, Da Vanzo, Sastry, Panis & Peterson, 2001). Despite this, another key

finding regarding the use of retrospective data has been that recall for significant life

events have been shown to have greater accuracy overall (Beckett, et al., 2001). I would

contend that obtaining a job is a significant life event, as found by previous researchers

(Jurges, 2007; Smith & Thomas, 2003).

In addition, retrospective recall has been found to exhibit greater accuracy among

better educated respondents (Beckett et al., 2001) and my respondents were fairly well

educated overall. Furthermore, data collection can be structured to minimize recall

efforts (Kessler & Wethington, 1991). Memories are stored according to schemas and

data collection which capitalizes on structure knowledge and includes contextual

information and concrete cues as well as several frames of reference has been found to be

less vulnerable to recency and primacy effects and allow for improved recall (Kessler &

Wethington, 1991). In fact, it has been found that reliable retrospective self-report can be

obtained for salient personal events in many cases over a significant period of time

(Beckett, et al., 2001; Kessler & Wethington, 1991; Smith & Thomas, 2003). The

questions asked in all of my survey data and my interview data are related to episodic

schematic information and requested recall of concrete meaningful and salient events,

thus facilitating recall.

The nature of what is being measured and why also needs to be considered when

determining whether retrospective measures are truly a limitation of the research. While

it is acknowledged that the use of retrospective data is by no means perfect, it can be a

viable option to collect a large quantity of useful data, when collecting data over a long

period of time and obtaining access to certain events and activities would be prohibitive

either due to cost or length of time for data collection or access to the event or activity

would be difficult to obtain contemporaneously. Smith and Thomas (2003) have in fact

argued that: "...the current presumption against the use of long term recall questions in

field surveys ignores a potentially rich source of data (p.47)."

Moser (2005) used retrospective measures of unmet expectations and gathered

data from recent hires following organizational entry. The use of retrospective measures

can in some cases be considered biased; some researchers recommend the use of

difference scores, which are still viewed as problematic (Irving & Meyer, 2005). Moser

(2005) makes the point that those who allege that retrospective measures are

inappropriate fail to consider the true nature of unmet expectations and what is intended

to be measured:

"...what is the nature of unmet expectations? There are two fundamentally different answers to this question. The first answer is that the evidence for an unmet expectation is an objective difference between expectations and reality. This means that expectations should be assessed before organizational entrance (independent of organizational reality). There exists a second answer to the questions: unmet expectations are experienced, and the evidence for unmet expectations is that experience. This means that what really counts is the respondent's "retrospective" assessment of unmet expectations. More specifically, even if expectations have not been objectively met but respondents do not experience unmet expectations, this "retrospective" experience then becomes the relevant variable (Moser, 2005; p.195)."

Moser (2005) argues that if the new employees' experience is the variable of interest, then retrospective measures are an acceptable and relevant method of data gathering. Retrospective measures continue to be used in a variety of research studies (e.g., Turnley & Feldman, 2000; Maslyn & Uhl-Bien, 2001). The variable of interest is employee experience of their expectations, not whether this is an 'accurate', 'objective' measure of their expectations prior to entry; therefore, retrospective measures were an appropriate way of measuring those employee's job expectations, job attitudes and experiences in this research.

Retrospective data can serve useful purposes, Weick (1995) argued strongly that individuals cannot understand the meaning of their behaviour, know how they will behave, or make sense of why they have behaved in a certain way until after the behavior has occurred. In fact, Horvath, et al. (2010) explained that met expectations may provide a better understanding of the link between recruitment sources and post-hire outcomes as

opposed to pre-hire outcomes "as applicants are unable to form judgments about the

accuracy of their sources' information until they start working (p.12)".

In all of the studies, the primary data gathering technique is self-report. Self-

report is a common method used in organizational research because it is often the only

feasible way to gather data (Donaldson & Grant-Vallone, 2002). Sackett and Larson

(1990) found that over a third of all published organizational research studies utilized

self-report and based on a reading of management and industrial-organizational

psychology journals organizational research this tendency has continued to be a strong

tradition in organizational research. Self-reports can be subject to a variety of biases due

to issues related to response biases, in particular social desirability, and common method

variance have been raised as key issue by several researchers. In their research,

Donaldson and Grant-Vallone (2002) determined that a variety of factors can influence

the degree of social desirability, these factors include the sensitivity of the construct

examined, participants' propensity to provide socially desirable responses and situational

pressures to provide socially desirable answers such as fear of reprisal. In studies One

and Three, the constructs examined are not particularly sensitive issues particularly as

they were not gathered by the organization for which the participants work. Thus there

would be no pressure to respond in a socially desirable manner because there was no risk

of reprisal as the organization would be highly unlikely to have access to the data. The

data collected in studies One and Three was not collected by the employer and the

employee would not be likely to believe the employer would gain access to their

information particularly in the context of study Three. Furthermore, participants' data

was anonymously gathered reducing the likelihood of social desirability in responding.

Study Three, most of the variables of interest are based on subjective experiences of the

employees (expectations, perceived fairness, job attitudes such as job satisfaction, etc.)

and not typically measurable through other means than self-report.

The problem of common method variance can be a problem in any research were

the same methods were used extensively but has been particularly emphasized and

possibly over-emphasized in cases of questionnaire and self-report research (Conway &

Lance, 2010; Spector, 2006). The findings of Study Three in particular could potentially

be inflated or deflated and thus be a source of Type 1, a false positive resulting in

wrongly accepting alternate hypotheses when in fact null is true (Conway & Lance, 2010;

Podsakoff, Mackenzie, Lee & Podsakoff, 2003). Equally, common method variance

could be a source of Type II error, or a false negative where the null hypotheses could be

falsely accepted (Conway & Lance, 2010). There are a number of strategies to lessen the

likelihood of this occurring one of the best is using questionnaire design techniques such

as separating the predictor and criterion, however not always possible (Podsakoff et al.,

2003) . Another suggestion is to obtain access to different forms of data; archival,

behavioural, issues of loss of participant anonymity due to the need to link the data can

also be problematic in terms of effort required, time & cost for the researcher (Podsakoff

et al., 2003).

I used a number of strategies to mitigate and or test for common method variance as recommended by Podsakoff et al. (2003). These included, separating the measures psychologically or methodologically by using different question formats. Several different question formats were used in my questionnaire: Likert, open question, semantic differential multiple choice, dichotomous. As much as possible, I also physically separated the measurement of the predictor & criterion in the survey (different section). Separate sections entirely were used for the recruitment source variables and respondents' outcome variables such as turnover and affective commitment, job satisfaction & perceived fairness further promotion as an outcome was in a separate section. As such, this reduced the likelihood that individual differences or recruitment source & prior information affected the results with outcome variables. The survey in Studies One and Three were anonymous and attempts were made in Study Three to reduce evaluation apprehension: I assured candidates I wanted their opinions there were no right or wrong answers. One thing I would have done differently in hindsight would be to counter-balance order of recruitment source presentation and separate the outcome variables themselves even further.

Among the tests suggested by Podsakoff et al. (2003) to assess common-method variance, Harman's single factor test is one of the most common and feasible in this research. Harman's single factor test is based on the assumption that if common method variance single factor will emerge or general factor which will account for most of variance, it is a diagnostic technique not a control technique. When I ran this analysis I

obtained 4 factors and the first of these factors only explained 32% of variance,

indicating that there is not a single factor. Recent scholarly publications discussing the

question of common-method variance have argued against using post-hoc statistical

controls to mitigate against common-method variance (Conway & Lance, 2010).

It has also been raised that a potential confound in Study Three was the use of

the information gathering and information received scales, —which were attempts to

assess the prior information participants thought they had before accepting their jobs—

and, the measures of recruitment sources used to find the job. As shown earlier in the

results section of chapter seven, while these variables are correlated, they by no means

show correlations high enough to indicate the same thing is being measured. Specifically,

as shown in Table 7.17, the correlation between type of recruitment source and perceived

information received was $r=.17$, $p<.001$; and that between type of recruitment source and

information gathered was $r=.34$, $p<.001$. In the case of the use of the internet as a

recruitment source, which could arguably be one of the most likely risks for measuring

the same variables based on the nature of the questions, the correlations were even lower

($r=.14$, $p<.05$ for information received and $r=.22$, $p<.001$ for information gathered).

Similarly, for Informal recruitment sources ($r=.18$, $p<.05$ for information received and

$r=.27$, $p<.001$ for information gathered) the correlations were not so high as to indicate

the same variables were being assessed. In fact, the amount of selection tools reported to

have been used during their selection processes was more highly correlated with

perceived information gathered and received than were recruitment sources ($r=.42$,

p<.001 for information received and r=.48, p<.001 for information gathered) than the

recruitment sources.

The variables measuring information gathered and received by the job seeker are

particularly interesting because they are an attempt to measure the amount of information

the hire believed they had prior to accepting the job. There have been few attempts to

assess or manipulate candidate information in past recruitment source research (for an

exception, see Ryan et al., 2005) and related attempts to manipulate candidate

information variables such as those in realistic job preview studies have been weak at

best (Breaugh, 2008). Conway & Lance (2010) argued that instead of statistical

manipulations to control for possible common method variance after the fact, in research

reports and journal articles reviewers should instead expect discussions regarding the

appropriateness of self reports, construct validity and reliability, lack of overlap of

constructs and questionnaire design techniques to reduce the likelihood of common

method variance.

7.6 General Conclusion

The three studies contained in this dissertation document contribute to our

knowledge of recruitment source usage in a number of ways. Study One provided the

first comprehensive empirical examination of the rates of recruitment source usage in a

large sample of employed individuals in Canada. Study One also provided the

opportunity to track recruitment source usage rates over time, yielding some interesting

trends in recruitment source usage for further research. Study One is unique in providing a comprehensive examination of recruitment source usage rates, using a large representative sample of employed Canadians, across multiple occupations and industries. In Study One, I demonstrated that there were a number of individual and firm differences associated with various recruitment sources. Specifically, firm size, revenue and industry, as well as occupational group showed interesting differences for recruitment source use. Rynes' (1991) model of recruitment included a number of contextual factors related to recruitment including organizational characteristics. Unfortunately, since that time, few studies have closely studied organizational characteristics (Saks, 2005). Because of the nature of the data in Study One it was possible to relate recruitment sources to firm characteristics and determine differences in source use for recent hires in a manner not previously available. In his review of literature, Saks (2005) cited only two studies which examined firm characteristics. In fact, Saks (2005) stated that he could not provide any practical implications regarding firm characteristics and recruitment because of the small number of recruitment studies conducted involving firm characteristics. My research provides new information of a practical nature related to firm differences in recruitment sources which has not been previously available and which makes a contribution to the literature which can be built upon in future research. Further, in Study One I showed that the informal source (family and friends) was used extensively as a recruitment source, but that when considered together, formal sources represent substantially similar levels of recruitment source usage rates. These rates are higher than may have previously been assumed in much of the

earlier literature of recruitment sources, due to the restricted number and variety of

recruitment sources which have usually been examined in these studies.

In Study One, I also demonstrated a consistent and significant increase in the use of

Internet recruitment, particularly in recent hires. Despite these increases in the usage of

the Internet, the results of Study One indicated surprisingly low results for the usage of

the Internet as a recruitment source. I also found important correlates of use of the

Internet as a recruitment source including age and tenure. I attempted to classify the type

of recruitment source used by incorporating firm and individual differences using logistic

regression. I was not however able to determine any firm or individual differences which

highly predicted classifications of groups. Because of the extremely large sample size, it

was difficult to work with numerous significant effects in the goodness-of-fit indices.

Therefore, although the results were significant, model fit was not always as good as

hoped; further, the accuracy of classification was disappointing. As such, this line of

research yielded less substantive results than expected. In addition, individual and firm

differences were not shown to be strong predictors of outcomes such as turnover

intentions, job satisfaction and promotions. This lack of finding may indicate that the

study of recruitment sources and outcome variables has resulted in artifactual findings

due to its narrow focus on single occupations or single industries, organizations as

demonstrated in the 'Summary Table of Recruitment Source Studies in Appendix A'. It

may also indicate that the firm and individual differences variables used in this research

were insufficient to explain recruitment source usage patterns and that other factors

should be included in the search for patterns of recruitment source usage.

Study Two also contributed to the literature on recruitment sources in significant

ways. Recruitment sources have rarely been studied using qualitative research. The very

act of asking people how things work can lend new insights on an area of research. This

was the case with Study Two. This study provided empirical evidence to show that job

seekers perceive different types of recruitment sources in different ways. This finding

was further supported quantitatively in Study Three and should be examined in further

detail in order to determine if these perceptions of various recruitment sources are

associated with potential applicants' decisions to apply and their interest in the job

opening being "promoted". Study Two provided an important context and triangulation

as to how job seekers perceived the recruitment process and recruitment sources in

general. From a practical standpoint, Study Two also lead me to consider whether the

wording of the recruitment sources question provided by Statistics Canada in Study One

captured a different aspect of recruitment source usage than I had originally anticipated.

Participants in Study Two also indicated that they used formal sources to find out

about job openings, but that they also frequently used informal sources to find out about

the job itself as well as the organization. The Internet was cited an important resource to

learn more facts about the job and the organization. Study Two provided a strong sense

that different types of information was gathered using different types of recruitment

sources and that multiple recruitment sources, both formal and informal, were actually

being used simultaneously. In addition, this research suggested that certain recruitment

sources were perceived as more appropriate for certain types of jobs, occupations, or

organizations. In the final analysis, Study Two appeared to show that during an intense

job search, any and all avenues were explored in an effort to locate job openings and the

behaviour expressed overall called to mind the search for a mate in scope and technique.

As a result of the literature reviews and findings of Studies One and Two a number

of potential mechanisms and intervening variables were raised for consideration to help

explain the linkages between recruitment sources, information and outcomes. For

instance, although prior information had been considered somewhat in a few previous

studies (for example; Ryan et al., 2005) information gathered and received had not been

explicitly examined as relates to recruitment sources and outcome variables. Further,

beyond recruitment sources and outcomes, potential underlying mechanisms such as

perceived fairness, job expectations and affective commitment had not been considered

as variables which would be associated with the outcomes relationships previously found

in earlier recruitment sources outcome literature.

In Study Three contrary to Study One, I found strong evidence of the use of

multiple types of recruitment sources. This specifically contradicted the findings in Study

One which indicated that only between 1% and 2% of respondents used more than one

type of recruitment source. As a result, I found that multiple recruitment sources were

used and that combinations of formal and informal sources were used in roughly 45% of

cases. This may indicate that these two questions were getting at different recruitment

source constructs. The differences found may be a result of the different questions in the

two studies measuring different aspects of usage. Study One may have been a better

measure of initial job opening information, a trigger to indicate where the knowledge of

job opening was initially found. The Study Three question was likely a better measure of

the variety of recruitment sources used in the pursuit of the job opening and the overall

recruitment source process. Horvath et al. (2010, under review) have stated that different

recruitment source question formulations may get at different aspects of recruitment

source usage.

Study Three contributed significantly to research on recruitment sources by

providing evidence to show that job seekers have a variety of non-neutral impressions of

various types of recruitment sources. These different impressions of various recruitment

sources may have a greater influence on applicant behaviour than previously thought and

should be examined more closely as a new potential source of applicant reactions in

future research. Study Three also advanced knowledge with regard to perceived

informativeness of recruitment sources. I was able to demonstrate that candidates

perceived some recruitment sources as more informative in preparing for the job

interview and others as more informative for preparing for the job itself. This indicated

that job seekers perceive the informativeness of various recruitment sources differently. I

also assessed whether there was a relationship between the amount of information

candidates gathered and received and outcomes. In addition, within this research sample,

I was able to demonstrate that differences existed in the same job seekers' recruitment

source usage from one job search experience to the next. This may indicate that

demographics and greater experience in job search relate to a pattern of behaviour, or it may indicate differences in situational factors related to job search behaviours. This is an area of recruitment source usage which has not been well explored, and which could be an interesting area for future study. A variety of individual differences were associated with the use of formal vs. informal recruitment sources were found. For instance, I found greater support for firm size as related to the types of recruitment sources used as well as self-efficacy.

Study Three contributed to the body of research on recruitment sources by extending the findings of Studies One and Two. Specifically, it expanded on some important underlying mechanisms which have not be previously hypothesized to explain the relationship between recruitment sources and outcomes which could be operating if realistic information was actually influencing outcome results. In the past, these were not clearly explained, addressed or expressly measured. Although I did not measure realistic information directly, I assessed the amount of information respondents reported gathering and receiving prior to accepting their jobs using information received items which were modeled on realistic job preview techniques. I was not able to show that information gathering or information received from the organization contributed significantly to the final results for job expectations, perceived fairness or affective commitment or outcomes such as turnover and job satisfaction. I was able to show that perceived fairness, affective commitment, and expectations predicted a substantial amount of variance in turnover intentions and job satisfaction. Job expectations, information obtained, and

affective commitment toward the organization were variables for which strong effects were found, they were simply not found to be the result of formal, informal, both or even a single source in the form of the Internet.

Study One lacked information on certain key things; 1) a wider variety of informal recruitment sources and, 2) greater information on aspects of Internet recruitment source usage, 3) measures of job attitudes such as met expectations, commitment, perceived fairness, measures of information gathering behaviour and perceived informativeness, measures of self-efficacy. As indicated in the literature review, over the last 30-40 years there have been numerous findings that different types of recruitment sources are associated with differences in outcomes such as turnover, turnover intentions, job satisfaction and performance (Rynes & Cable, 2003; Zottoli and Wanous, 2000). As a result, there has been a great deal of speculation and theorizing as to the reasons for these effects. Two key competing hypotheses which have been proposed are the realistic information hypothesis and the individual differences hypothesis both of which have had research supporting and disconfirming their operation on the results yielding equivocal findings (Rynes & Cable, 2003; Rynes, 1991; Zottoli & Wanous 2000). Much of the research examining recruitment source effects has used only one or two occupations or a single organization, industry and small sample sizes (Breaugh et al, 2008 and Rynes and Cable, 2003). My study utilized a large multi-industry and multi-occupation sample. Although I found greater support for individual differences influencing outcome variables than information gathered and received, I was not able to

find a clear link between many individual differences and the types of recruitment sources used. This may indicate that the relationships are more complex than has been previously hypothesized in the earlier literature or that the results have been due to a third variable.

The findings of Studies One and Three lead me to conclude that recruitment source has little or no relationship on outcome variables. If recruitment source has no impact, the question often studied in previous literature of whether certain recruitment sources are related to individual differences or whether certain sources provide more realistic information is moot. It is possible that the lack of findings for type of recruitment source effects is indicative of a lack of a general overall effect across multiple industries, various firms or various occupations. The studies allowed for the sampling of individuals across industries and occupations, were few previous studies has used a wide variety of industries and occupations to examine the relationships of recruitment sources and outcomes as has been done in Studies One and Three for this research. Had the results for the use of informal and formal recruitment sources used been significant, this would have provided strong evidence for the generalizability of the effect of type of recruitment source across a variety of settings/industries/occupations where individual effects have in the past been found piecemeal in single occupations and industries. The current results may indicate that different sources have varying effects in different industries, types of occupations or alternatively that the use of a mixture of sources as found in Study Three makes any potential effects moot. An as yet un-specified contingency theory may be more applicable. It is also feasible that the recruitment source effects which have been

found in the past may be spurious effects which are be linked to a third variable. This

third variable could be associated with recruitment sources and outcomes as a result of

the individual organization or occupation being studied. It may be that in a

heterogeneous sample these effects are lost. It could also be that the self-report outcome

measures which were used in Studies One and Three were not sufficiently accurate or

representative enough of the outcome variables to detect the recruitment source effect.

When the wider human resources research associated with variables such as job

performance, job satisfaction and turnover intentions is considered, it seems unlikely that

the type of recruitment source used during the recruitment process would have a

consistent effect such as those which have been hypothesized in the past on these

outcomes on its own without other factors playing a role. Recent research (Weller et al.,

2009) has indicated that the presence of informal recruitment sources may have a greater

impact earlier on in job tenure. In Study One, respondents came from all possible ranges

of job tenure, in Study Three tenure was five years or less, Weller et al.(2009) found

stronger turnover effects related to recruitment sources in the first year of hire. This may

be an important future avenue of research. In addition, Rynes and Cable (2003) have

noted that it may be more beneficial to focus recruitment source research on more

proximal source effects and pre-hire outcomes, such as quality of applicants, rather than

distal post hire effects such as performance and turnover, as these may yield stronger

more meaningful effects.

Recent research by Horvath, et al. (under review for publication) involved the use of confirmatory factor analysis on the recruitment source usage patterns of 565 job applicants. While the authors found that applicants used a combination of recruitment sources, they were not able to fully explain the patterns associated with the types of recruitment sources used. Perhaps if a better understanding of the patterns of recruitment source usage, were developed, it would be possible to better explain and understand some of the differences which have been found in the effects of recruitment source usage as well as pre-hire and post-hire outcomes.

My research raises some important questions for future research on recruitment sources and recruitment source outcomes. Further research should examine whether recruitment sources would relate to outcomes using independent information rather than self-report information but while still examining job seekers from a wider variety of occupations and industries than have been used in the past. Strategic sampling techniques could be used to test whether there is a contingency theory of recruitment source relationships which emerges for different industries and/or occupations. Greater attention should also be paid to pre-hire outcomes as opposed to post-hire outcomes which could potentially be associated with a number of intervening variables.

A final disheartening thought may need to be considered, that there is not pattern of recruitment source usage and that there are no effects for recruitment sources. Recall in Study Two, participants provided information about their use of recruitment source and

their perceptions of recruitment sources; many of the participants also provided

indications that despite their perceptions or preferences. If they really wanted a job they

were restricted some level to using the source chosen by the organization. Participants

thus indicated that they would use whatever source is available.

If there is a "chaos" element to use of recruitment sources it may be difficult or

impossible to specify clear patterns of recruitment source usage and recruitment source

effects. While this is a very disheartening line of thought, this is a potentially important

finding which could change the direction of recruitment research as a whole and lead to

other avenues of study.   Further, given that Study Three found a strong overlap in the use

of formal and informal sources together, and the advent of the Internet which is a highly

informative source being used with increasing frequency, comparisons between the

effects of formal and informal recruitment sources may not be as relevant as they had

been in the past.

As stated earlier, there have been a wide variety of individual differences

variables which have been examined with little underlying theory in choice or impacts.

Based on some of the research findings in Studies One, Two and Three, future research

could examine whether the usage of certain recruitment sources is related to life stage and

life situation issues. For instance, on-campus recruiting would likely be restricted to those

in school at the start of their careers, whereas headhunters would be more likely to be

used by individuals in mid-career. Individuals with dependent children or who are

currently employed may find the timing flexibility of the Internet more appealing than

government employment agencies. Those at a higher socio-economic status may have

easier access to the Internet than those at a lower socio-economic status, who therefore

may be more likely to use government agencies. Further, those who are more highly

educated but originate from lower socio-economic families or neighborhoods may be less

likely to use family and friends to find job opportunities and may therefore be more likely

to turn to professional networking or more formalized recruitment methods. Whereas

those whose family members were more highly educated and of a higher socio-economic

status with family in similar types of careers might be more likely to rely on informal

family and friends networking practices and less so on formal methods.

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Appendix A

Summary Table of Recruitment Source Outcome Studies[1]

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
Ullman (1966)	Newspaper Ad, employment agency, employee referral	**Outcomes** Turnover /discharge rate(dichotomous)	2 companies female administrative workers	Company 1 n=144 Company 2 N=114	Company 1; d=.035; 2; d=0.81 (turnover within 12 months)	Referrals most effective, less turnover. Pre-screening in informal.
Hill (1970)	Newspaper Ad, Employment agency, Employee referral	**Outcomes** Performance – job performance ratings	Clerical employees (life insurance)	Company 1 (n=39) Company 2 (n=94) Company3 (n=70)	Company 1; d=.59; 2; d=.15; 3; d=.10 (turnover)	Referrals most effective
Gannon (1971)	Newspaper Ad, Employment agency, Employee referral, rehire	**Outcomes** Turnover (dichotomous)	Bank employees	n=6390 n=5178(walk-ins removed)	d=0.20 (turnover – quit rates 12 months)	Employee referral, re-hire and walk ins are most effective and have lower turnover than other sources.
Reid (1972)	Newspaper Ad, Employment agency,	**Outcomes** Turnover/lower quit rates	Engineering and metal using trades	n=876 total n=200 (turnover can	d=.45 (turnover)	Referrals most effective remained

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[1] Adapted from Rynes (1991) and Zottoli and Wanous (2000) additional research on recruitment sources since 2000 was added to the adapted table as well as research on sources not included in Zottoli and Wanous' meta-analysis due to differing research criteria and/or missing effect size data .

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	Friend /relative referral	(dichotomous)		be assessed) (laid off engineering& metals workers		employed longer
Decker & Cornelius(1979)	Newspaper Ad, Employment agency, Employee referral, rehire	**Outcomes** Turnover/lower quit rates(dichotomous)	3 companies Bank, insurance Abstracting service	Company 1 – n= 412 bank employees Company 2- n=1404 insurance Agents Company 3 n=160 abstracting service employees	Company 1(d=.17) 2(d=.15) 3(d=.27) (turnover rates after 12 months)	Referrals most effective all 3 organizations. Referrals have longest tenure and newspapers shortest.
Allen & Keaveny (1980)	Formal means (college placement, private placement agency, government employment, newspaper or trade journal ads) Direct	Occupational level, Perceived association of job with education, Work experience, Length of time to find job,	467 male alumni in business and engineering	467	Job perceived as related to education and source Chi Sq.=5.80, df=6, p<.05; Starting salary & source Engineering F=2.20, p<.05 Business F=1.24, p>	Use of formal sources by engineering College graduates Resulted in higher level jobs, higher salaries and jobs perceived

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	application, Personal contacts (family, friend, faculty)	Starting salary			.05	as more related to education.
Breaugh (1981)	Newspaper Ad, Journal ads, On-campus College placement, Direct application	**Individual differences** demographics (age, sex, education, tenure, job tenure) **Outcomes** Performance ratings, absenteeism **Job attitudes** (i.e. Job satisfaction, supervisor satisfaction, job interest.	Research scientists	112 research scientists	No differences for demographics but differences for job attitudes and outcomes.	Found source effects for Job performance, absenteeism and job attitudes. Job performance higher among those hired in professional journals and self initiated(walk-ins). On-campus recruit and newspaper hires low performance. Absenteeism high newspaper hire. On-campus recruit lower job

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
						satisfaction.
Quaglieri (1982)	Newspaper Ad, Professional journal, Employment agency, Friend relative inside org, Friend relative outside org., Walk in	**Perceptions** Participants perceived accuracy and specificity of recruiting source information (likert-type scale.	Newly employed recent university business graduates (approx. 6 weeks employment)	N=64	Informal sources and walk-ins perceived as providing more specific and accurate information. Formal vs. Informal $T_{(accuracy)}$=5.49, p<.001 $T_{(specificity)}$=4.77, p<.001	Concluded support for differences in information provided as per realistic information hypothesis.
Caldwell and Spivey (1983)	Newspaper Ad, Employment agency, Employee referral, Internal/in-store job posting	**Outcomes** Turnover (dichotomous) Performance **Individual differences** (race)	Store clerks	n=755 (turnover) n=1400 (performance)	d=.05 (turnover) d=-.34 (performance)	For turnover little significant difference. For performance, newspaper advertisements are most effective. Found race mediated turnover effect.
Taylor & Schmidt (1983)	Referrals, Walk-ins, Radio & TV ads, Newspaper Ad, Public	**Individual differences** (weight, height, gender, salary level, preferred shift).	Seasonal packaging plant employees	N=293	Supported individual differences found differences in height, weight, preferred shift. Some support for realism for	Rehires longer tenure and lower absenteeism, no performance differences by

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	employment centers, Rehires	**Outcomes** Performance rating Turnover, attendance.			informal sources in that differences found for rehires but not for referrals.	source. Rehires longer tenure Once individual difference controlled no source differences for absenteeism or turnover
Tom-baugh (1983)	Employment agency, Employee referral, College recruiting	**Outcomes** Performance	Manufacturing firm employees	n=137 (1976 data) n=256 (1978 data)	d=.04 (performance)	No significant differences
Breaugh & Mann (1984)	Newspaper Ad, Employee referral, Direct application (walk in)	**Outcomes** Turnover(dichotomous in 12 months) Performance ratings. **Individual differences** Demographics, Perceived realism of source, ease of	Social service workers	n=75	d=.18 (turnover) Referrals self report more realistic information.	Direct applicant higher performance and retention. Supported realistic information hypothesis self reported/assessed. No turnover difference

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside)	Conclusion
		movement (job), ratings of training and education at hire(retrospective)				except less firing for referrals. Newspapers correlated with older employees and more males.
Gable & Hollon (1984)	Internal promotion, On-campus recruitment, Newspaper advertisement	Turnover(dichotomous)	Executive trainees (retail)	n=163	d=.94 (turnover)	Internal promotion most effective
Swarroff et al. (1985)	Newspaper Ad, Employment agency, Employee referral, Friend /relative referral, College recruiting, direct application	Turnover(dichotomous -2 years) Performance (% sales quota in 1st 2 years). **Individual differences:** Age, marital status, number of previous jobs	Technical sales people	n=618 (turnover) n=482(performance)	d=.07 (turnover) d = -.02 (performance)	Little or no effect of recruitment source for turnover & performance Individual demographic differences found for different sources.
Conard &	Newspaper Ad, Employment	**Outcomes:** Turnover	Life insurance agents	n= 5822	d=.22 (turnover) More support for	Aptitude differences

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
Ashworth(1986)	agency, Employee referral	(dichotomous in 12 months) Job knowledge accuracy when hired (assessed "realism" **Individual differences** Aptitude test,			individual differences hypothesis.	significant portion of source turnover effect, job knowledge not significant effect on turnover, source differences in turnover remained significant after individual differences partial led out.
Latham & Leddy (1987)	Referrals Direct Applications, Newspaper ad	Organizational commitment, Job satisfaction, Job involvement	Car dealership employees	N=68		Referrals higher job satisfaction than newspapers or direct applications. Referrals higher organizational commitment and job involvement than

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
						newspapers.
Skolnik (1987)	Newspaper Ad, Employee referral	Turnover(dichot omous) lower turnover rates Tenure(continu ous) higher tenure Performance – more commissions earned	Investment sales representative s	N=196(Turno ver) n=159 (tenure) n=107(perfor mance)	d=.13 (Turnover) d= -.06(Tenure) .04(averaged) d=.30 (performance)	Referrals personal recruits most effective.
Aamodt & Carr (1988)	Newspaper Ad, Employment agency, Employee referral, Friend relative referral	Tenure(continu ous)	Fast food and retail employees	N=276	D=-.19 (tenure)	Informal sources negatively associated with tenure in fast food and retail employees
Collela & Wanous (1988)	Newspaper Ad, Employee referral, Friend /relative referral	Turnover(dichot omous)	Bank tellers	N=46	d=.48(turnover)	Informal sources associated with lower turnover

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
Kirnan, Farley & Geiseinger (1989)	Newspaper Ad, Employment agency, Employee referral, Friend/relative referral	Tenure(continuous) Performance (sales) Applicant quality (background questionnaires)	Life insurance agents	Data from 1981: n=4007 (Tenure); n=1755 (performance) Data from 1982: n=3586 (tenure); n=1525(performance)	d=.21(1981 sample-tenure); d= .19(1982-tenure) d=.10(1981 – performance) d=.13 (1982-performance)	Found informal sources better overall in terms of applicant quality and lower turnover. Found females and minorities use more formal sources. Newspaper most frequently used source.
Blau (1990)	Newspaper, Employment agency, Employee referral, walk-ins	Tenure(continuous) performance	Bank tellers	N=105	d=.04 (tenure) d=.14 (performance)	Walk-ins higher performance and ability scores than other sources. Concluded support for individual differences.
McManus & Baratta (1992)	Newspaper Ad, Employment agency, Employee	Turnover(dichotomous) Performance	Insurance sales representatives	n=9643	d=.12 (turnover) d=.12 (performance)	Informal sources related to higher performance

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	referral, Friend/relative referral					and lower turnover. Small effect.
Williams et al. (1993)	Newspaper Ad, Employee referral, Rehire, Student clinical rotation, On-campus recruitment	Turnover(dichotomous). Participants were able to report multiple source use.	Nurses	n=103	Turnover d=.13	No significant source effects for performance. Realism assessed at hire not retrospectively. Rehires and those using more than one source found to have more realistic information.
Saks (1994)	Newspaper Ad, Radio ad, posters Employee referral, Rehire,	Turnover(dichotomous) Tenure(continuous) Attendance/absenteeism as an	Seasonal amusement park employees	n=149(turnover or tenure) n= 206 (intent to quit)	d=.41(turnover) d=.55(tenure) d=.16(intent to quit) d=.35(averaged)	Informal source higher job survival and self-reported more accurate job information,

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	Walk-ins	indicator of withdrawal				greater met expectations.
Palombo (1995)	Newspaper Advertisement Employee referral Friend relative referral On-campus recruitment Job fair Rehire.	Intent to quit as an indicator of withdrawal Performance.	School teachers	n=298 n=297 (performance)	d=-.09 (intent to quit) d=.12 (performance).	Intent to quit and performance higher among those using informal sources.
Vecchio (1995)	Newspaper ad, Relative, Someone who worked at organization, Friend, Acquaintance Employment agency or placement office, Recruiter for the employer Walk-in	Loyalty, Pride in organization, Desire to leave organization, Job dissatisfaction, , job satisfaction, anti-union attitudes, Demographics controlled (age, education, gender, race,	National sample (1991 General Social Survey)	N=702 employees, multiple U.S. organizations	Change R^2 loyalty= .02 p=.76, Change R^2 job dissatisfaction= .02 p=.62, Change R^2 pride= .02 p=.56, More women used newspaper ads and more men used recruiters. More non-whites used formal sources and more whites used informal sources.	Individual differences in source use(Higher income and education for recruiters and lower for walk-ins). Recruitment source not related to attitudinal variables (job satisfaction,

| Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
		income.				dissatisfaction, loyalty, etc.) No support for realistic information hypothesis.
Sommer -ville (1996)	Newspaper Advertisement Employment agency Employee referral Internal job posting	Turnover(dichot omous) Tenure	Construction industry workers	n= 2448 (617 for turnover) in 5 organizations.	d=.59 (Turnover) Employee referral had better outcomes post hire for most of the companies although for one company ads in trade/ professional journals was best.	Overall informal source associated with lower turnover. Different organizations yielded different results for different sources.
Werbel & Landau (1996)	Newspaper Advertisement Friend relative referral On-campus recruitment	Turnover(dichot omous)	Marketing/life insurance representative s	n=192	d=.21 (Turnover) d=.05 (performance)	Looked at realistic information, individual differences and job-person fit. Concluded no support for any of models.

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
						Placement office resulted in better performers than newspapers. No differences in education or experience for sources, referrals perceived as less realistic than walk-ins or employment agencies.
Griffeth, Fink, Hom & Cohen (1997)	Informal sources, Formal sources	Realism, Individual differences, Job satisfaction, Turnover, absenteeism	nurses	N==221	Used met expectations to assess realistic information	Found individual differences and realism associated with sources. Found that recruitment sources directly impacted post hire outcomes beyond realism.
Necker-	Employee referral	Turnover(dichot	Bank	n=228	d=.14	Employee

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
man & Fernan-dez (1997)	"Other recruitment"	omous)	Employees		(Turnover)	networks were best recruitment source. Yielded lower turnover.
Zottoli and Wanous (2000)	Inside vs. Outside sources	Withdrawal (Turnover Tenure Intent to quit Absenteeism) Performance	Meta-analysis	n=34,871; 21 studies; 25 effect sizes (turnover, tenure, intent to quit absenteeism) N=16102; 10 studies; 14 effect sizes (performance	d=.18 (withdrawal) d=.08 (performance)	Inside Sources are most effective
McMan us and Ferguso n (2003)	Internet, Personal recruits, Impersonal recruits	Applicant quality (Career profile biodata), demographics, personality (Achievement drive, energy, initiative, persistence)	Candidates for financial sales position	N=19,578 (financial services applicants)	Descriptive exploratory study no specific formal hypotheses presented. Mainly Chi squares and averaged presented. F(2, 19,575) =27.19, p<.0001 (personality differences by recruitment source	Personal recruits had highest career profile ratings, internet recruits significantly younger. Internet recruits scored higher on achievement drive, initiative

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside type)	Conclusion
					type)	and persistence, persuasion and energy than personal or impersonal recruits.
Jattuso & Sinar (2003)	Information Job sources for applications not specified ("how did you learn about this online application process?") Job specific internet board applications General internet job board applications.	Job board specificity Interim contact Candidate qualifications (education, certification, self rated technical skills and self rated computer skills, summed qualifications rated 0-100, work experience) Job fit	40,286 candidates for sales positions at three major manufacturing corporations (3 pooled samples)	40,286 (but in several analyses the sample was reduced to 584).	Effect of information job source on candidates overall qualification score was significant F=12.99, p<.001 There were significant effects for recruitment source on education: F=106.28, p<.001; Skills (F=25.67, p<.001 and Work experience F=20.54, p<.001 and job fit F=73.69, p<.001.	Interim contact effect on overall qualifications F=6.43, p<.01 (authors reported as significant), F=69.91, p<.001 (on education and self reported skills (F=19.06, p<.001). Overall qualifications not significant for job board specificity (t(6,578)=0.002, ns. but education was

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
						significant for more specific job board (t(6,578)=23.29, p<.001. However, general job board candidates reported more experience than specific job board applicants.
Hausdorf & Duncan(2004) Not formal /informal recruiting.Remove	Internet recruiting Differences in how larger and smaller firms use the internet as a recruitment source.	Firm size	175 organizations (small , medium, large)	N=175	Percentages of usage by firm size. Larger organizations were more aware of internet recruiters. Internet use declined as management level increased in job advertised.	Larger organizations more likely to have own website. There was no difference in use of website for recruiting by organizations size or in operation of

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
						website from another country or division.
Rafaeli, Hadomi & Simons (2005)	Formal sources (national newspaper ads, local newspaper ads) and referrals	Cost per hire - Yield ratio – proportion of hires from source	Applicants to a Fortune 500 company in Israel in 1995.	1545 applicants in 1995 (131 offered a job)	Referrals most cost effective followed by local newspapers.	Informal sources had highest yield ratio. Local newspapers had higher yield ratio and lower cost per hire than national newspapers
Ryan, Horvath & Kriska (2005)	12 sources Job fairs Church , community contact, Civil service commission, school, Current family member firefighter, Friend, Government t.v. ad,	Source informativeness (rated by recruiters), Perceived fit, organization image, familiarity Intent to apply, Application behaviour Demographics controlled (race, gender,	Applicants for firefighter job	N=415 applicants for a fire fighter job	Change R^2 self-select out= .00 p=.36, Change R^2 application= .02 p<.05, Change R^2 intent to apply= .00 p=.99,	Applying was related to source informativeness but not intent to apply, dropping out of the process or success in the process.

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	Military, other fire department, called recruiter directly, unknown	cognitive ability)				
Moser (2005)	Job ad, Unsolicited application, Public employment agency, Industry fairs, Graduate fairs, Internship contacts, Thesis contacts, Contact from site visit, Other personal contact with employees, Direct recruitment from company.	Job satisfaction, Organizational commitment, Unmet expectations (mediator – measured through questionnaire from interviews 48 items –direct measure), Demographics: Sex, Tenure, Age (controls)	Professionals in a large German electronic company(mai nly engineers)	N=767	d= .31 (job satisfaction) d= .21 (org. commitment) d=.30 (unmet expectations) Beta = .07 (job satisfaction when unmet expectations included) Beta=.04 (organizational commitment when unmet expectations included)	Found overlap in use of informal and formal sources (18%). Found unmet expectations mediated the effect of recruitment source on job satisfaction and organizational commitment. Organizational commitment was non-significant when demographics controlled for).
Saks	Number of times	Job search	N=225	225 business	Beta employment	Found informal

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
(2006)	12 sources used over 3 months. Split into Formal and informal sources. Informal (current employee, friend or relative inside organization, outside organization, Walk-in) Formal (employment agency	intensity, Job search effort, Job search self efficacy, Job search success, Perceived P-J. fit, P-O fit.		student undergraduate s in last term.	status and informal sources (-.25, p<.01; change R^2=.13, p<.01), Offers and informal sources Beta (-21, p<.01; change R^2=.23, p<.01)	job sources negatively related to job offers & employment. Self efficacy found to be a strong predictor of interviews, offers, PJ fit and a moderator of employment.
Allen, Mahto & Otondo(2007)	Internet recruitment	Job information (respondent rated), organization information (respondent rated), Organizational image, organizational familiarity,	815 undergraduate students examining actual websites.	N=815	SEM model supported	Job and organization information provided on the website is correlated with attitude to the organization which is in turn related to intention to

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
		attitudes to organization, attitudes to website, pursuit intentions				pursue employment
Marr (2007) Disserta -tion	Internet Newspaper Friend/relative Other	*Study 1*: Quantity of applicants Quality of applicants Intent to pursue *Study 2:* HR practitioners perceptions,	513 applicants various jobs in a large Australian university	Study 1: N=513 Study 2: 8 HR practitioners from 8 organizations (medium to large) government & service industries	Study 1: Applicants reported the internet as more likely to be used by them to find a job to apply (mean=4.64) followed by the newspaper (mean=3.97) and friends and family (mean=3.14). Recruitment source as predictor of Applicant Intent to pursue B=.11, p<.05; Newspaper ads and	Study 2: HR practitioners perceived internet recruitment as more cost effective but because of information overload candidates may have difficulty finding postings and does not lead to better

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
					other recruitment sources lead to greater percentage of shortlisted applicants than internet ads (8% vs. 4.9%). No significant differences between sources in appointees. Internet not more effective than other sources.	candidates. High volume not necessarily quality. All HR practitioners indicated nearly all jobs advertised on internet except senior management. Newspapers perceived as recruiting older individuals
Van Hoye & Lievens (2009)	"Quality of recruitment source" study type of Word-of-mouth and personality, Word of mouth as company independent recruitment source. Recruitment ad	"Source" expertise, Conscientiousne ss, Extroversion, Tie strength, Word of mouth, Other sources based on taxonomy of recruitment sources, Cable	Potential Applicants to Belgian defense	612 potential applicants	Nagelkerke R^2 .11, p<.01 (attractiveness) and .03 p<.01 (decision to apply) Of outcomes on recruitment sources Effect of recruitment source on decision to apply Nagelkerke R^2 .04 p<.01 (advertising was only significant	Applicants with higher conscientiousne ss and extroversion received more positive word of mouth, and higher conscientiousne ss more negative word

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside source)	Conclusion
	Recruitment website Career fair	& Turban(2001), informational vs. experiential				of mouth, Positive word of mouth associated with more organization attractiveness and intent to apply. Advertisement only significant recruitment source on decision to apply.
Weller, Holtom, Matiaske & Mellewigt (2009)	Recruitment sources: Employment office, employment agency (private), newspaper ad, Internet ad, Friend or relatives, Rehire, other, Recoded as	Voluntary turnover, tenure (time and level effects), Job satisfaction, Demographics Controls: Age, education, promotions, gender, nationality, employment	German Socio-economic panel study(GSOEP) from 1993-2001. Sample is representative of German population. Population	N=2706	beta=-60, SE(b) =.17, p<.05, LL ratio (χ^2) = 16.49, p<.05.	Hires from personal recruitment sources (informal) correlated with lower turnover. However, this correlation weakened over time and with increased tenure

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	personal (informal) vs. formal	status, prior jobs, prior quits, pay level, relative pay ratio, region, unemployment rates, population density, calendar time.	employed individuals 18-65 years.			particularly after 2 years. The effect size became equivocal after 41 months (3 1/3 years)
Horvath, Millard and Dickin-son (unpubli-shed manuscr ipt)	Extent of recruitment source use on likert scale. 10 sources: company website, newspaper ad, College placement, Job fairs, Friends, current employees, trade publication ads, outsourcing programs, Internet job board,	Realism (Perceived knowledge of organization, Actual knowledge- multiple choice test), Individual differences: fit perceptions; conscientiousne ss; Demographics (age, experience.) Differential	Job applicants in a large multinational manufacturing company. Regression equations for source effects: Step 1: gender, age, race Step 2 source types used	N= 565	Source effects on: job acceptance intensions $(R^2 = .06, p<01)$; Recommendation intensions $(R^2 = .07, p<.01)$; Organization attraction $(R^2 = .06, p<.01)$; Recommendation intentions Found some support for 3 theories of recruitment source results: Realism =Networking sources	Attempted to find patterns of Recruitment source examined using SEM. Component dimensions did not conform to theory. Found applicants use sources together. College placement and job fairs recruitment

Authors /year	Recruitment Sources	Variables Examined	Population	Sample Size	Findings/Effect size (Inside vs. Outside	Conclusion
	Self referral.	treatment procedural and interpersonal justice measures, Outcomes: offer acceptance intensions, recommendatio n intentions, organizational attraction.			explained intent to recommend −17.2 % of variance explained) Individual differences in perceived were found by source type (networking, 33% of variance; Differential treatment support found in assessment of interactional and procedural justice (networking sources related to greater perceived justice, 69% of variance)	source used by younger applicants, networking recruitment sources significantly related to intent to recommend to others and attraction but not to intent to accept job
Pellizzar i (2010)	Formal search methods vs Informal (6 types of sources, only one can be chosen) (personal contacts) Types of formal	Wage effect of formal and informal sources by tenure and country (15 different Countries). Job	European, Community Household Panel (15 European Countries)	Data 1994-2001. (15 E.U. countries, 43,300 employed workers.	Women, younger and less experienced workers less likely to use informal sources. Informal related to smaller companies About one third of respondents in the E.U. used personal	Found if all countries included wage effect for personal contacts was negative. However if countries

Appendix B
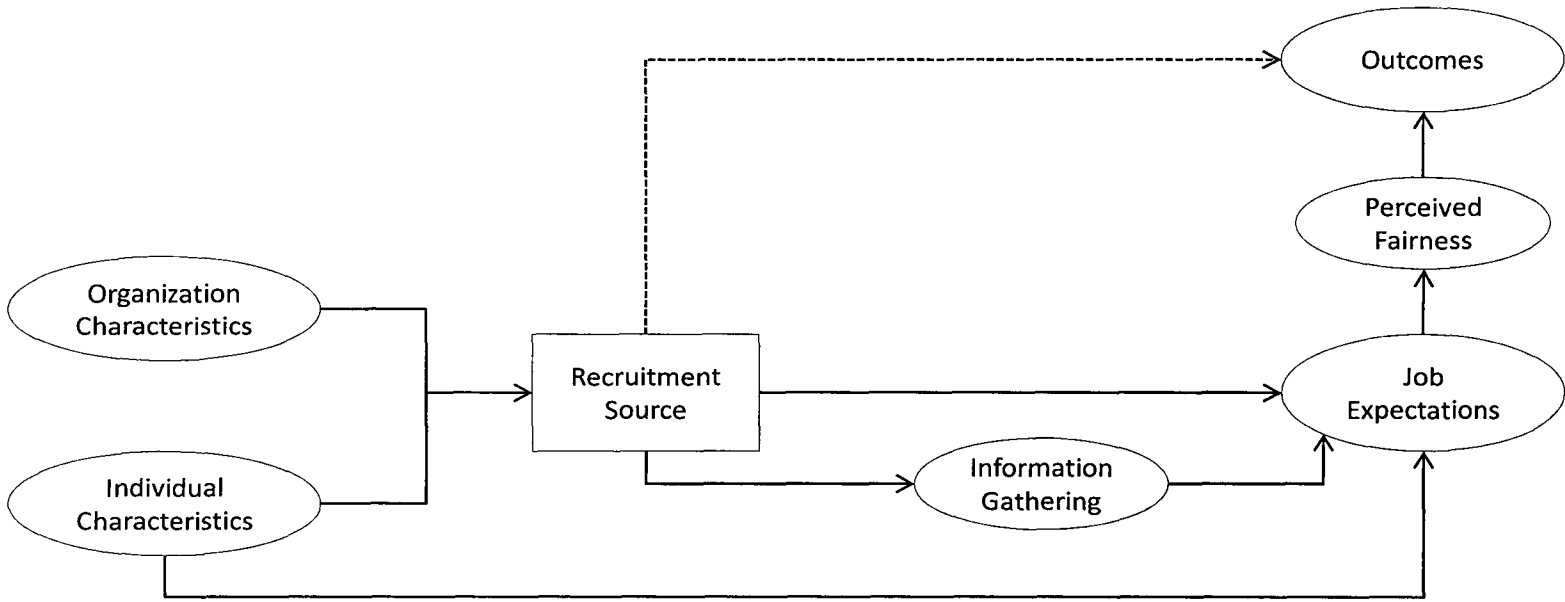
Simplified Model of Recruitment Sources and Information Relationships
with Job Expectancies and Outcomes.

Appendix C

Appendix C

Employer
End Goal
Vacancy Filled

How?

Employee
End Goal
Employment

Performance
Satisfaction
Absenteeism
Turnover
Tenure
Education
Experience
Person-Organization Fit

Which leads
to the best
employees?

Job Sources Format:

Help wanted Ads
Union Postings
Internet
Headhunters
HRDC
Job Fair
Informal
Friends
Family
Walk-ins/Personal Initiative

Which one
leads to the best
job?

Person-Organization fit
Income
Satisfaction
Promotion

Job Offer:
Schwab, Rynes Aldag (1987)
Breaugh Greising Taggart
Chen (2003),
Rafaeli, Hadomi,
Simmonds (2005)

Ways

Realistic
Information
vs.
Individual Differences
hypotheses

Type of employee firm seeking
Firm Size
-Organization Culture
Individual differences in firms

Type of job/firm employee seeking
Education Level
Experience Level
Individual differences in applicants

Appendix D

North American Industry Classification System (NAICS) 1997 - Canada

11	Agriculture, Forestry, Fishing and Hunting	53	Real Estate and Rental and Leasing
21	Mining and Oil and Gas Extraction	54	Professional, Scientific and Technical Services
22	Utilities	55	Management of Companies and Enterprises
23	Construction	56	Administrative and Support, Waste Management and Remediation Services
31-33	Manufacturing	61	Educational Services
41	Wholesale Trade	62	Health Care and Social Assistance
44-45	Retail Trade	71	Arts, Entertainment and Recreation
48-49	Transportation and Warehousing	72	Accommodation and Food Services
51	Information and Cultural Industries	81	Other Services (except Public Administration)
52	Finance and Insurance	91	Public Administration

Appendix E

Study 1 Questionnaires

Variables from Employee Survey:

X 41b) Tenure:
When did you start working for this employer? ___ Month _____ year

Recruitment source:
Q4a) When you were first hired, how did you learn about the job opening? *(Check all that apply.)*
Help wanted ad (formal)
Family or friend (Informal)
Union posting (formal)
On-campus recruitment (formal)
Canada Employment Centre/other government agency (formal)
News story
Recruitment agency (headhunter) (formal)
Job fair (formal)
Personal initiative
Directly recruited by employer
Internet (formal)
Other, *specify*

What is your job title? _____ (this was automatically recoded by Statistics Canada using SOC coding)
Manager, professional, technical/trades, marketing/sales, clerical/administrative, production worker with no trade/certification

Promotion
Q 20. Have you ever been promoted while working for this employer? (By promotion, we mean a change in duties/responsibilities that lead to both an increase in pay and the complexity or responsibility of the job.)
Yes
No

Number of promotions
Q20.a) How many times have you been promoted?

Job Satisfaction:
Q 38. Considering all aspects of this job, how satisfied are you with the job? Would you say that you are:
satisfied?
very satisfied?
dissatisfied?
very dissatisfied?

Previous wok experience:
Q 40. Considering all jobs you have held, how many years of full-time working experience do you have?
____ years

Demographics:
Age:
Q43. In what year were you born? ____

Gender:
Q44. Gender
Male
Female

Education:
Q47. What is the highest grade of elementary or high school (secondary school) that you have completed?
Please report the highest grade, not the year when it was completed.
Q48. Did you graduate from high school (secondary school)? Yes No
Q49. Have you received any other education? Yes No
Q50. What was that education? *(Check all that apply.)*
Trade or vocational diploma or certificate
Trade-vocational:
Some college, CEGEP, institute of technology or nursing school
College:
Completed college, CEGEP, institute of technology or nursing school
Some university
University:
Teachers' college
University certificate or diploma below bachelor level
Bachelor or undergraduate degree or teachers' college (e.g. B.A., B.Sc., B.A.Sc., 4-year B.Ed.)
University certificate or diploma above bachelor level
Master's degree (M.A., M.Sc., M.Ed., MBA, MPA and equivalent)
Degree in medicine, dentistry, veterinary medicine, law, optometry or theology (M.D., D.D.S.,
D.M.D., D.V.M., LL.B., O.D., M.DIV.) or 1-year B.Ed. after another bachelor's degree
Earned doctorate
Industry certified training or certification courses
Other, *specify*

Life partner:
Q51. What is your current legal marital status?
Legally married (and not separated)
Legally married and separated
Widowed
Single (never married)
Divorced

52. Are you currently living with a common-law partner?
Yes No

Dependent child:
53. Do you have any dependent children?
Yes No

Designated group membership:
55. Canadians come from many ethnic, cultural and racial backgrounds. From which groups did your parents or grandparents descend? *(Check all that apply.)*
Canadian
British (from England, Scotland, Ireland, etc.)
French
Any other European groups
Arab (from Egypt, Jordan, Lebanon, Iraq, etc.)
Black (from Africa, Caribbean, Haiti, U.S.A., Canada, etc.)
Chinese
East Indian (from India, Pakistan, East Africa, etc.)
Filipino
Inuit (Eskimo)
Japanese
Korean
Latin American (from Mexico, Central America or South America)
Métis
North American Indian (First Nations, Aboriginal persons, Native Peoples)
North African (from Egypt, Morocco, Algeria, etc.)
South East Asian (from Burma, Cambodia, Laos, Viet Nam, etc.)
West Asian (from Syria, Turkey, Afghanistan, Iran, etc.)
Other, *specify*

Person with a disability:
Q 57b) Does a physical condition **or** mental condition **or** health problem reduce the amount or the kind of activity you can do...At work or at school?
These questions refer to conditions or health problems that have lasted or are expected to last six months or more.
No
Yes, sometimes
Yes, often

Variables from Employer Survey

Firm Size:

1 (a) In the last pay period of March 2005 and March 2004 how many employees receiving a T4 slip were employed at this location? (See Employee Category Definitions on page 39.) _____

Industry

Dominant industry, 14 classifications; classified by Statistics Canada according to Standardized NAICS coding.

Forestry, mining oil and gas extraction
Labour intensive tertiary manufacturing
Primary product manufacturing
Secondary product manufacturing
Capital intensive tertiary manufacturing
Construction
Transportation, warehousing, wholesale trade
Communication and other utilities
Retail trade and consumer services
Finance and insurance
Real estate, rental and leasing operations
Business services
Education and health services
Information and cultural industries

Human Resources Department:
Q17. Which statement best describes the responsibility for human resources matters at this location?
a. There is a separate human resources unit in this workplace employing more than one person.
b. One full-time person in this workplace is responsible for human resources matters.
c. Human resources matters comprise part of one person's job in this workplace, such as owner or manager.
d. Human resources matters for this workplace are the responsibility of a person or unit in another workplace.
e. Human resources matters are handled as they arise in this workplace (i.e. are not assigned to one person in particular).
f. Some other arrangement, specify

Unionized workplace coded Yes or No:
Q24 How many employees are covered by collective bargaining agreements? (1999; 2001).
If your company has no non-management employees covered by a collective bargaining agreement please go to Question 25.
24. Does the agreement with the largest bargaining unit define how to deal with the following provisions? (2003; 2005)

Revenue:

Q 29.a. For the same fiscal year, what was the gross operating revenue from the sale or rental of all products and services for this location? (If you have not completed your fiscal year, please provide the gross operating revenue to date.). _____

Business and Labour Market Analysis Division &
Labour Statistics Division

2005 Workplace and Employee Survey

Statistics Canada
Statistique Canada

Canada

Survey Objective

The Workplace and Employee Survey will provide valuable information on the 'business of business' by looking at the practices that help firms succeed. It will poll Canadian employees and employers on a range of workplace concerns. Survey results will provide unique insight into the relationship between employment practices and firms' performances, as well as more in-depth information on the effect of technology, training and human resource practices.

Confidentiality

The law protects what you tell us. Your information is kept strictly confidential. No one, not the courts, the Canada Customs and revenue Agency or even the RCMP, can access your information. Your information cannot be made available under any other law such as the *Access to Information Act.*

We never release any information that could identify a particular individual or business without their consent.

You need help?

We would be most happy to answer any questions you might have.

Please fell free to call. Our telephone number is provided in the included letter.

You may also visit Statistics Canada's web site at **www.statcan.ca.**

Thank you for participating in this survey.

2005 Workplace and Employee Survey

A	On March 31, 2005, were you still working for the employer you reported in our interview held a year ago?

^{1} ◯ Yes ➔ *Go to Question B*

^{3} ◯ No ➔ *Go to Question X1.1 of Exit Questionnaire (XL/XS)*

> **Note:** You must be working for a **NEW EMPLOYER not a NEW OWNER**. If the workplace is conducting the same type of activity with a new owner, the answer should be **YES**.

B	Were you still working at the same location as last year?

^{1} ◯ Yes

^{3} ◯ No

> **Note:** You must be the one who changed location. If the company or workplace changed location, the answer should be **YES**; if you personally changed location, the answer should be **NO**.

C	As of March 31, 2005, had your job title changed since last year?

^{1} ◯ Yes ➔ *Go to Question 5 of Employee Questionnaire (EL)*

^{3} ◯ No ➔ *Go to Question D*

D	As of March 31, had your most important activities or duties changed since last year?

^{1} ◯ Yes ➔ *Go to Question 6 of Employee Questionnaire (EL)*

^{3} ◯ No ➔ *Go to Question 9 of Employee Questionnaire (ES)*

The following questions relate to the employee's exit conditions.

X1.1 Did you leave this job or did the job come to an end?

    $^1\bigcirc$ Left job   ➜   *Go to Question X1.2*

    $^2\bigcirc$ Job came to an end ➜   *Go to Question X1.3*

    $^3\bigcirc$ Both   ➜   *Go to Question X1.2*

> **Note:** Examples for leaving job: Found new job with new company, started business as self-employed or working owner, retired, attended school, etc.

X1.2 What was your main reason for leaving this job?

    $^{01}\bigcirc$ Found new job with new company (excluding self-employment)

    $^{02}\bigcirc$ Started business as self-employed or working owner

    $^{03}\bigcirc$ Retirement

    $^{04}\bigcirc$ Attend school

    $^{05}\bigcirc$ Dissatisfied with job

    $^{06}\bigcirc$ Moved to a new residence

    $^{07}\bigcirc$ Own illness or disability

    $^{08}\bigcirc$ Maternity/Parental leave

    $^{09}\bigcirc$ Caring for own children

    $^{10}\bigcirc$ Caring for elder relative(s)

    $^{11}\bigcirc$ Other personal or family responsibilities

    $^{12}\bigcirc$ Other, *specify* _____

> **Instruction:** If the answer to Question X1.1 is 1 (Left job), *go to Question X1.4.*

X1.3 What was the main reason why this job came to an end?

^{1}◯ Location moved or closed

^{2}◯ Company went out of business

^{3}◯ Seasonal nature of work

^{4}◯ Temporary lay-off/business slowdown – recall expected (not caused by seasonal conditions)

^{5}◯ Permanent lay-off – no recall expected

^{6}◯ Labour dispute

^{7}◯ Dismissal by employer

^{8}◯ Temporary job/contract ended

^{9}◯ Other, *specify* _____

X1.4 Did you receive any additional payments when you left this job or when the job came to an end?

^{1}◯ Yes

^{3}◯ No   ➔ *Go to Question X2.1*

> **Note:** For example, severance pay, early retirement payment, signing bonus or any other payments related to you having "left the job" or the "job coming to an end".

X1.5 What was the amount received?

$ |_|_|_|_|_|_| • |_|_|

X2.1 When did you leave your previous job or when did your job come to an end?

|_|_| Month |_|_|_|_| Year
01-12

> **Note:** Here we are talking specifically about the job you held based on our interview a year ago.

X2.2 What is your employment status: Are you currently working at a new job, running a business, or looking for work? *Check one of the following conditions.*

¹ ◯ Employed at work (including self-employed) ➔ *Go to Question X3.1*

² ◯ Absent from work for more than three months

³ ◯ Temporary lay-off

⁴ ◯ Looking for work

⁵ ◯ Future start

⁶ ◯ Not in labour force, able to work

⁷ ◯ Not in labour force, permanently unable to work

⁸ ◯ Other, *specify* _____

If the answer to Question X2.2 is 2 to 8, Go to Questions X5.1 (XS).

Additional questions for job changers

X3.1 In this new job, which best describes your employment status?

¹ ◯ Paid worker

² ◯ Unpaid family worker

³ ◯ Volunteer, unpaid

⁴ ◯ Self-employed with paid help

⁵ ◯ Self-employed without paid help

X3.2 When did you start working at this particular job?

⌷⌷ Month   ⌷⌷⌷⌷ Year
01-12

Instructions:
- If the answer to Question X3.1 is 1 (Paid worker), *go to Question X4.1 (a) (XL).*

- If the answer to Question X3.1 is between 2 and 5 AND the date provided in Question X3.2 is after the date provided in Question X2.1, *go to Question X5.1 (XS).*

- If the answer to Question X3.1 is between 2 and 5 AND the date provided in Question X3.2 is the same as, or before the date provided in Question X2.1, *go to Question 45 (b) (XS).*

X4.1 (a) Did you start working for this employer on the date answered in Question X3.2?

    ¹◯ Yes ➜ *Go to Question X4.2*

    ³◯ No

X4.1 (b) When did you start working for this employer?

    |__|__| Month |__|__|__|__| Year
    01-12

X4.2 What is the legal name of your current employer?

Legal name _____

X4.3 Would you say that the main type of business or industry of your new employer is similar to the main type of business of your old employer?

    ¹◯ Yes

    ³◯ No

X4.4 Considering your new employer, please describe its main business activity.

Specify _____

Instruction: If the answer to Question X3.1 is 1 (Paid worker) AND the date provided in Question X3.2 is the same or before the date reported in Question X2.1, *go to Question 2 (XL).*

X5.1 What was your main activity between the end of your previous job and the time you started your new job? (If you are not currently employed, what was your main activity since the end of your previous job?)

    ¹◯ Employed by another company

    ²◯ Started business as self-employed or working owner

    ³◯ Looking for work (unemployed)

    ⁴◯ Attending school

    ⁵◯ Retired

    ⁶◯ Not in labour force, able to work

    ⁷◯ Not in labour force, unable to work

    ⁸◯ Other, *specify* _____

Instructions:
- If the answer to Question X2.2 is between 2 and 8, *go to Question 45 (b) (XS).*
- If the answer to Question X3.1 is between 2 and 5, *go to Question 45 (b) (XS).*
- If the answer to Question X3.1 is 1 (Paid worker), *go to Question 2 (XL).*

Unless otherwise specified, all questions refer to the position you held in March 2005.

1. When did you start working for this employer?

   > **Note:** You must at least give the year that you started working for the employer.

   |__|__| Month |__|__|__|__| Year
   01-12

   > **Note:**
   > - This refers to the total uninterrupted tenure with the employer, regardless of location.
   > - If you quit at one time to work for another employer, we want the most recent start date.
   > - If you have been on extended leave or layoff from which you are expected to return, we want the original start date.

2. Did you ever work for this employer before?

   ¹◯ Yes

   ³◯ No   ➔ *Go to Question 4 (a)*

3. How many months did you work for them then?

   |__|__|__| • |__| months

   OR

   From |__|__| Month |__|__|__|__| Year
         01-12

   To |__|__| Month |__|__|__|__| Year
           01-12

   > **Note:** This is meant to include all previous terms of employment with the current employer.

For information only

4 (a) When you were first hired, how did you learn about the job opening? *(Check all that apply.)*

01 ◯ Help wanted ad

02 ◯ Family or friend

03 ◯ Union posting

04 ◯ Canada Employment Centre/other government agency

05 ◯ On-campus recruitment

06 ◯ News story

07 ◯ Job fair

08 ◯ Recruitment agency (headhunter)

09 ◯ Personal initiative

10 ◯ Directly recruited by employer

11 ◯ Internet

12 ◯ Other, *specify* _____

4 (b) When you were first hired, were you required to take: *(Check all that apply.)*

01 ◯ Tests for specific skills (for example typing or manual dexterity)

02 ◯ Aptitude or other personality testing

03 ◯ Security check

04 ◯ Medical examination

05 ◯ Drug test

06 ◯ Tests administered by a recruitment agency

07 ◯ Any other type of testing or screening, *specify* _____

08 ◯ Personal interview

09 ◯ Test on job-related knowledge

10 ◯ Test on general knowledge or literacy skills

11 ◯ None

5. What is your job title?

_____

6. What are your most important activities or duties?

_____

7. When did you start working at this particular job?

⌊_⌊_⌋ Month   ⌊_⌊_⌊_⌊_⌋ Year
01-12

> **Note:** You must at least give the year that you started working at this job.
>
> We are talking specifically about the job duties you described in Question 6. If you have moved in and out of the job several times, we want the most recent start date.

8. What is the *minimum* level of education required for this job?

01 ◯ Elementary school

02 ◯ Some secondary school

03 ◯ Secondary school diploma

04 ◯ Some postsecondary education

05 ◯ Trade certificate

06 ◯ College diploma

07 ◯ University undergraduate degree

08 ◯ University professional accreditation (M.D., Law, Architect, Engineer, Education, etc.)

09 ◯ University graduate degree

10 ◯ None

Unless you answered "No" in question A (XL), please answer the following questions for the job you held in March 2005, even if you have changed jobs or employers since then.

Instruction: Please answer Questions 9 to 39 (EN, EL, ES, XL).

---

9. Do you supervise the work of other employees on a day-to-day basis?

¹ ◯ Yes

³ ◯ No ➔ *Go to Question 10*

---

9 (a) About how many people do you directly and indirectly supervise on a day-to-day basis?

|_|_|_|_|_|_|

Note: Directly: are employees and supervisors who report to you.
Indirectly: are employees reporting to supervisors who report to you.

---

10. Do you normally work the same number of paid hours per week at this job excluding all overtime?

¹ ◯ Yes ➔ *Go to Question 10 (d)*

³ ◯ No ➔ *Go to Question 10 (a)*

---

10 (a) Not counting overtime, how many paid hours on average do you work per week at this job?

|_|_|_|_| • |_| hours

Instruction: If you have been in this job for less than twelve months, please answer the following questions for the period of time you have been in this job. Otherwise, answer for the past twelve months.

---

10 (b) Over the past twelve months/since you started this job, not counting overtime, what was the maximum number of paid hours you worked per week at this job?

|_|_|_|_| • |_| hours

4-4700-2.1

10 (c) Over the past twelve months/since you started this job, not counting overtime, what was the minimum number of paid hours you worked per week at this job? (Exclude the hours when you were on paid vacation or paid sick leave.)

| | | | | • | | hours → *Go to Question 10 (e)*

10 (d) Excluding all overtime, how many paid hours do you usually work per week at this job?

| | | | | • | | hours

10 (e) How many hours of paid overtime do you usually work per week?

| | | | | • | | hours

> **Note:** If the number of overtime hours varies from week to week, please provide an average.

10 (f) How many hours of unpaid overtime do you usually work per week?

| | | | | • | | hours

> **Instruction:** If the answer to Question 10 (e) and Question 10 (f) are both zero, please *go to Question 11 (a)*.

10 (g) How far in advance do you usually know your overtime schedule?

1 ◯ Always known

2 ◯ More than one month (more than 31 days)

3 ◯ One month (22 to 31 days)

4 ◯ 3 weeks (15 to 21 days)

5 ◯ 2 weeks (8 to 14 days)

6 ◯ 1 to 7 days

7 ◯ Less than one day

11 (a) How many weeks per year do you usually work at this job? Please include vacation and other paid leave.

| | | • | | weeks

11 (b) How many months of the year do you usually work at this job?

⊔⊔⊔ • ⊔ months

---

12. Given your rate of pay, would you prefer to work:

^{1}◯ the same number of hours for the same pay? ➔ *Go to Question 13 (a)(i)*

^{2}◯ fewer hours for less pay?

^{3}◯ more hours for more pay? ➔ *Go to Question 12 (c)*

---

12 (a) By how many hours would you like to reduce your work week?

⊔⊔⊔⊔ • ⊔ hours

---

12 (b) Why would you prefer to work fewer hours? *(Check all that apply.)*

^{1}◯ Family responsibilities

^{2}◯ Work-related stress

^{3}◯ Other health reasons

^{4}◯ More leisure time

^{5}◯ Other, *specify* _____

} *Go to Question 13 (a)(i)*

---

12 (c) How many additional hours per week would you prefer to work at this job?

⊔⊔⊔⊔ • ⊔ hours

---

12 (d) What are the reasons you did not work these additional hours? *(Check all that apply.)*

^{1}◯ Own illness or disability

^{2}◯ Childcare unavailable

^{3}◯ Other personal or family responsibilities

^{4}◯ Going to school

^{5}◯ Additional hours not offered by employer

^{6}◯ Payment for additional hours not sufficient

^{7}◯ Transportation problems

^{8}◯ No reason

^{9}◯ Other, *specify* _____

The next few questions cover your general work arrangements with your employer.

Reminder: Unless you answered "No" in question A (XL), the questions refer to the job you held in March 2005.

---

13 (a)(i) In your usual work week, do you work each day from Monday to Friday?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

13 (a)(ii) Do you work at least 6 hours per day?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

13 (a)(iii) Do you usually work between the hours of 6 a.m. and 6 p.m.?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

13 (b) Are you on a reduced work week by special arrangement with your employer?

> **Note:** A special arrangement, is an agreement that was reached with your employer to work fewer hours every week.

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 13 (d)*

---

13 (c) Which of the following best describes that arrangement?

$^1\bigcirc$ Job sharing – you share a full-time job with another employee

$^2\bigcirc$ Work sharing – you and others are working reduced hours to avoid lay-offs

$^3\bigcirc$ Family responsibilities – childcare/eldercare limit your ability to work full time

$^4\bigcirc$ Physical problem/injury limits your ability to work full time

$^5\bigcirc$ Outside activities limit your ability to work full time

$^6\bigcirc$ Retirement transition schedule

$^7\bigcirc$ Other, *specify* _____

4-4700-2.1

13 (d) Do you work a compressed work week? (This means working longer hours each day to reduce the number of days in a work week.)

¹ ◯ Yes

³ ◯ No

Instruction: If you answered "No" to Questions 13 (a)(i), 13 (a)(ii) or 13 (a)(iii), then *go to Question 13 (e);* else *go to Question 13 (j).*

---

13 (e) How far in advance do you know your weekly hours of work?

¹ ◯ Always known

² ◯ More than one month (more than 31 days)

³ ◯ One month (22 to 31 days)

⁴ ◯ 3 weeks (15 to 21 days)

⁵ ◯ 2 weeks (8 to 14 days)

⁶ ◯ 1 to 7 days

⁷ ◯ Less than one day

13 (f) Do you usually work the same hours of the day?

¹ ◯ Yes

³ ◯ No

13 (g) Do you usually work the same days of the week?

¹ ◯ Yes

³ ◯ No

Instruction: If your answer to both questions 13 (f) and 13 (g) is "Yes", *go to Question 13 (j).*

---

13 (h) Are you on a work schedule of rotating shifts?

> **Note:** By rotating shift we mean that according to a known schedule, the hours of day or the days of week change.

¹ ◯ Yes

³ ◯ No → *Go to Question 13 (j)*

---

13 (i) How many different shifts do you work in a full rotation?

└─┴─┴─┘

13 (j) How many days a week do you usually work?

└─┘ • └─┘ days

Instruction: If you answered "Yes" to Questions 13 (a)(i), 13 (a)(ii) and 13 (a)(iii), *go to Question 14.*

---

13 (k) Does your usual work week include Saturday or Sunday?

¹◯ Yes

²◯ Varies, depends on shift

³◯ No

14. Do you work flexible hours? (This means you may work a certain number of core hours, but you can vary your start and stop times as long as you work the equivalent of a full work week.)

¹◯ Yes

³◯ No

15. Which of the following best describes your terms of employment in this job?

¹◯ Regular employee with no contractual or anticipated termination date ➔ *Go to Question 16*

²◯ Seasonal employee: my employment on this job is intermittent according to the season of the year ➔ *Go to Question 16*

³◯ Term employee: my term of employment has a set termination date ➔ *Go to Question 15 (a)*

⁴◯ Casual or on-call employee ➔ *Go to Question 16*

> **Note:** Casual or on-call employees are persons:
> − who may have hours of work that vary substantially from one week to the next;
> − who are called to work as the need arises, not on a pre-arranged schedule.

⁵◯ Other, *specify* _____ ➔ *Go to Question 16*

15 (a) What is the end date of this term of employment?

|_|_|_| Month |_|_|_|_| Year
01-12

---

16. In your usual work week, are:

$^1\bigcirc$ **all** of your duties carried **out at your workplace**?

$^2\bigcirc$ **most** of your duties carried out **outside of your workplace**?

$^3\bigcirc$ **some** of your duties carried out **outside of your workplace**?

$^4\bigcirc$ **all** of your duties carried out **outside of your workplace**?

---

17. Do you ever carry out the duties of this job at home?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➔ *Go to Question 18 (a)*

---

17 (a) Is your work at home mainly:

$^1\bigcirc$ paid and within your normally scheduled work hours?

$^2\bigcirc$ paid and in addition to your normally scheduled work hours?

$^3\bigcirc$ unpaid and in addition to your normally scheduled work hours?

---

17 (b) How many hours per week do you usually work at home?

|_|_|_| • |_| hours

---

17 (c) What is the main reason you work at home?

$^1\bigcirc$ Requirements of the job, finish projects, etc.

$^2\bigcirc$ Care for children

$^3\bigcirc$ Care for other family members

$^4\bigcirc$ Other personal or family responsibilities

$^5\bigcirc$ Usual place of work

$^6\bigcirc$ Better conditions of work

$^7\bigcirc$ Save time, money

$^8\bigcirc$ Other, *specify* _____

---

17 (d) Does your employer offer any type of equipment or supplies and/or reimbursement of costs for working at home?

^{1}◯ Yes

^{2}◯ No equipment or supplies required ➔ *Go to Question 18 (a)*

^{3}◯ No ➔ *Go to Question 18 (a)*

---

17 (e) For the work done at home, does the employer provide you with any of the following? *(Check all that apply.)*

^{1}◯ Computer hardware/software

^{2}◯ Internet access

^{3}◯ Modem/fax

^{4}◯ Cellular phone, pager, beeper

^{5}◯ Other equipment or supplies, *specify* _____

^{6}◯ Reimbursement of costs

Instruction: If you have been with this employer for less than twelve months, please answer the following questions for the period of time since you started this job. Otherwise, answer for the past twelve months.

---

18 (a) In the past twelve months/since you started this job, how many days of paid vacation leave have you taken?

⌷⌷⌷⌷ • ⌷⌷ days

---

18 (b) How many days of paid sick leave have you taken?

⌷⌷⌷⌷ • ⌷⌷ days

---

18 (c)(i) Have you taken any maternity/parental leave in the past twelve months/since you started this job?

^{1}◯ Yes

^{3}◯ No ➔ *Go to Question 18 (d)*

---

18 (c)(ii) How many days have you taken?

⌷⌷⌷⌷ • ⌷⌷ days

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18 (c)(iii) Did your employer provide supplementary maternity/parental benefits?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

18 (d) How many days of other paid leave have you taken (for example education leave, disability leave, bereavement, marriage, jury duty, union business)?

|__|__|__|__| • |__| days

---

18 (e) In the past twelve months/since you started this job, have you taken any unpaid leave?

$^1\bigcirc$ Yes

$^3\bigcirc$ No ➔ *Go to Question 18 (g)*

---

18 (f) How many days of unpaid leave have you taken?

|__|__|__|__| • |__| days

---

18 (g) How many days of paid vacation leave are you entitled to annually?

|__|__|__|__| • |__| days

---

19. In the past twelve months/since you started this job, have you been off work due to a lay-off, strike or lockout?

$^1\bigcirc$ Yes

$^3\bigcirc$ No ➔ *Go to Question 20*

---

19 (a) Were you off work due to layoffs?

$^1\bigcirc$ Yes

$^3\bigcirc$ No ➔ *Go to Question 19 (b)*

---

19 (a)(i) How many working days were you off due to lay-offs?

|__|__|__|__| • |__| days

OR

|__|__|__| • |__| weeks

> **Note:** Either days or weeks are to be entered, not both.

19 (b) Were you off work due to strikes?

^{1}◯ Yes

^{3}◯ No ➔ *Go to Question 19 (c)*

---

19 (b)(i) How many working days were you off due to strikes?

|__|__|__|__| • |__| days

OR

|__|__|__| • |__| weeks

(**Note:** Either days or weeks are to be entered, not both.)

---

19 (c) Were you off work due to lockouts?

^{1}◯ Yes

^{3}◯ No ➔ *Go to Question 20*

---

19 (c)(i) How many working days were you off due to lockouts?

|__|__|__|__| • |__| days

OR

|__|__|__| • |__| weeks

(**Note:** Either days or weeks are to be entered, not both.)

The next questions refer to your total period of employment with your employer, including all locations that they might operate.

---

20. Have you ever been promoted while working for this employer? (By promotion, we mean a change in duties/responsibilities that lead to both an increase in pay and the complexity or responsibility of the job.)

^{1}◯ Yes

^{3}◯ No ➔ *Go to Question 21*

20 (a) How many times have you been promoted?

⌊_⌊_⌊_⌋

20 (b) When did your most recent promotion occur?

⌊_⌊_⌋ Month   ⌊_⌊_⌊_⌊_⌋ Year
01-12

20 (c) Which of the following factors were important in earning that promotion? *(Check all that apply.)*

1 ◯ Experience gained at previous job

2 ◯ Seniority

3 ◯ Test or competitive process

4 ◯ Training or career development programs

5 ◯ Past performance evaluations

6 ◯ None

21. Is your job performance in your position evaluated by a standard process?

By standard process, we mean:
- Through a written report
- A private meeting with your supervisor
- A standard report

1 ◯ Yes

3 ◯ No ➔ *Go to Question 22*

21 (a) Do the results of your job evaluation directly affect your level of pay or benefits?

1 ◯ Yes

3 ◯ No

The next set of questions refers specifically to computers and other technologies you work with on the job.

Reminder: Unless you answered "No" in question A (XL), the questions refer to the job you held in March 2005.

22.	Do you use a computer in your job? Please exclude sales terminals, scanners, machine monitors, etc., these are covered in another question.

> **Note:** By a computer, we mean a microcomputer, mini-computer, personal computer, mainframe computer or laptop that can be programmed to perform a variety of operations.

^{1} ◯ Yes

^{3} ◯ No ➔ *Go to Question 22 (m) (EN); go to Question 23 (EL, ES, XL)*

22 (a) How many hours a week do you normally spend using a computer at your job? (By this we mean using or developing computer applications, rather than just having the computer turned on.)

⌞_⌟_⌟_⌟ • ⌞_⌟ hours

22 (b) When you first started this job, how many hours a week did you normally spend using a computer?

⌞_⌟_⌟_⌟ • ⌞_⌟ hours

22 (c) What types of applications do you use? *(Check all that apply.)*

> **Note:** Here we are interested in what the application does, not its name. If you are not sure about the applications, please refer to the list provided at the end of the questionnaire.

^{01} ◯ Word processors

^{02} ◯ Spreadsheets

^{03} ◯ Databases

^{04} ◯ Desktop publishing and form design

^{05} ◯ General management applications

^{06} ◯ Communications

^{07} ◯ Programming languages and development tools

^{08} ◯ Specialized office applications

^{09} ◯ Data analysis

^{10} ◯ Graphics and presentations

^{11} ◯ Computer-aided design

^{12} ◯ Computer-aided engineering

^{13} ◯ Expert systems

^{14} ◯ Other, *specify* _____

Instruction: If only one application is used, *go to Question 22 (e)*.

22 (d) Which of these applications do you use the most, in terms of time? Please enter the corresponding code, as printed to the left of the circle in Question 22 (c).

Type of application code: |___|___|___|

22 (e) How many hours a week do you normally spend using this application?

|___|___|___|___| • |___| hours

22 (f) How did you learn this application? *(Check all that apply.)*

[1] ◯ Self-learning (manuals, books, on-line tutorials, etc.)

[2] ◯ Employer-paid formal training

[3] ◯ Self-paid formal training

[4] ◯ On-the-job training (co-workers, supervisors, resource people, friends)

[5] ◯ University or community college courses

[6] ◯ Other, *specify* _____

Instruction: If only one method of learning application is given then *go to Question 22 h).*

22 (g) What method was the most helpful in learning this application?

[1] ◯ Self-learning (manuals, books, on-line tutorials, etc.)

[2] ◯ Employer-paid formal training

[3] ◯ Self-paid formal training

[4] ◯ On-the-job training (co-workers, supervisors, resource people, friends)

[5] ◯ University or community college courses

[6] ◯ Other, *specify* _____

22 (h) Did you learn more:

[1] ◯ on company time?

[2] ◯ on your own time?

[3] ◯ About equally on company and own time

Instruction: If only one application is used: *go to Question 22 (m) (EN), go to Question 23 (EL, ES, XL).*

22 (i) Which of the other applications do you use the second most, in terms of time?

Please enter the corresponding code, as printed to the left of the circle in Question 22 (c)

Type of application code: |___|___|___|

22 (j) How many hours a week do you normally spend using this second application?

|___|___|___|___| • |___| hours

Instruction: If only two applications are used: *go to Question 22 (m) (EN), go to Question 23 (EL, ES, XL).*

22 (k) Which of the other applications do you use the third most, in terms of time?

Please enter the corresponding code, as printed to the left of the circle in Question 22 (c).

Type of application code: |___|___|___|

22 (l) How many hours a week do you normally spend using this third application?

|___|___|___|___| • |___| hours

Instruction: *Continue with Question 22 (m) (EN). Go to Question 23 (EL, ES, XL).*

22 (m) Considering all jobs you have held, how many years have you used a computer in a work environment?

|___|___| years

23. Do you use a computer-controlled or computer-assisted technology in the course of your normal duties? For example, industrial robots, retail scanning systems, etc.

^{1}◯ Yes

^{3}◯ No ➔ *Go to Question 23 (f)*

23 (a) What type of computer-controlled or computer-assisted technology do you use the most?

_____

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23 (a)(i) How many hours a week do you normally spend using this technology?

|_|_|_|_| • |_| hours

23 (b) What method was the most helpful in learning to use that technology?

^{1}◯ On-the-job training (co-workers, supervisors, resource people, friends)

^{2}◯ Employer-paid formal training

^{3}◯ Self-learning (manuals, books, on-line tutorials, etc.)

^{4}◯ Self-paid formal training

^{5}◯ University or community college courses

^{6}◯ Other, *specify* _____

23 (c) Has there been an upgrade or change in that technology in the past twelve months?

^{1}◯ Yes

^{3}◯ No → *Go to Question 23 (f)*

23 (d) Did you receive any informal or formal training related to that change in technology?

^{1}◯ Yes

^{3}◯ No → *Go to Question 23 (f)*

23 (e) Approximately how many days did you spend on that training? Include only the time actually spent in training sessions.

|_|_|_| • |_| days

23 (f) Do you use any other machine or technological device for at least one hour a day in the course of your normal duties? This question is meant to be inclusive and would include, for example, cash registers, sales terminals, typewriters, vehicles and industrial machinery.

^{1}◯ Yes

^{3}◯ No → *Go to Question 24*

Note: Do not include the car that you drive for work unless it requires a special permit.

23 (g) What machine(s) or technological device(s) do you use for at least one hour a day? If you use more than three, please report the three you use the most, in terms of time.

1 _____

2 _____

3 _____

23 (g)(i) How many hours a week do you normally spend with the first device or machine you reported in Question 23 (g)?

⌊_⌊_⌊_⌊_⌋ • ⌊_⌋ hours

Instruction: If you reported only one machine or device in Question 23 (g), *please go to Question 23 (h)*.

23 (g)(ii) How many hours a week do you normally spend with the second machine or device you reported in Question 23 (g)?

⌊_⌊_⌊_⌊_⌋ • ⌊_⌋ hours

Instruction: If you reported only two machines or devices in Question 23 (g), *please go to Question 23 (h)*.

23 (g)(iii) How many hours a week do you normally spend with the third machine or device you reported in Question 23 (g)?

⌊_⌊_⌊_⌊_⌋ • ⌊_⌋ hours

23 (h) Thinking of the machine or technological device you use the most, what has been the most helpful learning method to use that technology?

¹ ◯ On-the-job training (co-workers, supervisors, resource people, friends)

² ◯ Employer-paid formal training

³ ◯ Self-learning (manuals, books, on-line tutorials, etc.)

⁴ ◯ Self-paid formal training

⁵ ◯ University or community college courses

⁶ ◯ Other, *specify* _____

23 (i) Has there been an upgrade or change in that technology in the past twelve months?

   ¹◯ Yes

   ³◯ No ➔ *Go to Question 24*

23 (j) Did you receive any informal or formal training related to that change in technology?

   ¹◯ Yes

   ³◯ No ➔ *Go to Question 24*

23 (k) Approximately how many days did you spend on that training? Include only the time actually spent in training sessions.

   |_|_|_|_| • |_| days

24. Since you started this job, has the overall technological complexity:

   ¹◯ remained about the same?

   ²◯ increased?

   ³◯ decreased?

The next few questions deal with job-related training provided or paid by your employer.

Reminder: Unless you answered "No" in question A (XL), the questions refer to the job you held in March 2005.

---

25. In the past twelve months, have you received any classroom training related to your job?

¹ ◯ Yes

³ ◯ No → *Go to Question 25 (d)*

Classroom training includes:
- All training activities which have a predetermined format, including a pre-defined objective
- Specific content
- Progress may be monitored and/or evaluated

---

25 (a) How many different training courses have you taken in the last twelve months?

⌷⌷⌷

---

25 (b)(i) What was the main subject of the last course you completed?

01 ◯ Orientation for new employees

02 ◯ Managerial/supervisory training

03 ◯ Professional training

04 ◯ Apprenticeship training

05 ◯ Sales and marketing training

06 ◯ Computer hardware

07 ◯ Computer software

08 ◯ Other office or non-office equipment

09 ◯ Group decision-making or problem-solving

10 ◯ Team building, leadership, communication

11 ◯ Occupational health and safety, environmental protection

12 ◯ Literacy or numeracy

13 ◯ Other, *specify* _____

---

25 (b)(ii)	How long was the course? (Include only the time actually spent in training sessions.)

⊔⊔⊔⊔ • ⊔ days   → *Go to Question 25 (b) (ii) (a)*

OR

⊔⊔⊔⊔ • ⊔ hours   → *Go to Question 25 (b) (iii)*

---

25 (b)(ii) (a) How many hours per day?

⊔⊔⊔ • ⊔ hours

---

25 (b)(iii) Did the training take place at your workplace?

¹ ◯ Yes, entirely

² ◯ Partly

³ ◯ No, always elsewhere

---

25 (b)(iv) Did the training take place during your normal working hours?

¹ ◯ Yes

² ◯ Partly

³ ◯ No

---

25 (b)(v) Who provided the training sessions? *(Check all that apply.)*

¹ ◯ Supervisor

² ◯ Fellow worker

³ ◯ In-house trainer

⁴ ◯ Outside trainer

⁵ ◯ Supplier

⁶ ◯ Other, *specify* _____

---

25 (b)(vi) To what extent are you using the skills or knowledge acquired in this training at work?

¹ ◯ To a great extent

² ◯ Somewhat

³ ◯ Not at all

Instruction: If the answer to Question 25 (a) is 01, *go to Question 25 (d)*.

25 (c)(i) What was the main subject of the second most recent course you completed?

- 01 ◯ Orientation for new employees
- 02 ◯ Managerial/supervisory training
- 03 ◯ Professional training
- 04 ◯ Apprenticeship training
- 05 ◯ Sales and marketing training
- 06 ◯ Computer hardware
- 07 ◯ Computer software
- 08 ◯ Other office or non-office equipment
- 09 ◯ Group decision-making or problem-solving
- 10 ◯ Team building, leadership, communication
- 11 ◯ Occupational health and safety, environmental protection
- 12 ◯ Literacy or numeracy
- 13 ◯ Other, *specify* _____

25 (c)(ii) How long was the course? (Include only the time actually spent in training sessions.)

⌊_⌊_⌊_⌊_⌋ • ⌊_⌋ days → *Go to Question 25 (c) (ii) (a)*

OR

⌊_⌊_⌊_⌊_⌋ • ⌊_⌋ hours → *Go to Question 25 (c) (iii)*

25 (c)(ii) (a) How many hours per day?

⌊_⌊_⌋ • ⌊_⌋ hours

25 (c)(iii) Did the training take place at your workplace?

- 1 ◯ Yes, entirely
- 2 ◯ Partly
- 3 ◯ No, always elsewhere

25 (c)(iv) Did the training take place during your normal working hours?

- 1 ◯ Yes
- 2 ◯ Partly
- 3 ◯ No

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25 (c)(v) Who provided the training sessions? *(Check all that apply.)*

- ¹ ◯ Supervisor
- ² ◯ Fellow worker
- ³ ◯ In-house trainer
- ⁴ ◯ Outside trainer
- ⁵ ◯ Supplier
- ⁶ ◯ Other, *specify* _____

25 (c)(vi) To what extent are you using the skills or knowledge acquired in this training at work?

- ¹ ◯ To a great extent
- ² ◯ Somewhat
- ³ ◯ Not at all

25 (d) In the past twelve months, have you received any informal training related to your job (that is on-the-job training)?

- ¹ ◯ Yes
- ³ ◯ No ➔ *Go to Question 26*

25 (d)(i) What were the main subjects of the on-the-job training? *(Check all that apply.)*

- 01 ◯ Orientation for new employees
- 02 ◯ Managerial/supervisory training
- 03 ◯ Professional training
- 04 ◯ Apprenticeship training
- 05 ◯ Sales and marketing training
- 06 ◯ Computer hardware
- 07 ◯ Computer software
- 08 ◯ Other office or non-office equipment
- 09 ◯ Group decision-making or problem-solving
- 10 ◯ Team building, leadership, communication
- 11 ◯ Occupational health and safety, environmental protection
- 12 ◯ Literacy or numeracy
- 13 ◯ Other, *specify* _____

25 (d)(ii) In the past twelve months, how much time in total was spent for on-the-job training? (Include only the time actually spent in training.)

|__|__|__| • |__| days   → *Go to Question 25 (d) (ii) (a)*

OR

|__|__|__| • |__| hours   → *Go to Question 25 (d) (iii)*

---

25 (d)(ii) (a) How many hours per day?

|__|__| • |__| hours

---

25 (d)(iii) Who provided the training? *(Check all that apply.)*

¹ ◯ Self-learning (manuals, books, on-line tutorials, etc.)

² ◯ Supervisor

³ ◯ Fellow worker

⁴ ◯ In-house trainer

⁵ ◯ Outside trainer

⁶ ◯ Equipment supplier

⁷ ◯ Other, *specify* _____

---

25 (d)(iv) To what extent are you using the skills or knowledge acquired in this training at work?

¹ ◯ To a great extent

² ◯ Somewhat

³ ◯ Not at all

---

26. In the past twelve months, was there job-related training offered to you that you decided not to take?

¹ ◯ Yes

³ ◯ No   → *Go to Question 26 (b)*

26 (a) What was the main reason you decided not to take that training?

$^1\bigcirc$ Too busy with my duties on the job

$^2\bigcirc$ Courses not suitable (I already have the skills, heard bad things about the course, etc.)

$^3\bigcirc$ Course too difficult

$^4\bigcirc$ Health reasons

$^5\bigcirc$ Family responsibilities

$^6\bigcirc$ Too old, too late in career

$^7\bigcirc$ Other, *specify* _____

---

26 (b) In the past twelve months, has your employer paid for or otherwise helped you to take courses, outside of your paid working hours, that were **not directly job-related**? (The objectives of these courses being for career development, not just interest.)

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 27*

---

26 (c) How many such courses has your employer helped you to take in the past twelve months?

[| |]

---

26 (d) Speaking of the most recent course, what was (were) the goal(s) of that course? *(Check all that apply.)*

$^1\bigcirc$ Working towards a trade or vocational certificate or diploma

$^2\bigcirc$ Working towards a degree or diploma

$^3\bigcirc$ Working towards a professional designation

$^4\bigcirc$ Increase literacy or numeracy skill

$^5\bigcirc$ Other, *specify* _____

---

26 (e) Who paid for this course? *(Check all that apply.)*

$^1\bigcirc$ My employer

$^2\bigcirc$ Myself (the employee)

$^3\bigcirc$ Another organization

27. In the past twelve months, have you taken any courses that were not sponsored by your employer but were career-related? (Excluding courses taken for personal interest).

¹ ◯ Yes

³ ◯ No → *Go to Question 28*

---

27 (a) How many different courses have you taken in the last twelve months?

⌊__⌊__⌊__⌋

---

27 (b)(i) What was the main subject of the last course you completed?

01 ◯ Managerial/supervisory training

02 ◯ Professional training

03 ◯ Apprenticeship training

04 ◯ Sales and marketing training

05 ◯ Computer hardware

06 ◯ Computer software

07 ◯ Other office or non-office equipment

08 ◯ Group decision-making or problem-solving

09 ◯ Team building, leadership, communication

10 ◯ Occupational health and safety, environmental protection

11 ◯ Literacy or numeracy

12 ◯ Other, *specify* _____

---

27 (b)(ii) How long was the course? (Include only the time actually spent in training sessions.)

⌊__⌊__⌋ • ⌊__⌋ days → *Go to Question 27 (b) (ii) (a)*

OR

⌊__⌊__⌊__⌊__⌋ • ⌊__⌋ hours → *Go to Question 27 (c) (i)*

---

27 (b)(ii) (a) How many hours per day?

⌊__⌊__⌋ • ⌊__⌋ hours

Instruction: If the answer to Question 27 (a) is 01, *go to Question 28*.

27 (c)(i)	What was the main subject of the second most recent course you completed?
	01 ◯ Managerial/supervisory training
	02 ◯ Professional training
	03 ◯ Apprenticeship training
	04 ◯ Sales and marketing training
	05 ◯ Computer hardware
	06 ◯ Computer software
	07 ◯ Other office or non-office equipment
	08 ◯ Group decision-making or problem-solving
	09 ◯ Team building, leadership, communication
	10 ◯ Occupational health and safety, environmental protection
	11 ◯ Literacy or numeracy
	12 ◯ Other, *specify* _____
27 (c)(ii)	How long did the course last? (Include only the time actually spent in training sessions.)
	⊔⊔⊔⊔ • ⊔ days → *Go to Question 27 (c) (ii) (a)*
	OR
	⊔⊔⊔⊔ • ⊔ hours → *Go to Question 28*
27 (c)(ii) (a)	How many hours per day?
	⊔⊔⊔ • ⊔ hours
28.	Since you began working in your job, have the overall skill requirements of the position:
	1 ◯ increased?
	2 ◯ remained about the same?
	3 ◯ decreased?
29.	Since you began working for this company, has the amount of training available to employees:
	1 ◯ increased?
	2 ◯ remained about the same?
	3 ◯ decreased?
30.	Would you say that the amount of training that you take is:
	1 ◯ about right for the demands of the job?
	2 ◯ too little for the demands of the job?
	3 ◯ too much for the demands of the job?
	4 ◯ Not applicable, no training required

The next questions are about your reading, writing and mathematics activities at your job – whether these activities are done on paper or on computer.

30 (a) How often do you read or use information from one of the following as part of your job? Would you say at least once a week, less than once a week, rarely or never?

	At least once a week	Less than once a week	Rarely	Never
A. Letters, memos or e-mails	○	○	○	○
B. Reports, articles, magazines or journals	○	○	○	○
C. Manuals or reference books including catalogues	○	○	○	○
D. Diagrams or schematics	○	○	○	○
E. Directions or instructions	○	○	○	○
F. Bills, invoices, spreadsheets or budgets tables spreadsheets	○	○	○	○

30 (b) Think about the importance of reading activities in relation to all of your other workplace activities. Would they be...

1 ○ Just as important as all of your other activities?

2 ○ Less important than all of your other activities?

3 ○ More important than all of your other activities?

30 (c) How often do you write or fill out each of the following as part of your job? Would you say at least once a week, less than once a week, rarely or never?

	At least once a week	Less than once a week	Rarely	Never
A. Letters, memos or e-mails	◯	◯	◯	◯
B. Reports, articles, magazines or journals	◯	◯	◯	◯
C. Manuals or reference books including catalogues	◯	◯	◯	◯
D. Diagrams or schematics	◯	◯	◯	◯
E. Directions or instructions	◯	◯	◯	◯
F. Bills, invoices, spreadsheets or budgets tables spreadsheets	◯	◯	◯	◯

30 (d) How often do you do each of the following as part of your job? Would you say at least once a week, less than once a week, rarely or never?

	At least once a week	Less than once a week	Rarely	Never
A. Measure or estimate the size or weight of objects	◯	◯	◯	◯
B. Calculate prices, costs, or budgets	◯	◯	◯	◯
C. Count or read numbers to keep track of things	◯	◯	◯	◯
D. Manage time or prepare timetables	◯	◯	◯	◯
E. Give or follow directions or use maps or street directions	◯	◯	◯	◯
F. Use statistical data to reach conclusions	◯	◯	◯	◯

The next few questions deal with employee participation in decisions regarding the workplace.

Reminder: Unless you answered "No" in question A (XL), the questions refer to the job you held in March 2005.

Although a program or policy may exist somewhere in your workplace, we are only interested in those that apply directly to you.

If the answer to any of questions 31 (a) to 31 (d) is "always", answer "frequently".

31 (a) How frequently are you asked to complete employee surveys?

- ^{1}◯ Never
- ^{2}◯ Occasionally
- ^{3}◯ Frequently

31 (b) How frequently do you participate in an employee suggestion program or regular meetings in which you offer suggestions to your superiors regarding areas of work that may need improvement?

- ^{1}◯ Never
- ^{2}◯ Occasionally
- ^{3}◯ Frequently

31 (c) How frequently do you participate in a job rotation or cross-training program where you work or are trained on a job with different duties than your regular job?

- ^{1}◯ Never
- ^{2}◯ Occasionally
- ^{3}◯ Frequently

31 (d) How frequently are you informed (through meetings, newsletters, e-mail or Internet) about overall workplace performance, changes to workplace organization or the implementation of new technology?

- ^{1}◯ Never
- ^{2}◯ Occasionally
- ^{3}◯ Frequently

31 (e) How frequently do you participate in a task team or labour-management committee that is concerned with a broad range of workplace issues?

> **Note:** Task teams and labour-management committees make recommendations to line managers on such issues as safety, quality, scheduling, training and personal development programs.

¹ ◯ Never

² ◯ Occasionally

³ ◯ Frequently

⁴ ◯ Always

31 (f) How frequently do you participate in a team or circle concerned with quality or work flow issues?

¹ ◯ Never

² ◯ Occasionally

³ ◯ Frequently

⁴ ◯ Always

31 (g) How frequently are you part of a self-directed work group (or semi-autonomous work group or mini-enterprise group) that has a high level of responsibility for a particular product or service area? In such systems, part of your pay is normally related to group performance.

(Self-directed work groups:

- Are responsible for production of a fixed product or service, and have a high degree of autonomy in how they organize themselves to produce that product or service.
- Act almost as "businesses within businesses".
- Often have incentives related to productivity, timeliness and quality.
- While most have a designated leader, other members also contribute to the organization of the group's activities.)

¹ ◯ Never

² ◯ Occasionally

³ ◯ Frequently

⁴ ◯ Always

These questions cover the availability and use of practices that aim to help employees balance their careers and personal lives.

32.	Does your employer offer personal support or family services such as childcare, employee assistance, eldercare, fitness and recreation services or other types of services?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➔ *Go to Question 33*

32 (a)	Does your employer offer help for <u>childcare</u> either through an on-site centre or assistance with external suppliers or informal arrangements?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➔ *Go to Question 32 (b)*

32 (a)(i)	Did you use this help within the past twelve months?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

32 (b)	Does your employer offer <u>employee assistance</u> such as counselling, substance abuse control, financial assistance, legal aid, etc.?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➔ *Go to Question 32 (c)*

32 (b)(i)	Did you use these services within the past twelve months?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

32 (c)	Does your employer offer help with <u>eldercare</u> services?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➔ *Go to Question 32 (d)*

32 (c)(i) Did you use this help within the past twelve months?

    ¹◯ Yes

    ³◯ No

---

32 (d) Does your employer offer <u>fitness and recreation</u> services (on-site or off-site)?

    ¹◯ Yes

    ³◯ No   ➜ *Go to Question 32 (e)*

---

32 (d)(i) Did you use this service within the past twelve months?

    ¹◯ Yes

    ³◯ No

---

32 (e) Does your employer offer <u>other</u> personal support or family services?

    ¹◯ Yes

    ³◯ No   ➜ *Go to Question 33*

---

32 (e)(i) Please specify the type of service

    _____

---

32 (e)(ii) Did you use this service within the past twelve months?

    ¹◯ Yes

    ³◯ No

33.   In your job, are you a member of a union or covered by a collective bargaining agreement?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

34.   Is there a dispute, complaint, or grievance system in your workplace?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➜ *Go to Question 35 (a)*

---

34 (a)   Have you had a dispute, complaint or grievance in the past twelve months?

$^1\bigcirc$ Yes

$^3\bigcirc$ No   ➜ *Go to Question 35 (a)*

---

34 (b)   What mechanisms were used to address your dispute, complaint, or grievance?   *(Check all that apply.)*

$^1\bigcirc$ Informally addressed by manager/supervisor

$^2\bigcirc$ Management committee

$^3\bigcirc$ Labour-management committee

$^4\bigcirc$ Outside arbitrator

$^5\bigcirc$ Other, *specify* _____

---

34 (c)   Has the situation improved?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

The next few questions deal with your earnings in your job.

Reminder: Unless you answered "No" in question A (XL), the questions refer to the job you held in March 2005.

---

35 (a) In your job, are you paid by the hour?

¹ ◯ Yes ➔ *Go to Question 35 (c)*

³ ◯ No

---

35 (b) What is the easiest way for you to report your wage or salary, before taxes and other deductions? Would it be:

² ◯ daily

³ ◯ weekly

⁴ ◯ every two weeks

⁵ ◯ twice a month

⁶ ◯ monthly

⁷ ◯ yearly

⁸ ◯ other, *specify* _____

---

35 (c) What is your wage or salary, before taxes and other deductions?

$ |__|__|__|__|__|__|__|__| • |__|__|

Instruction: If you have been in this job for less than twelve months, please answer the following questions for the period of time since you started this job. Otherwise, answer for the past twelve months.

---

36 (b) Did you receive overtime payments in the past twelve months/since you started this job?

¹ ◯ Yes

³ ◯ No ➔ *Go to Question 36 (c)*

---

36 (b)(i) What were your total earnings from overtime payments for that period?

$ |__|__|__|__|__|__|__|__| • |__|__|

---

36 (b)(ii) Were these earnings included in the wage or salary reported in question 35 (c)?

¹ ◯ Yes

³ ◯ No

---

36 (c) Did you receive any tips, commissions or piecework payments in the past twelve months/since you started this job?

    ¹◯ Yes

    ³◯ No   → *Go to Question 36 (d)*

---

36 (c)(i) What were your total earnings from tips, commissions or piecework payments for that period?

    $ |__|__|__|__|__|__|__|__| • |__|__|

---

36 (c)(ii) Were these earnings included in the wage or salary reported in question 35 (c)?

    ¹◯ Yes

    ³◯ No

---

36 (d) Did you receive any productivity-related bonuses, profit-sharing or profit-related bonuses in the past twelve months/since you started this job?

    ¹◯ Yes

    ³◯ No   → *Go to Question 36 (e)*

---

36 (d)(i) What were your total earnings from productivity-related bonuses, profit-sharing or profit-related bonuses for that period?

    $ |__|__|__|__|__|__|__|__| • |__|__|

---

36 (d)(ii) Were these earnings included in the wage or salary reported in question 35 (c)?

    ¹◯ Yes

    ³◯ No

---

36 (e) Did you receive any other bonuses in the past twelve months/since you started this job?

    ¹◯ Yes *specify* _____

    ³◯ No   → *Go to Question 37*

---

36 (e)(i) What were your total earnings from other bonuses for that period?

    $ |__|__|__|__|__|__|__|__| • |__|__|

---

36 (e)(ii) Were these earnings included in the wage or salary reported in question 35 (c)?

    ¹◯ Yes

    ³◯ No

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The following questions cover the non-salary benefits related to this job.

37. Does your employer have any non-wage benefits such as pension plan, life insurance or dental plan?

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 38*

---

37 (a) Do you participate in an employer-sponsored pension plan? (This does not include CPP/QPP or group RRSPs.)

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

37 (a)(i) In your company, is this benefit:

$^1\bigcirc$ Mandatory?

$^2\bigcirc$ Optional?

$^3\bigcirc$ Not available?

---

37 (b) Do you participate in a group RRSP?

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 37 (b)(ii)*

---

37 (b)(i) Does your employer contribute to this plan?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

37 (b)(ii) In your company, is this plan:

$^1\bigcirc$ Mandatory?

$^2\bigcirc$ Optional?

$^3\bigcirc$ Not available?

---

37 (c) In your job, do you participate in a life and/or disability insurance plan?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

37 (c)(i) In your company, are these benefits:

    ¹◯ Mandatory?

    ²◯ Optional?

    ³◯ Not available?

---

37 (d) Do you participate in a supplemental medical insurance plan?

    ¹◯ Yes

    ³◯ No

> **Note:** Examples: Drug co-payment plans, hospital stay co-payment plans, hearing-impaired benefit plan, vision care and other medical benefits not covered by provincial health plans.

---

37 (d)(i) In your company, is this benefit:

    ¹◯ Mandatory?

    ²◯ Optional?

    ³◯ Not available?

---

37 (e) Do you participate in a dental plan?

    ¹◯ Yes

    ³◯ No

---

37 (e)(i) In your company, is this benefit:

    ¹◯ Mandatory?

    ²◯ Optional?

    ³◯ Not available?

---

37 (f) Does your employer offer supplements to Employment Insurance benefits for maternity/parental leave or lay-offs?

    ¹◯ Yes

    ³◯ No

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37 (g)   In your job, do you participate in a stock purchase plan?

   ^{1}◯ Yes

   ^{3}◯ No   ➜ *Go to Question 38*

---

37 (g)(i) Does your employer contribute to this plan or offer discounts on stock purchases?

   ^{1}◯ Yes

   ^{3}◯ No

---

38.   Considering all aspects of this job, how satisfied are you with the job? Would you say that you are:

   ^{1}◯ very satisfied?

   ^{2}◯ satisfied?

   ^{3}◯ dissatisfied?

   ^{4}◯ very dissatisfied?

---

39.   Considering the duties and responsibilities of this job, how satisfied are you with the pay and benefits you receive? Would you say that you are:

   ^{1}◯ very satisfied?

   ^{2}◯ satisfied?

   ^{3}◯ dissatisfied?

   ^{4}◯ very dissatisfied?

Instruction: If your job title and your most important activities or duties have not changed (ES), *go to Question 42.*

   If this is your first year responding to this questionnaire (EN), then *go to Question 40.*
   Otherwise, *go to Section X9* Job Comparisons Questions X40 (a) to X41 (d) (EL, XL).

X40 (a) In comparison to all the aspects of your previous job, is your new job:

^{1}◯ better?

^{2}◯ about the same?

^{3}◯ worse?

X41 (a) Please indicate whether you think your working conditions are better, about the same or worse in your new job compared to the previous job you held.

General Working Conditions	Better	About the same	Worse	No opinion	Not applicable
A. Availability of flexible working arrangements (e.g. compressed work week, flexible hours, work at home, other flexible arrangements)	◯	◯	◯	◯	◯
B. Usual work hours		◯	◯	◯	◯
C. Availability of overtime	◯	◯	◯	◯	◯
D. Availability of job or work sharing arrangements	◯	◯	◯	◯	◯
E. Availability of personal and family support programs (e.g. childcare, employee assistance, eldercare, other types of services)	◯	◯	◯	◯	◯

X41 (b) Please specify any other working conditions that contributed to your decision to change jobs.

_____

_____

X41 (c) Please indicate whether you think your job opportunities are better, about the same or worse in your new job compared to the previous job you held.

Job Opportunities	Better	About the same	Worse	No opinion	Not applicable
A. Opportunity for promotions	O	O	O	O	O
B. Access to computers and other technologies	O	O	O	O	O
C. Access to training and development	O	O	O	O	O
D. Opportunity for career change	O	O	O	O	O
E. Opportunity for employee participation (participating in decisions regarding the workplace)	O	O	O	O	O
F. Access to worker representation (e.g. member of a union, staff and professional association)	O	O	O	O	O
G. Salary increases	O	O	O	O	O
H. Job security	O	O	O	O	O
I. Bonuses/Profit sharing	O	O	O	O	O

X41 (d) Please specify any other factors that contributed to your changing of jobs.

_____

_____

Instruction: *Go to Question 42 (ES, EL, XL).*

40. Considering all jobs you have held, how many years of full-time working experience do you have?

| | | | | • | | | years

Instruction: If you have been working with this employer for more than 5 years, *please go to Question 42.*

40 (a) In the past five years, have you worked for any other employers, including yourself?

 ^{1}◯ Yes

 ^{3}◯ No → *Go to Question 40 (c)*

40 (b) How many other employers have you worked for in the past five years, including self-employment?

| | | |

40 (c) In that period, were you ever without work for more than two weeks when you were actively looking for work and not attending school on a full-time basis?

 ^{1}◯ Yes

 ^{3}◯ No → *Go to Question 40 (e)* if the answer to question 40 (a) is "Yes", otherwise, *go to Question 41.*

40 (d) During the past five years how many months, in total, have you been unemployed (without having necessarily received employment benefits)?

| | | | • | | | months

Instruction: If you reported "No" to Question 40 (a), then *go to Question 41.*

40 (e) Thinking about the last job you held before coming to work for your current employer, what was the main reason you left that job?

 ^{1}◯ Left for better pay, hours or career opportunities at current job

 ^{2}◯ Moved, immigrated, spouse relocated

 ^{3}◯ Returned to school

 ^{4}◯ Quit for any other reason

 ^{5}◯ Laid off: plant closure or business failure

 ^{6}◯ Laid off: business slowdown, restructuring, other reasons

 ^{7}◯ End of contract, seasonal or temporary position

 ^{8}◯ Left self-employment (sold business, own business failed, etc.)

 ^{9}◯ Other, *specify* _____

Instruction: If you have worked for your current employer for more than twelve months, *please go to Question 41.*

40 (f) What was your job title?

_____

_____

40 (g) In that last job, what were your most important activities or duties?

_____

_____

40 (h) How many months did you work for that employer?

|__|__|__| • |__| months

40 (i) About how many hours did you usually work per week in that job (including overtime)?

|__|__|__| • |__| hours

40 (j) What was your usual wage or salary before taxes and other deductions?

$ |__|__|__|__|__|__|__| • |__|__|

1 ◯ hourly

2 ◯ daily

3 ◯ weekly

4 ◯ every two weeks

5 ◯ twice a month

6 ◯ monthly

7 ◯ yearly

8 ◯ Other, *specify* _____

40 (k) In that last job you held, did you have an employer-sponsored pension plan?

1 ◯ Yes

3 ◯ No

40 (l) Did you use a computer in that job?

1 ◯ Yes

3 ◯ No

40 (m) In the last twelve months on that last job, did you receive any formal training sponsored by your employer?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

---

41. Immediately before starting with your present employer, were you:

$^1\bigcirc$ working at another job → *Go to Question 42*

$^2\bigcirc$ looking for work

$^3\bigcirc$ going to school → *Go to Question 42*

$^4\bigcirc$ working at home, raising family, etc. → *Go to Question 42*

$^5\bigcirc$ recuperating from illness or disability → *Go to Question 42*

$^6\bigcirc$ Other, *specify* _____ → *Go to Question 42*

---

41 (a) How many weeks were you looking for work?

☐☐☐☐ • ☐ weeks

---

42. Do you currently do any paid work for another employer?

> **Note:** This includes self-employed work.

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 43 (EN)*
       ↳ *Go to Question 45 (a) (ES, EL, XL)*

---

42 (a) How many hours a week do you usually work at that (these) job(s)?

Job 1 ☐☐☐ • ☐ hours

Job 2 ☐☐☐ • ☐ hours

---

42 (b) What are your approximate weekly earnings in that (these) job(s)?

Job 1 $ ☐☐☐☐☐☐☐ • ☐☐

Job 2 $ ☐☐☐☐☐☐☐ • ☐☐

Instruction : *Continue with Question 43 (EN). Go to Question 45 (a) (ES, EL, XL).*

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Finally, we would like to ask some general questions about you and your family.

---

43. In what year were you born?

⌊_⌊_⌊_⌊_⌋ Year

---

44. GENDER

¹◯ Male

²◯ Female

---

45 (a) What language do you most often use at work?

¹◯ English

²◯ French

³◯ Other, *specify* _____

---

45 (b) What language do you most often speak at home?

¹◯ English

²◯ French

³◯ Other, *specify* _____

Instruction: *Continue with Question 46 (EN). Go to Question 47 (ES, EL, XL, XS).*

---

46. Were you born in Canada?

¹◯ Yes → *Go to Question 47*

³◯ No

---

46 (a) In what year did you immigrate to Canada?

⌊_⌊_⌊_⌊_⌋ Year

---

46 (b) From what country did you emigrate?

Country _____

---

47. What is the highest grade of elementary or high school (secondary school) that you have completed?

Please report the highest grade, not the year when it was completed

⌊_⌊_⌋

---

48. Did you graduate from high school (secondary school)?

^{1} ◯ Yes

^{3} ◯ No

---

49. Have you received any other education?

^{1} ◯ Yes

^{3} ◯ No ➔ *Go to Question 51*

---

50. What was that education? *(Check all that apply.)*

Trade-vocational:

^{01} ◯ Trade or vocational diploma or certificate

College:

^{02} ◯ Some college, CEGEP, institute of technology or nursing school

^{03} ◯ Completed college, CEGEP, institute of technology or nursing school

University:

^{04} ◯ Some university

^{05} ◯ Teachers' college

^{06} ◯ University certificate or diploma below bachelor level

^{07} ◯ Bachelor or undergraduate degree or teachers' college (e.g. B.A., B.Sc., B.A.Sc., 4-year B.Ed.)

^{08} ◯ University certificate or diploma above bachelor level

^{09} ◯ Master's degree (M.A., M.Sc., M.Ed., MBA, MPA and equivalent)

^{10} ◯ Degree in medicine, dentistry, veterinary medicine, law, optometry or theology (M.D., D.D.S., D.M.D., D.V.M., LL.B., O.D., M.DIV.) or 1-year B.Ed. after another bachelor's degree

^{11} ◯ Earned doctorate

Other:

^{12} ◯ Industry certified training or certification courses

^{13} ◯ Other, *specify* _____

---

50 (a) What was the major field of study or training of your highest degree, certificate or diploma (excluding secondary or high school graduation certificates)?

_____

51. What is your current legal marital status?

    ¹ ◯ Legally married (and not separated) ➜ *Go to Question 53*

    ² ◯ Legally married and separated

    ³ ◯ Divorced

    ⁴ ◯ Widowed

    ⁵ ◯ Single (never married)

---

52. Are you currently living with a common-law partner?

    ¹ ◯ Yes

    ³ ◯ No

---

53. Do you have any dependent children?

    ¹ ◯ Yes

    ³ ◯ No ➜ *Go to Question 54 (a)*

---

53 (a) Please indicate their ages, starting with the youngest. If any children are less than one year old, record age as "01".

    1 |__|__| 2 |__|__| 3 |__|__| 4 |__|__|

    5 |__|__| 6 |__|__| 7 |__|__| 8 |__|__|

Instruction: If all children's ages are greater than 12, *go to Question 54 (a)*.

---

53 (b) Are any of your children in childcare (in the care of someone other than you or another legal guardian)? Please do not include regular school hours.

    ¹ ◯ Yes

    ³ ◯ No

Since the worker's well-being is related to the family's income as well as his/her own income, we would like to ask you a few questions about your immediate family's earnings and income. These questions refer only to those family members living in your household.

---

54 (a) Over the past twelve months what were the approximate **annual employment earnings** of all members of your immediate family (including yourself)?

    $ |__|__|__|__|__|__|__|__| • |__|__|

54 (b) Over the past twelve months what was your **family's approximate annual income from sources other than employment**? For example: pensions, investment income and social benefits. Please include your own income from sources other than employment.

$ | | | | | | | | | | • | | | |

Instructions : • *Continue with Question 55 (EN).*

• *If you are not a paid worker (XS), go to Question 57.*

• *If you are a paid worker (ES, EL, XL), go to Question 56 (a).*

---

55. Canadians come from many ethnic, cultural and racial backgrounds. From which groups did your parents or grandparents descend? *(Check all that apply.)*

01 ◯ Canadian

20 ◯ American

02 ◯ British (from England, Scotland, Ireland, etc.)

03 ◯ French

04 ◯ Any other European groups

05 ◯ Arab (from Egypt, Jordan, Lebanon, Iraq, etc.)

06 ◯ Black (from Africa, Caribbean, Haiti, U.S.A., Canada, etc.)

07 ◯ Chinese

08 ◯ East Indian (from India, Pakistan, East Africa, etc.)

09 ◯ Filipino

10 ◯ Inuit (Eskimo)

11 ◯ Japanese

12 ◯ Korean

13 ◯ Latin American (from Mexico, Central America or South America)

14 ◯ Métis

15 ◯ North American Indian (First Nations, Aboriginal persons, Native Peoples)

16 ◯ North African (from Egypt, Morocco, Algeria, etc.)

17 ◯ South East Asian (from Burma, Cambodia, Laos, Viet Nam, etc.)

18 ◯ West Asian (from Syria, Turkey, Afghanistan, Iran, etc.)

19 ◯ Other, *specify* _____

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56 (a) Does your employer have any recruitment or career programs for minority groups?

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 57*

56 (b) Have you ever participated in these programs?

$^1\bigcirc$ Yes

$^3\bigcirc$ No

Instruction: These questions refer to conditions or health problems that have lasted or are expected to last **six months or more.**

57. Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?

$^1\bigcirc$ Yes, sometimes

$^2\bigcirc$ Yes, often

$^3\bigcirc$ No

57 (a) Does a physical condition **or** mental condition **or** health problem **reduce the amount or the kind of** activity **you can do...**

A) At home?

$^1\bigcirc$ Yes, sometimes

$^2\bigcirc$ Yes, often

$^3\bigcirc$ No

Instruction: If you are not a paid worker (XS), *go to Question 57 (a) C).*

B) At work or at school?

$^1\bigcirc$ Yes, sometimes

$^2\bigcirc$ Yes, often

$^3\bigcirc$ No

$^4\bigcirc$ Not applicable

C) In other activities, for example, transportation or leisure?

$^1\bigcirc$ Yes, sometimes

$^2\bigcirc$ Yes, often

$^3\bigcirc$ No

Instructions: If you are new to this survey (EN) or if you have a different job (EL) or the same job (ES) as the previous year and you answered "1 or 2" to Question 57, then *continue with Question 58*; otherwise, *go to Question 59.*

If you are not a paid worker (XS) and you answered "1 or 2" to Question 57, then *go to Question 58 (b)*; otherwise, *go to the end of the interview.*

If you are a paid worker (XL) and you answered "1 or 2" to Question 57, then *continue with Question 58*; otherwise, *go to the end of the interview.*

---

58. Does your employer have any recruitment or career programs for employees with disabilities?

   ¹◯ Yes

   ³◯ No   → *Go to Question 58 (b)*

---

58 (a) Have you ever participated in these programs?

   ¹◯ Yes

   ³◯ No

---

58 (b) Do you need altered facilities or equipment aids to help accommodate your condition?

   ¹◯ Yes

   ³◯ No   → *Go to Question 59*

Instruction: If you are not a paid worker (XS), *go to Question 59.*

---

58 (c) Does your employer provide these altered facilities, equipment or aids to you?

   ¹◯ Yes

   ³◯ No

---

59. In case we have difficulty in reaching you next year, could you please give us the name and telephone number of a relative or someone we could call to obtain your telephone number

Last name _____

Given name _____

Telephone number (_____) _____

On behalf of Statistics Canada, we would like to thank you for taking the time to answer this survey.

Please use this list if you know the name of the application but you are not sure under which category it falls. The numbers correspond to the numbers to the left of the circles in Question 22 (c).

Access (database)	3	Lotus 1-2-3	2
Access (programming)	7	Management applications	5
Adabas (database)	3	Microsoft Office	4
Adabas (programming)	7	Microsoft Project	5
Ami Pro	1	MS-QUERY	9
Basic	7	MS-Write	1
C	7	Net Bui	6
C++	7	Netscape	6
Clipper	7	Oracle (database)	3
COBOL	7	Oracle (programming)	7
Communications	6	Orange	13
Compuserve	6	Other	14
Computer Aided Design	11	Outlook	6
Corel Draw	10	Outsideln	6
Correcteur 101	8	Pagemaker	4
Crystal Reports	4	Paradox (database)	3
Data Analysis	9	Paradox (programming)	7
Databases	3	PCTCP	6
DB-2	3	PerForm Pro	4
dBase (database)	3	PL/1	7
dBase (programming)	7	PM-Work Bench	5
DELPHI	7	PowerBuilder	7
Desktop Publishing	4	Power Play	9
Developer	12	Powerpoint	10
Development tool	7	Programming language	7
E-mail systems	6	Quattro Pro	2
Easycase	12	SAS (data analysis)	9
Excel	2	SAS (programming)	7
Excellerator	12	SGML	1
Extra!	6	SmallTalk	7
FAME	9	Spreadsheets	2
Form Design	4	SPSS	9
Fortran	7	SQL	7
Foxpro (database)	3	SQL Server	3
Foxpro (programming)	7	SQL Windows	7
Framemaker	4	Statgraphics	9
Freelance	10	StatPac	9
GML	1	STP	12
Graphics and presentation	10	SUDAAN	9
Harvard Graphics	10	Sybase	3
HTML (communications)	6	Systems Architect	12
HTML (programming)	7	Timeline	5
Hugo	8	Turbo Pascal	7
Internet	6	Ventura	4
Intranet	6	Visual Basic	7
JAVA (communications)	6	Word	1
JAVA (programming)	7	Wordperfect	1
Jetform	4	Wordpro	1
Lotus Smart Suite Integration	4	Wordprocessors	1
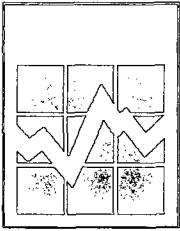
Business and Labour Market Analysis Division and
Labour Statistics Division
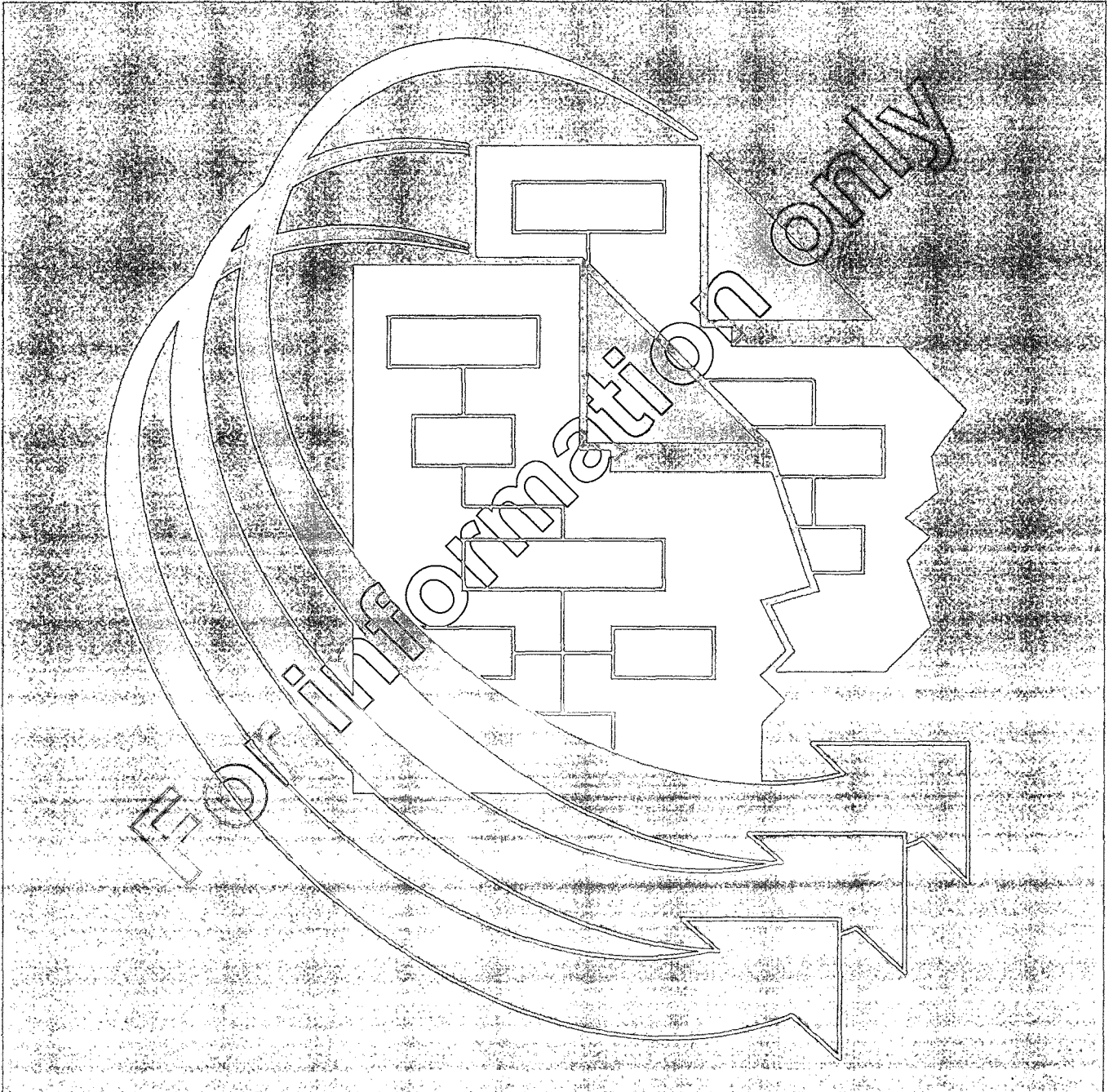
2005 Workplace and Employee Survey

Statistics   Statistique
Canada   Canada

Canada

Survey Objective

The Workplace and Employee Survey will provide valuable information on the "business of business" by looking at the practices that help firms succeed. It will poll Canadian employees and employers on a range of workplace concerns. Survey results will provide unique insight into the relationship between employment practices and firms' performance, as well as more in-depth information on the effect of technology, training and human resource practices.

Your Participation

The participation of your business to this survey is critical to ensure that the results are an accurate reflection of your industry, region, and the type of business. *Not all the questions will apply to every business.* As with most business surveys conducted by Statistics Canada, this survey is mandatory. We thank you for your understanding and support.

Confidentiality

The law protects what you tell us. Your information is kept strictly confidential. No one, not the courts, the Canada Customs and Revenue Agency, the RCMP or even the Canadian Security Intelligence Service (CSIS) can access your information. Your information cannot be made available under any other law such as the *Access to Information Act.*

We never release any information that could identify a particular individual or business without their consent.

Instructions

A Statistics Canada interviewer will contact you to arrange a convenient time to conduct a telephone interview.

This questionnaire is a working tool to inform you ahead of time of the questions that are being asked and to help you in preparing the answers.

You must not return this questionnaire by mail.

You need help?

We would be most happy to answer any questions you might have.

Please feel free to call. The telephone number is given in the included letter.

You may also visit Statistics Canada's web site at **www.statcan.ca.**

2005 Workplace and Employee Survey

Section A : Workforce Characteristics and Job Organization

This section includes questions relating to the characteristics of the employees at this location. (For the purpose of this survey, "location" refers to either a specific address or to all locations of the enterprise. Please consult the above label.) Include only paid employees of this location receiving a T4 slip *(not a T4a)* who work on-site, off-site (such as customer service representatives or telecommuters) and employees who are on paid leave *as well as temporary help and casual workers. (Do not include independent contractors in any of the answers provided in this section except in Question 1 (h) where the number of independent contractors is requested).*

1 (a) In the last pay period of March 2005 and March 2004 how many employees receiving a T4 slip were employed at this location? *(See Employee Category Definitions on page 39.)*

A. |___|___|___|___|___|___| March 2005   B. |___|___|___|___|___|___| March 2004

1 (a) (i) Of the total employment in March 2005 (as reported in **Question 1 (a)**), how many were male and how many were female?

A. |___|___|___|___|___|___| Males   B. |___|___|___|___|___|___| Females

1 (b) Of the total employment in March 2005 (as reported in **Question 1(a)**), how many were in the following categories?

A. Permanent[1] Full-time[3] employees |___|___|___|___|___|___|

B. Permanent Part-time[4] employees |___|___|___|___|___|___|

C. Total Permanent employees   (A+B=C) |___|___|___|___|___|___|

D. Non-permanent[2] Full-time employees |___|___|___|___|___|___|

E. Non-permanent Part-time employees |___|___|___|___|___|___|

F. Total Non-permanent employees   (D+E=F) |___|___|___|___|___|___|

G. Total number of employees reported in **Question 1(a)**   (C+F=1 (a)) |___|___|___|___|___|___|

1. Permanent employees are those who have no set termination date.
2. Non-permanent employees have a set termination date or a specific period of employment.
3. Full-time employees: working 30 or more hours per week.
4. Part-time employees: working less than 30 hours per week.

1 (c) Of the total employment in March 2005 (as reported in **Question 1(a)**), how many employees were covered by collective bargaining agreements at this location?

1 (d) Of the total employment in March 2005 (as reported in **Question 1(a)**), how many were in the following categories? *(See Employee Category Definitions on page 39.)*

If you reported 0 employees in **Question 1(c)** please skip column 3 – **Non-Management** (with collective bargaining agreement).

Total Number of Employees: • Include on-site and off-site employees	Management	Non-Management (no collective bargaining agreement)[3]	Non-Management (with collective bargaining agreement)[4]
A. Full-time [1]			
B. Part-time [2]			
C. Total (A + B = C)			

1. Full-time employees: working 30 or more hours per week.
2. Part-time employees: working less than 30 hours per week.
3. Employees other than managers who are not covered by a collective bargaining agreement.
4. Employees other than managers who are covered by a collective bargaining agreement.

If you reported 0 employees in **question 1 (d) C. Total – Non-Management (no collective bargaining agreement)**, *please go to question 1 (f)*.

1 (e) Of the total of *NON-MANAGEMENT EMPLOYEES NOT COVERED BY A COLLECTIVE AGREEMENT* reported in **Question 1(d) C.** how many were in the following categories? *(See Employee Category Definitions on page 39.)*

	Full-time	Part-time
A. Professionals		
B. Technical / Trades		
C. Marketing / Sales		
D. Clerical / Administrative		
E. Production workers with no trade / certification		
F. Other		

If there are no non-management employees covered by a collective bargaining agreement at this location **(Question 1 (d) C.)**, *please go to question 1 (g)*.

1 (f) Of the total of *NON-MANAGEMENT EMPLOYEES COVERED BY A COLLECTIVE AGREEMENT* reported in **Question 1(d) C.**, how many were in the following categories? *(See Employee Category Definitions on page 39.)*

	Full-time	**Part-time**
A. Professionals	|_|_|_|_|_|_|	|_|_|_|_|_|
B. Technical / Trades	|_|_|_|_|_|_|	|_|_|_|_|_|
C. Marketing / Sales	|_|_|_|_|_|_|	|_|_|_|_|_|
D. Clerical / Administrative	|_|_|_|_|_|_|	|_|_|_|_|_|
E. Production workers with no trade / certification	|_|_|_|_|_|_|	|_|_|_|_|
F. Other	|_|_|_|_|_|_|	|_|_|_|_|_|

1 (g) Of the total employment in March 2005 (as reported in **Question 1(a)**), how many were on-site or off-site employees?

A. On-site employees \|_\|_\|_\|_\|_\|_\|

B. At another workplace (off-site employees) \|_\|_\|_\|_\|_\|_\|

C. At home (off-site employees) \|_\|_\|_\|_\|_\|_\|

D. Total number of employees reported in Question 1(a) (A+B+C = Q1(a)) \|_\|_\|_\|_\|_\|_\|

1 (h) During the month of March 2005, how many independent contractors provided products or services to your location? Please include contract workers working at home. *(See Employee Category Definitions on page 39.)*

These contract workers should not have been reported in the previous Question 1(a) to Question 1(g).

A. At this workplace \|_\|_\|_\|_\|_\|_\|

B. Outside this workplace \|_\|_\|_\|_\|_\|_\|

2. Do you have seasonal peaks in employment?

[1] ◯ Yes

[3] ◯ No → *Go to Question 3*

2 (a) What is the maximum employment during that (these) peak(s)?

\|_\|_\|_\|_\|_\|_\|_\|

2 (b) During which months do they occur?

⁰¹ ○ January   ⁰⁷ ○ July

⁰² ○ February   ⁰⁸ ○ August

⁰³ ○ March   ⁰⁹ ○ September

⁰⁴ ○ April   ¹⁰ ○ October

⁰⁵ ○ May   ¹¹ ○ November

⁰⁶ ○ June   ¹² ○ December

Hiring

3. Were there any new employees hired **between April 1, 2004 and March 31, 2005** at this location? *(Please exclude the filling of positions through recalls from lay-offs or the ending of labour disputes.)*

[1] ○ Yes

[3] ○ No → *Go to Question 4 (a)*

3 (a) How many new employees did you hire **between April 1, 2004 and March 31, 2005** at this location?

(Please include only paid employees of this location receiving a T4 slip. Exclude the filling of positions through recalls from lay-offs or the ending of labour disputes.)

3 (b) How many new employees did you hire in each of the following categories **between April 1, 2004 and March 31, 2005?** *(See Employee Category Definitions on page 39.)*

A. Managers

B. Professionals

C. Technical / Trades

D. Marketing / Sales

E. Clerical / Administrative

F. Production workers with no trade / certification

G. Other, *specify* _____

Vacancies

4 (a) How are vacant positions **usually** filled? For all applicable categories, <u>check only the most frequently used method</u>. *(See Employee Category Definitions on page 39.)*

	From within the workplace	From another workplace within the same legal company or business enterprise	From outside the company
A. Same for all occupations	¹ ○	² ○	³ ○
B. Managers	¹ ○	² ○	³ ○
C. Professionals	¹ ○	² ○	³ ○
D. Technical / Trades	¹ ○	² ○	³ ○
E. Marketing / Sales	¹ ○	² ○	³ ○
F. Clerical / Administrative	¹ ○	² ○	³ ○
G. Production workers with no trade / certification	¹ ○	² ○	³ ○
H. Other, *specify* _____	¹ ○	² ○	³ ○

4 (b) At this location, are there any vacant positions that you are **currently** trying to fill?

¹ ○ Yes

³ ○ No → *Go to Question 5 (a)*

4 (c) In total, how many vacant positions are **currently** unfilled at this location?
(Exclude vacancies for work to be undertaken by independent contractors - See Employee Category Definitions on page 39)

4 (d) Of those unfilled positions reported in **Question 4 (c)**, how many have **remained vacant for four months or longer** in the following categories? *(See Employee Category Definitions on page 39.)*

	Number of positions that, despite active recruitment, have remained vacant for four months or longer	For each group with vacant positions for four months or longer, identify the reason(s) for the vacancies. *(Check all that apply.)*			
		Too few applicants	Most applicants lacked educational requirements	Most applicants lacked job experience	Most applicants declined job offer
A. Managers	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
B. Professionals	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
C. Technical / Trades	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
D. Marketing / Sales	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
E. Clerical / Administrative	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
F. Production workers with no trade / certification	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯
G. Other	⊔⊔⊔⊔⊔⊔	¹ ◯	² ◯	³ ◯	⁴ ◯

5 (a) Please estimate by reason the number of employees who have permanently left this location **between April 1, 2004 and March 31, 2005.** *(Please include only paid employees of this location receiving a T4 slip who have permanently left during this period and exclude laid-off employees who are expected to be recalled - See Employee Category Definitions on page 39).*

Reason   **Number of employees**

A. Resignations (No special incentives) | | | | | | | |

B. Lay-offs (No recall expected) [1] | | | | | | | |

C. Special workforce reductions [2] | | | | | | | |

D. Dismissal for cause | | | | | | | |

E. Retirement (No special incentives) | | | | | | | |

F. Other permanent separation, *specify* _____ | | | | | | | |

  1. Involuntary lay-offs with enhanced severance packages should be included with "Lay-offs (no recall expected)" Voluntary lay-offs with enhanced severance packages are considered to be Special workforce reductions.

  2. Special workforce reductions include resignations and early retirements induced through special financial incentives (i.e. where employees voluntarily leave).

5 (b) Were there any temporary lay-offs between **April 1, 2004 and March 31, 2005** at this location? *(By temporary lay-offs, we mean that all laid-off employees are expected to be recalled.)*

[1] ◯ Yes

[3] ◯ No   → *Go to Question 6 (a)*

5 (c) Please estimate the number of person-days that employees spent on temporary lay-off *(number of employees affected multiplied by the number of days laid off)* between **April 1, 2004 and March 31, 2005.**

| | | | | | | | | | | Number of person days

OR

| | | | | | Number of employees affected | | | | | Number of days laid off

This section focuses on wage and non-wage benefits and compensation practices.

6 (a) Does your compensation system include the following incentives?

	Yes	No
A. Individual incentive systems [1]	[1] ◯	[3] ◯
B. Group incentives systems [2]	[1] ◯	[3] ◯
C. Profit-sharing plan [3]	[1] ◯	[3] ◯
D. Merit pay or skill-based pay [4]	[1] ◯	[3] ◯
E. Employee stock plans [5]	[1] ◯	[3] ◯

1. **"Individual incentive systems"** such as bonuses, piece-rate and commissions are systems that reward individuals on the basis of individual output or performance.

2. **"Group incentives systems"** such as productivity /quality gain-sharing are systems that reward individuals on the basis of group output or performance.

3. **"Profit-sharing plan"** is any plan by which employees receive a share of the profits from the workplace.

4. **"Merit pay or skill-based pay"** is a reward or honour given for superior qualities, great abilities or expertise that comes from training, practice, etc.

5. **"Employee stock plans"** are employee stock purchase plans, ownership plans or stock options.

If you have answered "No" to all of these questions, *go to Question 7.*

6 (b) To which group of employees are these incentives offered? *(Check all that apply.)* *(See Employee Category Definitions on page 39.)*

Compensation	Individual incentive systems	Productivity / quality gain-sharing and other group incentives	Profit-sharing plan	Merit pay or skill-based pay	Employee stock plans
A. Same for all occupations	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
B. Managers	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
C. Professionals	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
D. Technical / Trades	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
E. Marketing / Sales	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
F. Clerical / Administrative	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
G. Production workers with no trade / certification	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
H. Other	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯

7. What was the total gross payroll for all employees at this location between **April 1, 2004 and March 31, 2005?** *(If the information is not available for the specified period, report the total gross payroll for the most recently completed fiscal year.)*

$ |__|__|__|__|__|__|__|__|__|__| . |__|__|

Gross payroll is the total remuneration paid to employees before deductions. The amount should be equivalent to the sum of the monthly taxable employment income reported in box 14 of the T4 slip and on the Canada Customs and Revenue Agency (formerly Revenue Canada) "Remittance Form for Current Source Deductions."

Include:

- regular wages and salaries

- commissions

- overtime pay

- paid leave

- piecework payments

- special payments

- taxable allowances and benefits that are recognized by the Canada Customs and Revenue Agency.

Exclude:

- employer's contributions to pension plans

- Employment Insurance (E.I.) premiums and other employee benefits

- compensation in kind

- travel expenses

- non-taxable allowances and benefits

- recreational facilities provided by the employer

- moving expenses paid by the employer

- employee counseling services.

8. Please estimate the number of permanent full-time and part-time employees in each of the following annual earnings categories.

A. $ 80,001 and above |__|__|__|__|__|__|

B. $ 60,001 - $ 80,000 |__|__|__|__|__|__|

C. $ 40,001 - $ 60,000 |__|__|__|__|__|__|

D. $ 20,001 - $ 40,000 |__|__|__|__|__|__|

E. $ 20,000 and below |__|__|__|__|__|__|

9. Are non-wage benefits, such as health related benefits (e.g. dental care, life insurance), pay related benefits (e.g. severance, supplements to E.I.) or pension related benefits (e.g. pension plans, group RRSPs), available to full-time or part-time employees?

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 12*

If you do not have any permanent full-time employees (as reported in **Question 1 (b) A.**), then *go to Question 10 (c).*

---

10 (a) Please indicate which of the following non-wage benefits are available to **permanent full-time** employees at this location?

	Not available	Available to...			
		All	Management	Non-Management	
				Non-Union	Union
A. Pension plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
B. Life and / or disability insurance	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
C. Supplemental medical	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
D. Dental care	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
E. Group RRSP	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
F. Stock purchase or other savings plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
G. Supplements to Employment Insurance (E.I.) benefits (e.g. for maternity or layoff)	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
H. Workers' Compensation	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
I. Severance allowances	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
J. Flexible benefit plan *	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
J.a) Annual reimbursement for an employee opting out of the flexible plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$
K. Other *(specify)* _____	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$	$^5\bigcirc$

* If your answer to **Question 10 (a) J.** Flexible benefit plan = not available, *please go to Question 10 (a)* **K.**

10 (b) How are these benefits funded?

	Not applicable	Funded by...		
		Employer only	Employee only	Employee and Employer
A. Pension plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
B. Life and/or disability insurance	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
C. Supplemental medical	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
D. Dental care	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
E. Group RRSP	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
F. Stock purchase or other savings plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
G. Supplements to Employment Insurance (E.I.) benefits (e.g. for maternity or layoff)	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
H. Workers' Compensation	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
I. Severance allowances	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
J. Flexible benefit plan	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$
K. Other	$^1\bigcirc$	$^2\bigcirc$	$^3\bigcirc$	$^4\bigcirc$

If you do not have any part-time employees (as reported in **Question 1 (b) B.** and **Question 1 (b) E.**), then ***please go to Question 11.***

10 (c) Are the following non-wage benefits available to **any part-time** employees at this location?

		Yes	No
A.	Pension plan	¹ ○	³ ○
B.	Life and/or disability insurance	¹ ○	³ ○
C.	Supplemental medical	¹ ○	³ ○
D.	Dental care	¹ ○	³ ○
E.	Group RRSP	¹ ○	³ ○
F.	Stock purchase plan or other savings plan	¹ ○	³ ○
G.	Supplements to Employment Insurance (E.I.) benefits (e.g. for maternity or layoff)	¹ ○	³ ○
H.	Workers' Compensation	¹ ○	³ ○
I.	Severance allowances	¹ ○	³ ○
J.	Flexible benefit plan *	¹ ○	³ ○
J.a)	Annual reimbursement for an employee opting out of the flexible plan	¹ ○	³ ○
K.	Other, *specify* _____	¹ ○	³ ○

* If your answer to **Question 10 (c) J.** Flexible benefit plan = no, *please go to Question 10 (c) K.*

11. What was the total expenditure on non-wage benefits at this location between **April 1, 2004 and March 31, 2005?** *(If this information is not available for the specified period, give the total expenditure on non-wage benefits for the calendar year or your most recent fiscal year.)* Please exclude statutory payments such as CPP/QPP, EI and health taxes.

$ |__|__|__|__|__|__|__|__|__|__|__|__| • |__|__|

Include:

- employer's contributions to pension plans, group RRSPs
- employee benefits
- compensation in kind other than stock plans
- travel expenses
- non-taxable allowances and benefits
- recreational facilities provided by the employer
- moving expenses paid by the employer
- employee counselling services
- worker's compensation

Exclude:

- contribution to CPP/QPP
- contribution to Employment Insurance
- provincial health taxes
- regular wages and salaries, commissions, overtime pay
- stock plans (purchase or ownership plans or stock options)
- paid leave
- piecework payments and special payments
- taxable allowances and benefits that are recognized by the Canada Customs and Revenue Agency

Hours of work

If you do not have any full-time employees (as reported in **Question 1 (d) A.**), *please go to Question 14 (a).*

12. Excluding all overtime, how many paid hours do **full-time employees** in each category work in a normal week? *(See Employee Category Definitions on page 39.)*

A. Same for all occupations ⌊_⌊_⌊_⌋ • ⌊_⌋

B. Managers ⌊_⌊_⌊_⌋ • ⌊_⌋

C. Professionals ⌊_⌊_⌊_⌋ • ⌊_⌋

D. Technical / Trades ⌊_⌊_⌊_⌋ • ⌊_⌋

E. Marketing / Sales ⌊_⌊_⌊_⌋ • ⌊_⌋

F. Clerical / Administrative ⌊_⌊_⌊_⌋ • ⌊_⌋

G. Production workers with no trade / certification ⌊_⌊_⌊_⌋ • ⌊_⌋

H. Other ⌊_⌊_⌊_⌋ • ⌊_⌋

13. How is overtime work compensated for **full-time employees** in each category? *(Check all that apply.)* *(See Employee Category Definitions on page 39.)*

	Not applicable (no overtime worked)	Hourly overtime premiums	At normal rate	Compensatory time off	Not compensated
A. Same for all occupations	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
B. Managers	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
C. Professionals	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
D. Technical / Trades	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
E. Marketing / Sales	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
F. Clerical / Administrative	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
G. Production workers with no trade / certification	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯
H. Other	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯

This section covers the nature and extent of workplace training. It is meant to include all types of training intended to develop your employees' skills and/or knowledge through a structured format (Question14 (a)) or on-the-job training (Question 16 (c)) whether it takes place inside or outside the location.

14 (a) **Between April 1, 2004 and March 31, 2005,** did this workplace pay for or provide any of the following types of classroom job-related training? *(Check all that apply)*.

Classroom training includes all training activities:

- which have a pre-determined format, including a pre-defined objective;
- which have a specific content;
- for which progress may be monitored and/or evaluated.

01 ◯ No classroom training ➔ *Go to Question 16 (a)*

02 ◯ Orientation for new employees

03 ◯ Managerial / supervisory training

04 ◯ Professional training

05 ◯ Apprenticeship training

06 ◯ Sales and marketing training

07 ◯ Computer hardware

08 ◯ Computer software

09 ◯ Other office and non-office equipment

10 ◯ Group decision-making or problem-solving

11 ◯ Team-building, leadership, communication

12 ◯ Occupational health and safety, environmental protection

13 ◯ Literacy or numeracy

14 ◯ Other training, *specify* _____

14 (b) Please estimate the number of employees who received classroom training **between April 1, 2004 and March 31, 2005.** *(Include full-time, part-time, permanent and non-permanent employees.)*

⌊_⌊_⌊_⌊_⌊_⌊_⌊_⌋

4-4700-3.1

14 (c) **Between April 1, 2004 and March 31, 2005,** were any of the following a source of funding for classroom training of employees at this location? *(Check all that apply.)*

- ¹◯ Federal government programs
- ²◯ Provincial government programs
- ³◯ Training trust funds
- ⁴◯ Union or employee association funding
- ⁵◯ Industry organizations
- ⁶◯ Employees
- ⁷◯ Equipment vendors
- ⁸◯ Other private sector organizations
- ⁹◯ Other outside sources of funding, *specify* _____
- ⁰◯ None

---

15 (a) Please estimate this workplace's total training expenditure, **between April 1, 2004 and March 31, 2005.**

$ |__|__|__|__|__|__|__|__|__|__|__|__|__|__| • |__|__|

If the total training expenditure equals 0, **go to Question 15 (c).**

---

15 (b) Which of the following are included in the estimate?

- ¹◯ Trainers' salaries
- ²◯ Trainees' salaries
- ³◯ Contracts to vendors
- ⁴◯ Direct tuition to schools or training institutions
- ⁵◯ Training materials
- ⁶◯ Travel or living costs for trainees and trainers
- ⁷◯ Overhead or office costs for training
- ⁸◯ Other training expenses
- ⁹◯ Other, *specify* _____

---

15 (c) **Between April 1, 2004 and March 31, 2005,** did the amount of training time for the category of employees with the largest number of employees...

- ¹◯ increase?
- ²◯ remain about the same?
- ³◯ decrease?

---

16 (a) Does this workplace subsidize, assist or reimburse employees for training or courses taken outside of their paid working hours?

This question is meant to be inclusive. Besides direct subsidies (i.e. helping with tuition or fees), assistance could include helping with registration, arranging travel, arranging discounts or offering salary incentives to training.

¹ ◯ Yes

³ ◯ No ➔ *Go to Question 16 (c)*

---

16 (b) **Between April 1, 2004 and March 31, 2005,** how many employees has this workplace subsidized, reimbursed or assisted?

---

16 (c) **Between April 1, 2004 and March 31, 2005,** did this workplace pay for or provide any of the following types of on-the-job training? *(Check all that apply).*

01 ◯ No on-the-job training ➔ *Go to Question 17*

02 ◯ Orientation for new employees

03 ◯ Managerial / supervisory training

04 ◯ Professional training

05 ◯ Apprenticeship training

06 ◯ Sales and marketing training

07 ◯ Computer hardware

08 ◯ Computer software

09 ◯ Other office and non-office equipment

10 ◯ Group decision-making or problem-solving

11 ◯ Team-building, leadership, communication

12 ◯ Occupational health and safety, environmental protection

13 ◯ Literacy or numeracy

14 ◯ Other training, *specify* _____

---

16 (d) Please estimate the number of employees who received on-the-job training **between April 1, 2004 and March 31, 2005.** *(Include full-time, part-time, permanent and non-permanent employees.)*

4-4700-3.1

17.   Which statement best describes the responsibility for human resources matters at this location?

¹◯ There is a separate human resources unit in this workplace employing more than one person.

²◯ One full-time person in this workplace is responsible for human resources matters.

³◯ Human resources matters comprise part of one person's job in this workplace, such as owner or manager.

⁴◯ Human resources matters for this workplace are the responsibility of a person or unit in another workplace.

⁵◯ Human resources matters are handled as they arise in this workplace (i.e. are not assigned to one person in particular).

⁶◯ Some other arrangement, *specify* _____

If the number of employees reported in Question 1 (a) is smaller than or equal to 10, **go to Question 19.**

18. For **non-managerial employees**, which of the following practices exist on a formal basis in your workplace? In what year were they implemented?

		Yes	No	Year implemented
A.	Employee's suggestion program	¹ ◯	³ ◯	└┴┴┴┴┘
B.	Flexible job design	¹ ◯	³ ◯	└┴┴┴┴┘
C.	Information sharing with employees	¹ ◯	³ ◯	└┴┴┴┴┘
D.	Problem-solving teams	¹ ◯	³ ◯	└┴┴┴┴┘
E.	Joint labour-management committees	¹ ◯	³ ◯	└┴┴┴┴┘
F.	Self-directed work groups	¹ ◯	³ ◯	└┴┴┴┴┘

A. **Employee's suggestion program:** Includes employee survey feedback.

B. **Flexible job design:** Includes job rotation, job enrichment/redesign (broadened job definitions), job enrichment (increased skills, variety or autonomy of work).

C. **Information sharing with employees:** For example, with respect to firm's performance, colleagues' wages, technological or organizational changes, etc. This implies that employees can provide feedback on policies.

D. **Problem-solving teams:** Responsibilities of teams are limited to specific areas such as quality or work flow (i.e. narrower range of responsibilities than F).

E. **Joint labour-management committees:** Include non-legislated joint labour-management committees and task teams that generally cover a broad range of issues, yet tend to be consultative in nature.

F. **Self-directed work groups:** Semi-autonomous work groups or mini-enterprise work groups that have a high level of responsibility for a wide range of decisions /issues.

4-4700-3.1

19. Who normally makes decisions with respect to the following activities? *(Check all that apply.)*

Decision	Non-managerial employee	Work group	Work supervisor	Senior manager	Individual or group outside workplace	Business owner
A. Daily planning of individual work	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
B. Weekly planning of individual work	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
C. Follow-up of results	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
D. Customer relations	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
E. Quality control	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
F. Purchase of necessary supplies	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
G. Maintenance of machinery and equipment	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
H. Setting staffing levels	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
I. Filling vacancies	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
J. Training	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
K. Choice of production technology	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯
L. Product / service development	1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯

Organizational change refers to a change in the way in which work is organized within your workplace or between your workplace and others.

20. Has your workplace experienced any of the following forms of organizational change **between April 1, 2004 and March 31, 2005?**

		Yes	No
A.	Greater integration among different functional areas	1 ◯	3 ◯
B.	Increase in the degree of centralization	1 ◯	3 ◯
C.	Downsizing (reducing the number of employees on payroll to reduce expenses; it is part of a reorganization in the workplace and not simply a response to a drop in demand)	1 ◯	3 ◯
D.	Decrease in the degree of centralization	1 ◯	3 ◯
E.	Greater reliance on temporary workers	1 ◯	3 ◯
F.	Greater reliance on part-time workers	1 ◯	3 ◯
G.	Re-engineering (redesigning processes to improve performance and cost)	1 ◯	3 ◯
H.	Increase in overtime hours	1 ◯	3 ◯
I.	Adoption of flexible working hours	1 ◯	3 ◯
J.	Reduction in the number of managerial levels (delayering)	1 ◯	3 ◯
K.	Greater reliance on job rotation, multi-skilling	1 ◯	3 ◯
L.	Implementation of total quality management	1 ◯	3 ◯
M.	Greater reliance on external suppliers of products / services (outsourcing)	1 ◯	3 ◯
N.	Greater inter-firm collaboration in R&D, production or marketing	1 ◯	3 ◯
O.	Other, *specify* _____	1 ◯	3 ◯

If the answer to all of these questions is "No", *go to Question 24.* Otherwise, *go to Question 21 (a).*

21 (a) Of those organizational changes selected in question 20, which one affected the greatest number of employees **between April 1, 2004 and March 31, 2005?** *(Check one answer only.)*

01 ◯ Greater integration among different functional areas

02 ◯ Increase in the degree of centralization

03 ◯ Downsizing (reducing the number of employees on payroll to reduce expenses; it is part of a reorganization in the workplace and not simply a response to a drop in demand)

04 ◯ Decrease in the degree of centralization

05 ◯ Greater reliance on temporary workers

06 ◯ Greater reliance on part-time workers

07 ◯ Re-engineering (focusing on the redesign of business processes to improve performance and cost)

08 ◯ Increase in overtime hours

09 ◯ Adoption of flexible working hours

10 ◯ Reduction in the number of managerial levels (delayering)

11 ◯ Greater reliance on job rotation, multi-skilling

12 ◯ Implementation of total quality management

13 ◯ Greater reliance on external suppliers of products /services (outsourcing)

14 ◯ Greater inter-firm collaboration in R&D, production or marketing

15 ◯ Other

21 (b) If you answered "Downsizing", by how many employees did you reduce your workforce?

22. What were the objectives of this most significant organizational change? *(Check all that apply.)*

01 ◯ To introduce new technology

02 ◯ To reduce costs

03 ◯ To respond to an amalgamation or a take-over

04 ◯ To increase product differentiation

05 ◯ To increase product and service quality

06 ◯ To increase hours of operation

07 ◯ To reduce inventories

08 ◯ To reduce the time between orders and deliveries

09 ◯ To raise productivity

10 ◯ To increase the pace of innovation

11 ◯ Other, *specify* _____

23. **Between April 1, 2004 and March 31, 2005,** what was the impact of this organizational change for your location?

	Not applicable	Increase	No effect (an organizational change was tried but it didn't work)	Decrease
A. Profitability	1 ◯	2 ◯	3 ◯	4 ◯
B. Costs	1 ◯	2 ◯	3 ◯	4 ◯
C. Labour-management relationship	1 ◯	2 ◯	3 ◯	4 ◯
D. Product / service differentiation	1 ◯	2 ◯	3 ◯	4 ◯
E. Productivity	1 ◯	2 ◯	3 ◯	4 ◯
F. Labour turnover	1 ◯	2 ◯	3 ◯	4 ◯
G. Automation of production processes	1 ◯	2 ◯	3 ◯	4 ◯
H. Level of inventories	1 ◯	2 ◯	3 ◯	4 ◯
I. Utilization time for physical plant and equipment	1 ◯	2 ◯	3 ◯	4 ◯
J. Absenteeism	1 ◯	2 ◯	3 ◯	4 ◯
K. Number of levels in hierarchy	1 ◯	2 ◯	3 ◯	4 ◯
L. Quality of products / services	1 ◯	2 ◯	3 ◯	4 ◯
M. Time between order and delivery	1 ◯	2 ◯	3 ◯	4 ◯
N. Ability to measure performance	1 ◯	2 ◯	3 ◯	4 ◯

23 (a) As a result of the implementation of the most significant organizational change, have the skill requirements of employees...

1 ◯ increased?

2 ◯ remained the same?

3 ◯ decreased?

If your company has **NO NON-MANAGEMENT EMPLOYEES COVERED BY A COLLECTIVE BARGAINNING AGREEMENT** *please go to Question 25.*

24. Does the agreement with the largest bargaining unit define how to deal with the following provisions?
(Check all that apply.)

	Written agreements	Regular discussions	Ad hoc agreements	No provision
A. Technological change	¹◯	²◯	³◯	⁴◯
B. Workplace reorganization	¹◯	²◯	³◯	⁴◯
C. Employee participation	¹◯	²◯	³◯	⁴◯
D. Occupational health and safety	¹◯	²◯	³◯	⁴◯
E. Employment equity	¹◯	²◯	³◯	⁴◯
F. Pay equity	¹◯	²◯	³◯	⁴◯
G. Job security / lay-offs	¹◯	²◯	³◯	⁴◯
H. Contracting out	¹◯	²◯	³◯	⁴◯
I. Education and training	¹◯	²◯	³◯	⁴◯
J. Cost of living adjustments	¹◯	²◯	³◯	⁴◯

For information only

25. Did any of the following situations occur at this location **between April 1, 2004 and March 31, 2005?**
If so, for how many days did it last?

	Yes	No	Number of days
A. Work-to-rule	¹◯	³◯	⌊⌊⌊⌊⌋ • ⌊⌋
B. Work slowdown	¹◯	³◯	⌊⌊⌊⌊⌋ • ⌊⌋
C. Strikes	¹◯	³◯	⌊⌊⌊⌊⌋ • ⌊⌋
D. Lockouts	¹◯	³◯	⌊⌊⌊⌊⌋ • ⌊⌋
E. Other labour-related actions	¹◯	³◯	⌊⌊⌊⌊⌋ • ⌊⌋

26 (a) Does this workplace have a dispute, complaint or grievance system for employees?

  ^{1}◯ Yes, formal

  ^{2}◯ Informal only

  ^{3}◯ No → *Go to Question 28*

26 (b) Who has **final** authority to settle disputes, grievances or complaints?

  ^{1}◯ Management

  ^{2}◯ Labour-management committee

  ^{3}◯ Outside arbitrator

27 (a) How many disputes, grievances or complaints were filed **between April 1, 2004 and March 31, 2005?**

  | | | | |

27 (b) How would you rate your labour-management relations?

  ^{1}◯ Good

  ^{2}◯ Fair

  ^{3}◯ Poor

Section F : Workplace Performance

28. Which of the following best describes your organization? *(If your workplace is part of a multiple location business, please use the entire organization to determine the category.)*

  $^1\bigcirc$ Non-profit organization^1

  $^3\bigcirc$ For profit business

  ^{1} Includes organizations filling a non-profit tax return, registered charity organizations, government agencies and quasi-governmental organizations.

---

28 (a) Has this workplace completed one fiscal year?

  $^1\bigcirc$ Yes

  $^3\bigcirc$ No

---

28 (b) What was the end date of your most recently completed fiscal year? (Or when will your first fiscal year end?)

Fiscal year end date ⌊__⌋ Day ⌊__⌋ Month ⌊____⌋ Year

---

29 (a) For the same fiscal year, what was the gross operating revenue from the sale or rental of all products and services for this location? *(If you have not completed your fiscal year, please provide the gross operating revenue to date.)*

$ ⌊_____⌋ • ⌊__⌋

---

29 (b) Does this amount represent the revenues for this location only?

  $^1\bigcirc$ Yes

  $^3\bigcirc$ No, *specify* _____

If the answer to **Question 28 (a)** is "No" *go to Question 30 (a).*

29 (c) Please estimate the percentage change in operating revenue from the previous 12-month period.

| | | | | | % (blank boxes)

◯ Increase

◯ Decrease

---

30 (a) What was the gross operating expenditure for this location for the most recently completed fiscal year? Please include payroll and non-wage expenses and the purchase of goods. *(If you have not completed your first fiscal year, please provide the gross operating expenditure to date)*

$ | | | | | | | | | | | | | | • | | | |

---

30 (b) Does this amount represent the expenditure for only this location?

¹◯ Yes

³◯ No, *specify* _____

---

31. What percentage of the assets of this workplace are held by foreign interests?

| | | | • | | %

---

32. Approximately how long has this workplace been located at this address? Please do not exclude periods of temporary shutdown from your answer.

| | | | | • | | months   OR | | | | • | | years

---

32 (a) Thinking now about your entire organization, including all locations, approximately how long has it been in operation?

| | | | | | • | | months   OR | | | | • | | years

33 (a) How has your workplace performance in each of the following areas changed **between April 1, 2004 and March 31, 2005?**

	Increased	Remained the same	Decreased
A. Productivity	1 ○	2 ○	3 ○
B. Sales	1 ○	2 ○	3 ○
C. Product quality	1 ○	2 ○	3 ○
D. Customer satisfaction	1 ○	2 ○	3 ○
E. Profitability	1 ○	2 ○	3 ○

33 (b) **Between April 1, 2004 and March 31, 2005** has your unit production cost (including the production of services):

1 ○ increased?

2 ○ remained the same?

3 ○ decreased?

34. Please rate the following factors with respect to their relative importance in your workplace general business strategy.

		Not applicable	Not important	Slightly important	Important	Very important	Crucial
A.	Undertaking research and development	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
B.	Developing new products / services	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
C.	Developing new production / operating techniques	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
D.	Expanding into new geographic markets	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
E.	Total quality management	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
F.	Improving product / service quality	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
G.	Reducing labour costs	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
H.	Using more part-time, temporary or contract workers	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
I.	Reducing other operating costs	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
J.	Reorganizing the work process	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
K.	Enhancing labour-management cooperation	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
L.	Increasing employees' skills	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
M.	Increasing employees' involvement / participation	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
N.	Improving coordination with customers and suppliers	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○
O.	Improving measures of performance	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○

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35. **Between April 1, 2004 and March 31, 2005,** what percentage of your total sales from all products and services were in each of the following market areas?

A. Local market (same municipality or county) |__|__|__| %

B. Rest of Canada |__|__|__| %

C. U.S.A. |__|__|__| %

D. Rest of the world |__|__|__| %

Total (A + B + C + D should total 100%)   100 %

36. Do you directly compete with locally, Canadian or internationally-owned firms? *(Check all that apply.)*

¹ ◯ Yes, locally-owned firms

² ◯ Yes, Canadian-owned enterprises

³ ◯ Yes, American-owned enterprises

⁴ ◯ Yes, other internationally-owned enterprises (other than American)

⁵ ◯ No → *Go to Question 40*

36 (a) To what extent do these firms offer significant competition to your business?

Significant competition refers to a situation where other firms market products / services similar to yours which could be purchased by your customers.

	Not applicable	Not important	Slightly important	Important	Very important	Crucial	Don't know
A. Locally-owned	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯	⁷◯
B. Canadian-owned	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯	⁷◯
C. American-owned	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯	⁷◯
D. Other internationally-owned	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯	⁷◯

37. Please indicate how many firms (whether based in Canada or not) offer products / services directly competing with yours in your most important market. Your most important market is represented by the highest percentage of your total sales reported in Question 35.

Products directly competing refers to products / services, whether brand name or generic, that compete directly with yours in the same market. In other words, products / services which compete with yours to satisfy the same needs of the same customers.

¹◯ 0 ➜ **Go to Question 39**

²◯ 1 to 5

³◯ 6 to 20

⁴◯ Over 20

38. Please indicate the general price level of your products / services relative to the price level of your main competitors in your most important market.

¹◯ Higher

²◯ About the same

³◯ Lower

39. Compared to your main competitors, how would you rate your workplace performance **between April 1, 2004 and March 31, 2005** in each of the following areas?

	Much worse	Worse	About the same	Better	Much better	Don't know
A. Productivity	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯
B. Sales growth	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯
C. Profitability	¹◯	²◯	³◯	⁴◯	⁵◯	⁶◯

40. **Between April 1, 2004 and March 31, 2005,** has this workplace introduced...

	Yes	No
A. new products or services? [1]	[1] ○	[3] ○
B. improved products or services? [2]	[1] ○	[3] ○
C. new processes? [3]	[1] ○	[3] ○
D. improved processes? [4]	[1] ○	[3] ○

[1] New products or services differ significantly in character or intended use from previously produced goods or services.

[2] Improved products or services are those whose performance has been significantly enhanced or upgraded.

[3] New processes include the adoption of new methods of goods production or service delivery.

[4] Improved processes are those whose performance has been significantly enhanced or upgraded.

If you have answered "No" to A, B, C and D, **go to Question 43**.

41. What was your most important innovation between **April 1, 2004 and March 31, 2005?** *By most important, we mean the one which cost the most to implement.*

_____

_____

42. Was this innovation:

[1] ○ a world first?

[2] ○ a Canadian first?

[3] ○ a first in the local market?

[4] ○ none of the above.

The next few questions deal with the investment in three types of technology (computer hardware / software, computer controlled or assisted technology and other technology or machinery) and the use of computers and other technologies in this workplace.

43. At this location, how many employees currently use computers as part of their normal working duties?

By computers, we mean a microcomputer; personal computer; minicomputer; mainframe computer or laptop that can be programmed to perform a variety of operations.

^{0}◯ None → **Go to Question 45 (a)**

|☐|☐|☐|☐|☐|☐|

---

44 (a) **Between April 1, 2004 and March 31, 2005,** has your workplace implemented a major new software application and/or hardware installation? By this we refer to hardware installations or entirely new applications rather than upgrades.

^{1}◯ Yes

^{3}◯ No → **Go to Question 45 (a)**

---

44 (b)

	Most recent implementation	Second most recent implementation
A. When was the most recent implementation of new software or hardware?	☐☐ Month ☐☐☐☐ Year	☐☐ Month ☐☐☐☐ Year
B. How many employees use this new software or hardware?	☐☐☐☐☐☐	☐☐☐☐☐☐
C. What was the approximate cost of implementing this new software or hardware in this workplace?	$ ☐☐☐☐☐☐☐☐☐	$ ☐☐☐☐☐☐☐☐☐
D. How many employees received training directly related to this software or hardware?	☐☐☐☐☐☐	☐☐☐☐☐
E. What was the usual duration of the training? Include only the formal training period; do not include the apprenticeship period in adapting to this technological change.	☐☐☐ • ☐ hours or ☐☐☐ • ☐ days	☐☐☐ • ☐ hours or ☐☐☐ • ☐ days
F. Which of the following groups use this software or hardware?	^{1}◯ Managers ^{2}◯ Professionals ^{3}◯ Technical / Trades ^{4}◯ Marketing / Sales ^{5}◯ Clerical / Administrative ^{6}◯ Production workers with no trade / certification ^{7}◯ Other	^{1}◯ Managers ^{2}◯ Professionals ^{3}◯ Technical / Trades ^{4}◯ Marketing / Sales ^{5}◯ Clerical / Administrative ^{6}◯ Production workers with no trade / certification ^{7}◯ Other

45 (a) **Between April 1, 2004 and March 31, 2005,** has your workplace implemented computer-controlled or computer-assisted technology? *For example, retail scanning technologies, manufacturing robots, optical, laser, audio, photographic technologies, hydraulic or other mechanical technologies.*

$^1\bigcirc$ Yes

$^3\bigcirc$ No ➔ *Go to Question 46 (a)*

---

45 (b)

	Most recent implementation	**Second most recent implementation**
A. When was the most recent implementation of this technology?	⊔⊔ Month ⊔⊔⊔⊔ Year	⊔⊔ Month ⊔⊔⊔⊔ Year
B. How many employees use this technology?	⊔⊔⊔⊔⊔⊔	⊔⊔⊔⊔⊔⊔
C. What was the approximate cost of implementing this new technology in this workplace?	$ ⊔⊔⊔⊔⊔⊔⊔⊔	$ ⊔⊔⊔⊔⊔⊔⊔⊔⊔
D. How many employees received training directly related to this new technology?	⊔⊔⊔⊔	⊔⊔⊔⊔
E. What was the usual duration of the training?	⊔⊔⊔ • ⊔ hours or ⊔⊔⊔ • ⊔ days	⊔⊔⊔ • ⊔ hours or ⊔⊔⊔ • ⊔ days
F. Which of the following groups use this technology?	$^1\bigcirc$ Managers $^2\bigcirc$ Professionals $^3\bigcirc$ Technical / Trades $^4\bigcirc$ Marketing / Sales $^5\bigcirc$ Clerical / Administrative $^6\bigcirc$ Production workers with no trade / certification $^7\bigcirc$ Other	$^1\bigcirc$ Managers $^2\bigcirc$ Professionals $^3\bigcirc$ Technical / Trades $^4\bigcirc$ Marketing / Sales $^5\bigcirc$ Clerical / Administrative $^6\bigcirc$ Production workers with no trade / certification $^7\bigcirc$ Other

46 (a) **Between April 1, 2004 and March 31, 2005,** has your workplace had any major implementations of other technologies or machinery?

$^1\bigcirc$ Yes

$^3\bigcirc$ No → *Go to Question 47. If you answered "No" to Questions 44 (a), 45 (a) and 46 (a), please go to Question 50.*

46 (b)

		Most recent implementation	**Second most recent implementation**
A.	When was the most recent implementation?	⊔⊔ Month ⊔⊔⊔⊔ Year	⊔⊔ Month ⊔⊔⊔⊔ Year
B.	How many employees use this technology or machinery?	⊔⊔⊔⊔⊔⊔	⊔⊔⊔⊔⊔⊔
C.	What was the approximate cost of implementing this technology or machinery in this workplace?	$ ⊔⊔⊔⊔⊔⊔⊔⊔	$ ⊔⊔⊔⊔⊔⊔⊔⊔⊔
D.	How many employees received training directly related to this technology or machinery?	⊔⊔⊔⊔⊔⊔	⊔⊔⊔⊔⊔⊔
E.	What was the usual duration of that training?	⊔⊔⊔ • ⊔ hours or ⊔⊔⊔ • ⊔ days	⊔⊔⊔ • ⊔ hours or ⊔⊔⊔ • ⊔ days
F.	Which of the following groups use this other technology or machinery?	$^1\bigcirc$ Managers $^2\bigcirc$ Professionals $^3\bigcirc$ Technical / Trades $^4\bigcirc$ Marketing / Sales $^5\bigcirc$ Clerical / Administrative $^6\bigcirc$ Production workers with no trade / certification $^7\bigcirc$ Other	$^1\bigcirc$ Managers $^2\bigcirc$ Professionals $^3\bigcirc$ Technical / Trades $^4\bigcirc$ Marketing / Sales $^5\bigcirc$ Clerical / Administrative $^6\bigcirc$ Production workers with no trade / certification $^7\bigcirc$ Other

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47. What effects has the **implementation of the new technology with the largest cost** had on the following factors?

	Not applicable	Positive effect	No effect (a new technology was implemented but it had no effect)	Negative effect
OVERALL EFFECTS				
A. Profit margin	1 ○	2 ○	3 ○	4 ○
B. Quality of products or services	1 ○	2 ○	3 ○	4 ○
C. Technological capabilities	1 ○	2 ○	3 ○	4 ○
D. Working conditions	1 ○	2 ○	3 ○	4 ○
E. Lead times	1 ○	2 ○	3 ○	4 ○
F. Range of products or services	1 ○	2 ○	3 ○	4 ○
FACTORS OF PRODUCTION				
G. Labour requirements	1 ○	2 ○	3 ○	4 ○
H. Energy requirements	1 ○	2 ○	3 ○	4 ○
I. Capital requirements	1 ○	2 ○	3 ○	4 ○
J. Material requirements	1 ○	2 ○	3 ○	4 ○
K. Design costs	1 ○	2 ○	3 ○	4 ○
MARKET SHARES				
L. Shares in local market (municipality or county)	1 ○	2 ○	3 ○	4 ○
M. Shares in regional or national markets	1 ○	2 ○	3 ○	4 ○
N. Shares in foreign markets	1 ○	2 ○	3 ○	4 ○
INTERACTIONS WITH OUTSIDE PARTIES				
O. Interactions with customers	1 ○	2 ○	3 ○	4 ○
P. Interactions with suppliers	1 ○	2 ○	3 ○	4 ○
RESPONSE TO GOVERNMENT REGULATORY REQUIREMENTS				
Q. Environmental regulations	1 ○	2 ○	3 ○	4 ○
R. Health and safety regulations	1 ○	2 ○	3 ○	4 ○
S. Other, *specify* _____	1 ○	2 ○	3 ○	4 ○
OTHER				
T. Other, *specify* _____	1 ○	2 ○	3 ○	4 ○
U. Other, *specify* _____	1 ○	2 ○	3 ○	4 ○

48 (a) As a result of the implementation of this technology, has the number of non-management employees in this workplace...

   1 ◯ increased?

   2 ◯ remained the same?

   3 ◯ decreased?

---

48 (b) As a result of the implementation of this technology, has the number of managers in this workplace...

   1 ◯ increased?

   2 ◯ remained the same?

   3 ◯ decreased?

---

49. As a result of the implementation of this technology, have the skill requirements of employees...

   1 ◯ increased?

   2 ◯ remained the same?

   3 ◯ decreased?

---

50. Which of the following factors impede the implementation of new technology in your workplace? *(Check all that apply.)*

   01 ◯ Lack of financial resources

   02 ◯ Lack of skilled personnel

   03 ◯ Lack of information on technologies

   04 ◯ Lack of information on markets

   05 ◯ Deficiencies in the availability of external technical services

   06 ◯ Internal resistance to change

   07 ◯ Barriers to cooperation with other firms

   08 ◯ Barriers to cooperation with scientific and educational institutions

   09 ◯ Government standards and regulations

   10 ◯ Other, *specify* _____

   11 ◯ None

Statistics Canada thanks you for taking the time to participate in this important survey.

4-4700-3.1

Employee Category Definitions

A. Employee:

Any person receiving pay for services rendered in Canada or for paid absence, and for whom you are required to complete a Canada Customs and Revenue Agency T-4 Form.

A. Full-time employee: An employee working 30 or more hours per week.

B. Part-time employee: An employee working less than 30 hours per week.

C. Permanent employee: An employee who has no set termination date.

D. Non-permanent employee: An employee who has a set termination date or an agreement covering the period of employment (e.g. temporary or seasonal).

B. Independent contractor:

A person providing products or services under contract with your location but for whom the completion of a Canada Customs and Revenue Agency T-4 Form is not required. This person may be an employee of another business or a home worker (e.g. computer consultant, piecework seamstresses, etc).

C. Management:

1. Managers

(a) Senior Managers

Include the most senior manager in the workplace and other senior managers whose responsibilities would normally span more than one internal department. Most small workplaces would only have one senior manager. Examples: president of single location company; retail store manager; plant manager; senior partners in business services firms; production superintendent; senior administrator in public services enterprise; as well as vice-presidents, assistant directors, junior partners and assistant administrators whose responsibilities cover more than one specific domain.

(b) Specialist Managers

Managers who generally report to senior management and are responsible for a single domain or department. This category would normally include assistant directors or the equivalent in small workplaces. Examples: department heads or managers (engineering, accounting, R&D, personnel, computing, marketing, sales, etc.); heads or managers of specific product lines; junior partners or assistant administrators with responsibilities for a specific domain; and assistant directors in small locations (without an internal department structure).

D. Non-Management:

1. Professionals

Employees whose duties would normally require at least an undergraduate university degree or the equivalent. Examples: medical doctors, lawyers, accountants, architects, engineers, economists, science professionals, psychologists, sociologists, registered nurses, marketing and market research professionals, nurse-practitioners and teaching professionals. Include computing professionals whose duties would normally require a minimum of an undergraduate degree in computer science. Include professional project managers and supervisors not included in senior managers (C.1 (a)) and specialist managers (C.1 (b)).

2. Technical / Trades

Composed of:

(a) Technical / Semi-professional workers

Employees whose duties would normally require a community college certificate / diploma or the equivalent and who are not primarily involved in the marketing / sales of a product or service. Examples: technologists, lab technicians, registered nursing assistants, audio-visual technicians; ECE-trained caregivers; technology trainers; legal secretaries and draftspersons. Include computer programmers and operators whose duties would normally require a community college certificate or diploma. Include semi-professional project managers and supervisors not included in managers (C.1) and professionals (D.1).

(b) Trades / Skilled production, operation and maintenance

Non-supervisory staff in positions requiring vocational / trades accreditation or the equivalent. Examples: construction trades, machinists, machine tenders, stationary engineers, mechanics, beauticians / barbers / hairdressers, butchers and repair occupations that do not normally require a post-secondary certificate or diploma.

3. Marketing / Sales

Non-supervisory staff primarily engaged in the marketing / sales of products or services. Examples: retail sales clerks, waiters / waitresses, telemarketers, real estate agents, insurance agents and loans officers. Exclude employees whose duties require a university degree and professional accreditation (professionnals (D.1)), those whose duties require a community college certificate / diploma (technical/trades (D.2)) and those whose duties are primarily supervisory (managers (C.1)).

4. Clerical / Administrative

Non-supervisory staff providing clerical or administrative services for internal or external clients. Examples: secretaries, office equipment operators, filing clerks, account clerks, receptionists, desk clerks, mail and distribution clerks, bill collectors and claims adjusters. Duties do not normally require post-secondary education nor responsibility for marketing or sales.

5. Production workers with no trade / certification, operation and maintenance

Non-supervisory staff in production or maintenance positions that require no vocational / trades accreditation or the equivalent in on-the-job training. Examples: assemblers, packers, sorters, pilers, machine operators, transportation equipment operators (drivers), warehousemen, and cleaning staff. As a rough guideline, jobs in this category require no more than a one-month training for someone with no trade or vocational accreditation.

6. Other

If you have a large number of employees who do not correspond to any of the above categories, please list their occupation(s) in the space provided below.

_____

_____

_____

_____

_____

_____

Appendix F

INFORMED CONSENT FORM

Recruitment process study-Interview component
Angela Bissonnette
Department of Management
Saint Mary's University
Halifax, NS B3H 3C3

I am a *graduate student* in the Department of Management at Saint Mary's University. *As part of my Doctoral dissertation, I am conducting research under the supervision of Dr. Victor Catano,* and I am inviting you to participate in my study. The purpose of the study is to examine the way in which individuals recruit employees and are recruited by companies

This study involves a 1 hour interview where participants are asked to respond to questions regarding past experiences with recruitment.

This research will allow for a better understanding of how recruitment takes place in today's environment and may facilitate organizational recruitment as well as candidate job search in return it will demand approximately and hour of your time discussing past job search or candidate search experiences,as appropriate. **Your participation is completely voluntary. You may withdraw from this study at any time without penalty.**

All information obtained in this study will be kept strictly confidential and anonymous. Information obtained in the interviews will be presented globally using qualitative groupings or themes, no identifing information related ot participants beynd general demographics will be presented. To further protect individual identities, this consent form will be sealed in an envelope and stored separately. Furthermore, the results of this study will be presented as a group and no individual participants will be identified.If you have any questions, please contact *"the student researcher, Angela Bissonnette, at phone or email, or Dr. Victor Catano at phone or email.*

This research has been reviewed and approved by the Saint Mary's University Research Ethics Board. If you have any questions or concerns about the study, you may contact Dr. John Young at ethics@smu.ca, Chair, Research Ethics Board.

By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this study.
Participant's Signature: _____   Date: _____

Please keep one copy of this form for your own records.

Study Two

Interview Guide – Employees
Objective: Find out the pros and cons of the different sources of information about jobs based on interviewee's impression. Develop understanding of applicant perceptions of the recruitment process.

1. How did you find your current job? What occurred? What was the end result?

   Planned prompts
   a) How long did you look for a job? How many interviews did you go to before you got a job?
   b) What type of job were you looking for?
   c) How did you find out about the job opening?
   Did you find this source of information useful? Why or why not?
   d) Once you found out about the job's availability what did you do next?
   e) Was there anything you took into consideration before accepting this job? If so what?
   f) How do you feel about your job? (Do you like your job? Why or why not?)
   g) How do you feel about the organization? Have you considered leaving? Why or why not?
   h) How is your job going now? Do you think you are doing well at this job? Why or why not?

2. What things made it easier or harder to find a job? *(in relation to other jobs you have looked for)* What occurred? What was the end result?
3. Were there some sources of job information you liked better than others? Why?
4. Have you ever had difficulty finding a job? If yes, why do you think you experienced difficulty?
5. Have you ever refused a job which was offered to you? Why?
6. What are the main things you look for in a job?
7. What are the main things you look for in an employer?
8. If you had to look for a job tomorrow, where would you start? What would you do?
9. If a friend or relative were looking for a job what advice would you give to them?

Ensure you know individual's sex, ethnicity, age, education level, profession, type of job sought.

**Do you think some sources of job information gave you different types of information than others? Which ones? Why?

Participants:

1- Ben[1]-58 year old white English Canadian male manager level working in the financial industry, high school, grade 12
2- Britney- 28 year old female visible minority Canadian landed immigrant, professional working in the federal government, Master's degree.
3- Katherine- 36 year old female 1st generation Canadian of German descent, working in Human Resources in the education sector (public school board, elementary/high School), B.Com working on her Master's.
4- Cash-36 year old male Chinese landed immigrant working in sales in a large multinational pharmaceutical company in the private sector, M.B.A.
5- Harry- 28 year old male visible minority landed immigrant working in as an IT professional in the education sector, B.Com, working on Master's.
6- Grace -32 year old white English Canadian female working as an executive Director in a not-for-profit organization, 2 Bachelor's degrees, (B.Com, B.A. in Psychology)
7- Tania – 35 year old, white Canadian female academic, has a master's degree and is working on her Ph.D.
8- Marilyn- 34 year old, white Canadian female academic, has Master's degree and is working on her Ph.D.
9- Mark – 33 year old male Caucasian mechanic with a professional community college certificate
10- Natasha- 31 year old female Caucasian nurse with a Bachelor's degree in Nursing.

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[1] All names are fictitious and used to protect confidentiality and for ease of discussion.

Appendix G

Example of Transcript Table
"Mark"

CONCEPT	DESCRIPTION WORDS
Source perceptions:	
<u>Internet postings</u>	I'd find looking on the internet now, it's just easier because it's just, it's home, you don't have to go nowhere, it's right there. IS THERE ANYWHERE IN PARTICULAR ON THE INTERNET THAT'S GOOD FOR YOU, FOR YOUR JOB? The job bank or the, even the newspaper, tons are in there too, I find. I get the Daily News and I look at it every time just to look, see all the money they pay out west compared to here, it's amazing.
<u>Newspapers</u>	My first job was in the newspaper, I think, it was in the Chronicle Herald.
<u>About HRDC (Government job banks)</u> <u>Lower paid lower skill</u>	If looking for another job: ...then I'd probably, well go the job bank (HRDC) of course, human resources and see, you never know, might just not do this job or do something else, you never know. If helping a friend look for a job: I'd tell them they have to get a good resume that would be the first thing. Start looking, I guess, that's the only thing you can do, look at the job bank (HRDC) and see if there's anything. Which is the best job information source: I'd say the human resources one is the best. I think most employers go to that because they figure the majority of the people are going to, if they're laid off, they're already going to be in there to get their unemployment stuff so they're going to have a quick look at the job opportunities that might be

	there. So I would think that that would be the best starting spot.
Informal networking	I went to another fellow and worked with him, told him I'd give him six months to see how things were going and they weren't going well and I just made a call to, actually the guy that runs the parts store that we deal with, I asked him if he knew anybody looking and he told me (my current boss) was and I phoned him, quit, quit the one job on Wednesday and started the new job Friday morning, basically been there since. Positive Previous work experience: So I made a phone call and seen who wanted somebody, needed somebody. There was three or four but I knew (my current boss) so it seemed to work out better than somebody you don't know, what you're getting into. Advice for a friend looking for a job: …see if anybody you know has any openings anywhere for you, you never know, somebody might know somebody. That seems to be the way things work more than anything, that's about it.
Associations and conferences networking	I should say (industry association) has a hiring, oh what do you call them, like a hiring agency or something hire, to find people for our work for to hire them. I guess they can call in but I don't know, so if you were on good terms when you left that might be all right, if you're on bad terms it might not help you out.
Previous work experience with manager -Network	He knew me, Chad knew me, knew the work I could do I guess would be the biggest difference. He wasn't hiring somebody he didn't know like just coming off the street and giving him a resume, so he knew what to expect I guess, easier for him and for me because I knew what he expected.
Different recruitment	

sources for different types of companies and different experience levels	
Informal networking	I'd probably call (colleague) at (Parts Supplies Company) and see who is looking, to tell you the truth, just because he talks to all the owners everyday so and I know (current boss) when he was looking, he also told the part supplier, you know, same as I called and he told me that he (current boss) was looking for somebody and I know all the other employers and most guys in the trade, or people in the trade, know that people tell him too, right?
Recruitment procedure	First job after school: I just put resumes out and he phoned, asked very basic questions like basically knew how far, like he was a mechanic himself so he basically knew what was going on. He just asked me some questions and said alright. I left and then he phoned and there were two or three other places that phoned, but he phoned first, so that's where I ended up going. Current job previous work experience with employer: He just said come in and start and see how it goes because he had just opened, he had just opened the business so he was only there a few weeks, said he needed somebody, that was about it.
About the recruitment process How do you feel when you are looking for a job?	When looing for first job: Out of school and payments to make and no job so it was scary, I had to find something, mind you it wasn't, I mean I basically went one day with resumes and started the following Monday, it wasn't that hard, I didn't think
Location	HAVE YOU EVER REFUSED A JOB THAT WAS OFFERED TO YOU BEFORE? Yeah. WHY? Because it wasn't close enough to home, that's why, it was too far away. SO IS THAT SOMETHING YOU THINK IS IMPORTANT?

	Yeah, close to home unless we moved as a family, that'd be different and I'd be close to where we move, so I'd still be close to home I guess, but yeah, I enjoy working in Dartmouth way more than I did having to travel to Halifax, I know that much. Cuts down a lot, when go from an hour to fifteen minutes to get to work right? Which is nice, yeah, close to home.
Manager	Do you like your job? …nobody gets mad or yells or gets grossed out. That's just the way (current boss) is, he doesn't freak, he's pretty even, capable guy… What makes a good job? Good people to work with, that's one thing, no fighting going on with each other, I mean there are only four of us so, it only takes one and you have a problem and the boss is good. Like I said, he's not jumping down your throat if something goes wrong. That's part of the business, it goes wrong, like that's the way it is, whereas, other places they're just right down your throat, you know? Like that's no place to be working. If you're not happy, you might as well not be there as far as I'm concerned. It's not worth what they're paying you to be cranky, with where I worked before, I did that for four or five years before, and that's enough, it's time to leave. The guy treats you right and he's there to talk to and talks to you, doesn't treat you like you're below him, you're an equal, does stuff for you, you know, take you out for supper once in a while or you know, we go out, where I'm at now, we go out once a month, talk about how this stuff's going at work, around the shop you know, like just, I mean we talk in the days in the shop everyday, but I mean we go out, out of the work area for supper once a month basically, just have a chit chat about how things are going, make sure everybody is happy, all that, which is nice. It's the first guy I've worked for that's done that. We get lunch every few weeks and

	stuff and I mean he just treats us good, try to make us happy and stay I guess, I don't know, it's just good. It's funny to be that young, because I figure I've been working for him for four years
Other offers/opportunities	Being good at your job and getting calls for work: Yeah, well that's the thing too and I think my boss knows that too right, I mean, it's bad to say, but if I left he wouldn't be very pleased, for sure but, that's why he keeps me happy I guess. There's some people, they just tell you to go pound sand, he works things out with you, if you have any questions or anything.
Salary as motivator	Anything that you think about when deciding to take a job: Not really, honestly, how much money it paid probably be the only thing.
Why did you refuse another offer? Location vs. salary vs. challenge and advancement	I never, I've had a couple of opportunities come up since I've been there and I've not left. WHY? Didn't seem like it would be worth leaving where I'm at where it's, I like it, it's comfortable, I guess. If I want a day off or Friday off, I go, there's no blah, blah, blah, you can't, and well, no nights, no weekends, so it's pretty hard to leave because most places, 90% of the places, you gotta work Saturdays or nights, so I'd rather just work Monday to Friday, 8-5, is good.
Fairness	I would say when I left my (work term) job to go to (first post trade school job) it took a little bit of time, but nothing spectacular, you know, like basically a week. I looked, got serious a day or two and put resumes out, but I just find you put them out, somebody calls always to talk to you at least, whereas some people, they always say they can't find a job but I don't know why.
Self efficacy	"…but it's the few people that phoned for a job, they just heard through the grapevine, I guess, it's funny it is a tight knit little group, I guess you could say, the automotive trade, people hear that you're

	good at what you do, they call, it's whether I want to work for them or not, is the question."
How did you feel about the job after you accepted it? Did you like the job?	No stress, nobody down your back or nothing, giving you a hard time or anything, just go and do your thing, come home.
Supply and demand Macro environment	Other than that, it was just, if I need another job, I'll go get one. It seems so easy to get a job, every time I went to get one then I just, what the Hell, if I don't want to work here, I'll just go somewhere else and get another one, because right now, a trades person is in high demand in every trade. When you look in the paper and stuff. So I don't think it's that hard, if you're any good at what you do, which is a big problem with some people.

Example of Transcript Table
"Mark"

CONCEPT	DESCRIPTION WORDS
Source perceptions:	
Internet postings	I'd find looking on the internet now, it's just easier because it's just, it's home, you don't have to go nowhere, it's right there. IS THERE ANYWHERE IN PARTICULAR ON THE INTERNET THAT'S GOOD FOR YOU, FOR YOUR JOB? The job bank or the, even the newspaper, tons are in there too, I find. I get the Daily News and I look at it every time just to look, see all the money they pay out west compared to here, it's amazing.
Newspapers	My first job was in the newspaper, I think, it was in the Chronicle Herald.
About HRDC (Government job banks) Lower paid lower skill	If looking for another job: ...then I'd probably, well go the job bank (HRDC) of course, human resources and see, you never know, might just not do this job or do something else, you never know. If helping a friend look for a job: I'd tell them they have to get a good resume that would be the first thing. Start looking, I guess, that's the only thing you can do, look at the job bank (HRDC) and see if there's anything. Which is the best job information source: I'd say the human resources one is the best. I think most employers go to that because they figure the majority of the people are going to, if they're laid off, they're already going to be in there to get their unemployment stuff so they're going to have a quick look at the job opportunities that might be

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CONCEPT	DESCRIPTION WORDS
Different recruitment sources for different types of companies and different experience levels	
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	take you out for supper once in a while or you know, we go out, where I'm at now, we go out once a month, talk about how this stuff's going at work, around the shop you know, like just, I mean we talk in the days in the shop everyday, but I mean we go out, out of the work area for supper once a month basically, just have a chit chat about how things are going, make sure everybody is happy, all that, which is nice. It's the first guy I've worked for that's done that. We get lunch every few weeks and stuff and I mean he just treats us good, try to make us happy and stay I guess, I don't know, it's just good. It's funny to be that young, because I figure I've been working for him for four years
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Self efficacy	"…but it's the few people that phoned for a job, they just heard through the grapevine, I guess, it's funny it is a tight knit little group, I guess you could say, the automotive trade, people hear that you're good at what you do, they call, it's whether I want to work for them or not, is the question."
How did you feel about the job after you accepted it? Did you like the job?	No stress, nobody down your back or nothing, giving you a hard time or anything, just go and do your thing, come home.
Supply and demand Macro environment	Other than that, it was just, if I need another job, I'll go get one. It seems so easy to get a job, every time I went to get one then I just, what the Hell, if I don't want to work here, I'll just go somewhere else and get another one, because right now, a trades person is in high demand in every trade. When you look in the paper and stuff. So I don't think it's that hard, if you're any good at what you do, which is a big problem with some people.

Appendix H

StudyResponse Project
Brief Participant Survey

Dr. Jeffrey M. Stanton, Principal Investigator and Director, StudyResponse Project

Thank you very much for participating in the StudyResponse project. I have a few questions for you that will help me to plan an upcoming study that StudyResponse will host. Completing this survey will probably take less than two minutes. In appreciation of your choice to participate, I will enter you into a random drawing for a gift certificate. The details of the drawing were specified in your email invitation. This project has approval from Syracuse University's Institutional Review Board (02165). With questions about this research please contact me at jmstanto@syr.edu.

Researchers at Saint Mary's University plan to conduct a StudyResponse research project on the topic of "The Recruitment Process." To be eligible for this project, participants must meet the following criteria: you must be at least 18 years of age; you must be employed. Please keep the research topic and these criteria in mind as you answer the following questions.

Please answer each of the following items Yes or No. Your responses will remain confidential and your identity will not be revealed to researchers. You may skip any question that you feel uncomfortable answering.	Yes	No
1. Would you be willing to participate in a study on the recruiting process that takes 30 minutes to complete?	○	○
2. Have you started a new job in the last five years?	○	○

The following responses will help us aggregate and analyze your responses properly. Note that your responses will remain confidential and that we never report your identity or email address to researchers who use StudyResponse.

May StudyResponse contact you by email with further information about this research?
A. ○ No.
B. ○ Yes.
C. ○ Perhaps: Depends on the compensation.
D. ○ Perhaps: Depends on the specific questions.
E. ○ Not sure: Need more information.

How frequently do you check your email account (the one you use for StudyResponse messages)?
A. ○ Rarely.
B. ○ Less than once a week.
C. ○ About once a week.
D. ○ Once every couple of days.
E. ○ At least once a day.

Your age and gender:
Present age in years: [   ]
○ Male

○ Female

Submit Your Responses

Participant [ID]: New Survey Invitation

Dear StudyResponse Project Participant:

In an earlier screening study you indicated that you would be willing
to participate in a study conducted by a researcher at Saint Mary's
University on the topic of the Recruitment Process. We are pleased to
inform you that the researchers have selected you to participate in
this study. You must be at least 18 years of age to participate in the
survey. The study will take you approximately 30 minutes to complete.
Please note that if you choose not to respond within the first week, we
will send you a reminder in one week.

This study is anonymous, so please do not enter any identifying
information into the research instrument except your StudyResponse ID,
which is [ID]. The researcher has pledged to keep your data
confidential and only to report aggregated results in any published
scientific study.

In appreciation of your choice to participate in the project, we will
enter you into a random drawing for a gift certificate to Amazon.com.
The researcher has provided StudyResponse with funding for 6 gift
certificates to Amazon.com worth $53 each. The drawing for the 6 gift
certificates will be conducted by StudyResponse on or about November
27, 2007. Note that your StudyResponse ID number is [ID] (also shown in
the subject line of this message) and that you must enter that number
into the survey to be eligible for the random drawing.

Follow this link to participate:

http://studyresponse.syr.edu/sr1247abredir.asp?srid=[ID]

Participation in this study is voluntary and you may withdraw from
participation at any time. If you have any questions about the study
you may contact the researcher directly:

Angela Bissonnette
Saint Mary's University
Email: XXXXX
Ph: XXXXX

We very much appreciate your participation in the StudyResponse project
and your willingness to consider completing this study.

You received this email because you signed up as a research participant
for the StudyResponse project, which is based at Syracuse University's
School of Information Studies, in Syracuse NY, USA. You also provided a
confirmation of that signup in a subsequent step. The StudyResponse
project has received institutional review board approval (#02165),
affirming our commitment to ethical treatment of research participants.
Although StudyResponse is not a commercial service and does not send
unsolicited email, the project complies with the obligations of the
2003 CAN-SPAM act. In accordance with the act, you have the following
options for ceasing participation in the StudyResponse project:

1. You may simply reply to this email with the word UNSUBSCRIBE in the subject.

2. You may use our self service account management interface at: http://istprojects.syr.edu/~studyresponse/studyresponse/update.htm

3. You may contact a staff member of the StudyResponse project using the contact information provided below.

For further information about the StudyResponse project, you may contact a member of the StudyResponse staff:

StudyResponse Project; Director: Jeffrey Stanton; Hinds Hall, Syracuse University, Syracuse, NY 13244-4100, 315-443-7267, SRhelp@syr.edu

* 7 Day Reminder *

Dear StudyResponse Project Participant:

In an earlier screening study you indicated that you would be willing to participate in a study conducted by a researcher at Saint Mary's University on the topic of the Recruitment Process. We are pleased to inform you that the researchers have selected you to participate in this study. You must be at least 18 years of age to participate in the survey. The study will take you approximately 30 minutes to complete. Please note that this is the last email you will receive inviting you to participate in this study.

This study is anonymous, so please do not enter any identifying information into the research instrument except your StudyResponse ID, which is 216291. The researcher has pledged to keep your data confidential and only to report aggregated results in any published scientific study.

In appreciation of your choice to participate in the project, we will enter you into a random drawing for a gift certificate to Amazon.com. The researcher has provided StudyResponse with funding for 6 gift certificates to Amazon.com worth $53 each. The drawing for the 6 gift certificates will be conducted by StudyResponse on or about November 27, 2007. Note that your StudyResponse ID number is 216291 (also shown in the subject line of this message) and that you must enter that number into the survey to be eligible for the random drawing.

Follow this link to participate:

http://studyresponse.syr.edu/sr1247abredir.asp?srid=216291

Participation in this study is voluntary and you may withdraw from participation at any time. If you have any questions about the study you may contact the researcher directly:

Angela Bissonnette
Saint Mary's University
Email: xxxxx
Ph: xxxxxxxxx

We very much appreciate your participation in the StudyResponse project and your willingness to consider completing this study.

You received this email because you signed up as a research participant for the StudyResponse project, which is based at Syracuse University's School of Information Studies, in Syracuse NY, USA. You also provided a confirmation of that signup in a subsequent step. The StudyResponse project has received institutional review board

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2. You may use our self service account management interface at: http://istprojects.syr.edu/~studyresponse/studyresponse/update.htm

3. You may contact a staff member of the StudyResponse project using the contact information provided below.

For further information about the StudyResponse project, you may contact a member of the StudyResponse staff:

StudyResponse Project: Director: Jeffrey Stanton: Hinds Hall, Syracuse University, Syracuse, NY 13244-4100, 315-443-7267, SRhelp@syr.edu

Appendix I

Details of key measures used in analyses

Study 3 Recruitment Questionnaire

Section 1.1: Preferred Recruitment source

1. If you were looking for a job, what job information sources <u>would you prefer</u> to use in order to find out about a job? Rate each of the following job information sources on a scale from 1 to 5 where 1= Most preferred=MP, 3= neutral, and 5=least preferred=LP.

		MP				LP
a.	Help wanted ads	1	2	3	4	5
b.	Internet job postings	1	2	3	4	5
c.	Recruitment agency –Headhunters	1	2	3	4	5
d.	Government job bank (agency)	1	2	3	4	5
e.	Outside Networking (Friends/Family/Colleagues outside an organization of interest)	1	2	3	4	5
f.	Inside Networking (Friends/Family/ Colleagues inside an organization of interest)	1	2	3	4	5
g.	Union job posting	1	2	3	4	5
h.	Job Fair	1	2	3	4	5
i.	On-campus recruitment	1	2	3	4	5
j.	Walk-in	1	2	3	4	5

Section 1.2 Recruitment source helpfulness

2. Rank the following 12 sources in terms of their level of helpfulness from one to 11. Which job source do you believe gives you the most helpful information about a job? (Assign a score of 1 to the source you feel is the most helpful, a score of 2 to the second most helpful and continue to 12, which would indicate the least helpful source.

   a. __ Help wanted ads
   b. __ Internet job postings
   c. __ Recruitment agency –Headhunter
   d. __ Government job bank (agency)
   e. __ Using a network of contacts (ex. professional association, colleagues, etc.) (friends, family, colleagues outside the organization)
   f. __ Employee referrals (friends, family, colleagues inside the organization)
   g. __ Notifying family and friends of your job search
   h. __ Prior experience with the organization (consulting, internship)
   i. __ Union job posting
   j. __ Job Fair
   k. __ On-campus recruitment
   l. __ Walk-in

Section 1.3 Recruiting Source Interview informativeness

3. **Think about the information you might need in preparing for a job interview.** How informative do you think each of these recruitment sources are in providing the type of information that will **help you to prepare for a job interview? 1=NI=Not Informative, 5=VI=Very informative (select one) Please choose N/A if you have never had any experiences with the listed job source.**

		NI				VI	
a.	Help wanted ads	1	2	3	4	5	N/A
b.	Internet job postings	1	2	3	4	5	N/A
c.	Recruitment agency – Headhunter	1	2	3	4	5	N/A
d.	Government job bank (agency)	1	2	3	4	5	N/A
e.	Outside Networking (friends, family, colleagues outside the organization)	1	2	3	4	5	N/A
f.	Inside Networking (friends, family, colleagues						

			1	2	3	4	5	N/A
	inside the organization)		1	2	3	4	5	N/A
g.	Prior experience with the organization (consulting, internship)		1	2	3	4	5	N/A
h.	Union job posting		1	2	3	4	5	N/A
i.	Job Fair		1	2	3	4	5	N/A
j.	On-campus recruitment		1	2	3	4	5	N/A
k.	Walk-in		1	2	3	4	5	N/A

Section 1.4 Recruiting Source Job informativeness

4. **Thinking about actually doing the job itself;** how informative do you think each of these recruitment sources are in terms of **preparing you for a job itself? 1=NI= Not informative, 5=VI=Very informative Please choose N/A if you have never had any experiences with the listed job source.**

		NI				VI	
		1	2	3	4	5	N/A
a.	Help wanted ads	1	2	3	4	5	N/A
b.	Internet job postings	1	2	3	4	5	N/A
c.	Recruitment agency –Headhunter	1	2	3	4	5	N/A
d.	Government job bank (agency)	1	2	3	4	5	N/A
e.	Outside Networking (friends, family, colleagues outside the organization)	1	2	3	4	5	N/A
f.	Inside Networking (friends, family, colleagues inside the organization)	1	2	3	4	5	N/A
g.	Prior experience with the organization (consulting, internship)	1	2	3	4	5	N/A
h.	Union job posting	1	2	3	4	5	N/A
i.	Job Fair	1	2	3	4	5	N/A

j. On-campus recruitment	1	2	3	4	5	N/A
k. Walk-in	1	2	3	4	5	N/A

Section 2 Internet usage
The following question pertains to internet recruiting specifically.
5. During a job search I would look for job postings on the internet.
   a. Once a day
   b. 2-3 times a week
   c. once a week
   d. never (**if never skip to next section**)

6. Have you ever set up automatic mailings of job postings from the internet?
Yes   No

Type of Internet Job site preferred
7. Rank from 1 to 5, in order of preference, which types of internet job sites you would prefer to use if you were currently conducting an internet job search: Most preferred =1, least preferred= 5

___Large and international (ex. Monster)
___Targeted to a specific occupation
___Targeted to a specific geographic region
___Targeted to a specific industry
___Company specific sites (ex. internet "career sections")

Section 3 Perceptions of recruitment sources: Two sample items were provided the same questions were asked successively for the other recruitment sources.

In the following series of questions please select the adjective or words for each pair of words or phrases that best describe how you perceive each recruitment source. Select the degree to which that adjective or words describe the recruitment source in your opinion. For example: 1=modern, 5=Traditional. (Please check the one that best applies)

8. Newspaper help wanted ads are:

		1	2	3	4	5	
a.	Modern	1	2	3	4	5	Traditional
b.	Not targeted	1	2	3	4	5	Targeted
c.	Entry level Positions	1	2	3	4	5	High level positions
d.	Informative	1	2	3	4	5	Not Informative
e.	Low skill	1	2	3	4	5	High skill
f.	Efficient	1	2	3	4	5	Inefficient
g.	Easy	1	2	3	4	5	Difficult
h.	Small Company	1	2	3	4	5	Large Company

9. Internet postings are:

		1	2	3	4	5	
a.	Modern	1	2	3	4	5	Traditional
b.	Not targeted	1	2	3	4	5	Targeted
c.	Entry level Positions	1	2	3	4	5	High level positions
d.	Informative	1	2	3	4	5	Not Informative
e.	Low skill	1	2	3	4	5	High skill
f.	f. Efficient	1	2	3	4	5	Inefficient

g.	Easy	1	2	3	4	5	Difficult
h.	Small Company	1	2	3	4	5	Large Company

Section 5.1: Source Usage -Type of recruitment source used

Please answer the following questions based on your current job.
19.Did you use the following sources to find out about the job opening for your current job? (Select yes or no as appropriate)

a. Help wanted ads	YES	NO
b. Internet job postings	YES	NO
c. Recruitment agency –Headhunter	YES	NO
d. Government Recruiting Agencies	YES	NO
e. Outside Networking (friends, family, colleagues outside the organization)	YES	NO
f. Inside Networking (friends, family, colleagues inside the organization)	YES	NO
g. Prior experience with the organization (consulting, internship)	YES	NO
h.Union job posting	YES	NO
i. Job Fair	YES	NO
j.On-campus recruitment	YES	NO
k.Walk-in	YES	NO
l.other, specify_____		

Section 5.3 Information gathered (6 items -Bolded questions only were used to create this measure)

Did you do any of the following to prepare for the selection procedures required for your current job? (Please select YES or No as applicable)

a.Review the company website	**YES**	**NO**
b.Study for the interview/exam based on the qualifications required	YES	NO
c.Discuss the organization with current or former employees in the company	**YES**	**NO**
d. Discuss the position with people in similar positions	**YES**	**NO**
e.Contact references	YES	NO
f. Look for information on the industry to which the company belongs	**YES**	**NO**

g. Think about the types of questions which might be asked	YES	NO
h. Review your resume	YES	NO
i. Prepare a cover letter	YES	NO
j. Discuss the requirements of the job with the hiring manager	**YES**	**NO**
k. Request a copy of the job description	**YES**	**NO**
l. Other (specify)	YES	NO
m. Nothing	YES	NO

Section 5.4 Information received from the company (This is modeled on RJP theory as discussed in text -5 items Bolded questions only were used to create this measure)

Prior to accepting the position, you currently hold, did the hiring manager or an organizational representative do any of the following: (Please select "YES" or "NO" as applicable

a. Introduce you to your potential colleagues	**YES**	**NO**
b. Provide a tour of the work location	**YES**	**NO**
c. Provide information about working conditions (hours of work, salary benefits, vacation)	**YES**	**NO**
d. Provide information regarding the positive and negative aspects of the job	**YES**	**NO**
e. Provide you with a simulation of the job	**YES**	**NO**
f. None of the above were provided	YES	NO
g. Other (Specify) _____		

These variables are denoted by the following abbreviations in bold:

Section 6: Affective commitment=AC; Perceived Fairness=PF; Turnover intentions=TI; Job Expectations =JE; Satisfaction=SAT; Job Satisfaction =Job sat.

The following series of questions pertain to HOW YOU FEEL about your current job, and the organization you work for. Please circle the response which most accurately reflects your opinion regarding your current job. (SD=Strongly Disagree=1;SA =Strongly Agree=5)

	SD				SA
I feel I was treated fairly during recruitment for my job. **(PF)**	1	2	3	4	5
The company contacted me at appropriate times during the recruitment process. **(PF)**	1	2	3	4	5

During recruitment, I felt the assessment

tools used were fair (PF)	1	2	3	4	5
Deciding to accept this job was a smart move on my part. (JE)	1	2	3	4	5
I had a very good understanding of my job before I accepted it. (JE)	1	2	3	4	5
I was surprised by some aspects of my job after I started it. (JE) Reverse code	1	2	3	4	5
In reality, my job is not what I had initially expected it to be.(JE) Reverse code	1	2	3	4	5
I am satisfied with my job (JOB SAT)	1	2	3	4	5
I am satisfied with the organization for which I work (SAT)	1	2	3	4	5
I am satisfied with my pay level (SAT)	1	2	3	4	5
I am satisfied with my work environment (SAT)	1	2	3	4	5
I intend to leave this job within one year (TI)	1	2	3	4	5
I believe the recruitment sources (or job information sources) used to advertise for my current job were appropriate (PF)	1	2	3	4	5
I would be happy to spend the rest of my career in this organization (AC)	1	2	3	4	5
I enjoy discussing my organization with people outside of it. (AC)	1	2	3	4	5
I really feel this organization's problems are my own. (AC)	1	2	3	4	5
I think that I could easily become as attached to another organization as I am to this one. (AC-Reverse scored)	1	2	3	4	5

I do not feel like part of the family at this Organization **(AC-Reverse scored)**	1	2	3	4	5
I do not feel emotionally attached to this Organization **(AC-Reverse scored)**	1	2	3	4	5
This organization has a great deal of personal meaning to me. **(AC)**	1	2	3	4	5
I do not feel a strong sense of belonging to this organization. **(AC-Reverse scored)**	1	2	3	4	5

Section 7.17 Promotion

Since starting your current job have you: (choose all that apply)

Received a promotion yes/No

Section 9 Self-Efficacy

The following section relates to how you perceive yourself in general. Please respond to the statements indicating the degree to which you agree or disagree with them as they relate to how you perceive yourself. Strongly disagree=1, Strongly Agree=5

	SD				SA
a. I will be able to achieve most of the goals that I have set for myself.	1	2	3	4	5
b. When facing difficult tasks, I am certain that I will accomplish them.	1	2	3	4	5
c. In general, I think I can obtain outcomes that are important to me.	1	2	3	4	5
d. I believe I can succeed at most any endeavor to which I have set my mind.	1	2	3	4	5
e. I will be able to successfully overcome many challenges	1	2	3	4	5
f. I am confident that I can perform effectively on many different tasks.	1	2	3	4	5
g. Compared to other people, I can do most tasks very well.	1	2	3	4	5
h. Even when things are tough, I can perform quite well.	1	2	3	4	5

Recruitment Questionnaire

Job Sources are the places, people and/or tools people use to find information about a job. Examples of job sources are: friends, newspaper ads, internet postings. There are a variety of sources of information people use to find a job. Initial questions in this survey ask how you perceive various sources of job information. Please take into account how you perceive these sources of job information when responding.

1.1. If you were looking for a job, what job information sources would you prefer to use in order to find out about a job?

Rate each of the following job information sources on a scale from 1 to 5.
(Most preferred = 1, Neutral = 3 , and Least preferred = 5)

	1	2	3	4	5
Help wanted ads	○	○	○	○	○
Internet job postings	○	○	○	○	○
Recruitment agency (i.e. Headhunter)	○	○	○	○	○
Government job bank (agency)	○	○	○	○	○
Outside Networking (Friends/Family/Colleagues outside an organization of interest)	○	○	○	○	○
Inside Networking (Friends/Family/ Colleagues inside an organization of interest)	○	○	○	○	○
Union job posting	○	○	○	○	○
Job Fair	○	○	○	○	○
On-campus recruitment	○	○	○	○	○
Walk-in	○	○	○	○	○

1.2. Rank the following 11 sources in terms of their level of helpfulness from 1 to 11. Which job source do you believe gives you the most helpful information about a job?

(Assign a score of 1 to the source you feel is the most helpful, a score of 2 to the second most helpful and continue to 11, which would indicate the least helpful source.)

Help wanted ads: [ ] *
Internet job postings: [ ] *
Recruitment agency -Headhunter: [ ] *
Government job bank (agency): [ ] *
Outside Networking (friends, family, colleagues outside the organization): [ ] *
Inside Networking (friends, family, colleagues inside the organization): [ ] *
Prior experience with the organization (consulting, internship): [ ] *
Union job posting: [ ] *
Job Fair: [ ] *
On-campus recruitment: [ ] *

Walk-in: [_____] *

1.3. Think about the information you might need in preparing for a job interview. How informative do you think each of these recruitment sources are in providing the type of information that will help you to prepare for a job interview?
(Not Informative = 1, Very informative = 5) Please choose N/A if you have never had any experiences with the listed job source.

	1	2	3	4	5	N/A
Help wanted ads	○	○	○	○	○	○
Internet job postings	○	○	○	○	○	○
Recruitment agency (i.e. Headhunter)	○	○	○	○	○	○
Government job bank (agency)	○	○	○	○	○	○
Outside Networking (Friends/Family/Colleagues outside an organization of interest)	○	○	○	○	○	○
Inside Networking (Friends/Family/ Colleagues inside an organization of interest)	○	○	○	○	○	○
Prior experience with the organization (consulting, internship)	○	○	○	○	○	○
Union job posting	○	○	○	○	○	○
Job Fair	○	○	○	○	○	○
On-campus recruitment	○	○	○	○	○	○
Walk-in	○	○	○	○	○	○

1.4. Thinking about actually doing the job itself; how informative do you think each of these recruitment sources are in terms of preparing you for a job itself?
(Not informative = 1, Very informative = 5) Please choose N/A if you have never had any experiences with the listed job source.

	1	2	3	4	5	N/A
Help wanted ads	○	○	○	○	○	○
Internet job postings	○	○	○	○	○	○
Recruitment agency (i.e. Headhunter)	○	○	○	○	○	○
Government job bank (agency)	○	○	○	○	○	○
Outside Networking (Friends/Family/Colleagues outside an organization of interest)	○	○	○	○	○	○
Inside Networking (Friends/Family/ Colleagues inside an organization of interest)	○	○	○	○	○	○
Prior experience with the organization (consulting, internship)	○	○	○	○	○	○
Union job posting	○	○	○	○	○	○
Job Fair	○	○	○	○	○	○
On-campus recruitment	○	○	○	○	○	○

Walk-in	r	r	r	r	r	r

The following question pertains to internet recruiting specifically.

2.1. During a job search I would look for job postings on the internet:
- ⌜ Once a day
- ⌜ 2-3 times a week
- ⌜ once a week
- ⌜ never (if never skip to next section)

2.2. Have you ever set up automatic mailings of job postings from the internet?
- ⌜ Yes ⌜ No

2.3. Rank from 1 to 5, in order of preference, which types of internet job sites you would prefer to use if you were currently conducting an internet job search:
(Most preferred = 1, least preferred = 5)

Large and international (i.e. Monster): ☐ *

Targeted to a specific occupation: ☐ *

Targeted to a specific geographic region: ☐ *

Targeted to a specific industry: ☐ *

Company specific sites (i.e. internet "career sections"): ☐ *

In the following series of questions, please select the degree to which each adjective or word best describe how you perceive each recruitment source. For instance, if you believe newsapapers are "modern" choose 1, if you believe they are "traditional" choose 5. If you believe they are "neither modern nor traditional" choose 3. Please follow this pattern for all of the following words, using 1 if you believe the recruitment source is more like the first word and 5 if you believe it is more like the second word. You may also use a degree in between if you believe it is somewhere in between, as appropriate. Select the degree to which that adjective or words best describe the recruitment source in your opinion.

3.1. Newspaper help wanted ads are:

	1	2	3	4	5	
Modern	⌜	⌜	⌜	⌜	⌜	Traditional
Not Targeted	⌜	⌜	⌜	⌜	⌜	Targeted
Entry Level Positions	⌜	⌜	⌜	⌜	⌜	High Level Positions
Informative	⌜	⌜	⌜	⌜	⌜	Not Informative
Low Skill	⌜	⌜	⌜	⌜	⌜	High Skill
Efficient	⌜	⌜	⌜	⌜	⌜	Inefficient
Easy	⌜	⌜	⌜	⌜	⌜	Difficult
Small Company	⌜	⌜	⌜	⌜	⌜	Large Company

3.2. Internet postings are:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.3. Recruitment agency (i.e. Headhunter) are:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.4. Government Recruiting Agencies are:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.5. Networking outside a company (friends, family, colleagues) is:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.6. Networking inside a company (friends, family, colleagues) is:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.7. Union job postings are:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted
Entry Level Positions	○	○	○	○	○	High Level Positions
Informative	○	○	○	○	○	Not Informative
Low Skill	○	○	○	○	○	High Skill
Efficient	○	○	○	○	○	Inefficient
Easy	○	○	○	○	○	Difficult
Small Company	○	○	○	○	○	Large Company

3.8. Job Fairs are:

	1	2	3	4	5	
Modern	○	○	○	○	○	Traditional
Not Targeted	○	○	○	○	○	Targeted

Entry Level Positions ○ ○ ○ ○ ○ High Level Positions
Informative ○ ○ ○ ○ ○ Not Informative
Low Skill ○ ○ ○ ○ ○ High Skill
Efficient ○ ○ ○ ○ ○ Inefficient
Easy ○ ○ ○ ○ ○ Difficult
Small Company ○ ○ ○ ○ ○ Large Company

3.9. On-campus recruitment is:

| | 1 | 2 | 3 | 4 | 5 | |

Modern ○ ○ ○ ○ ○ Traditional
Not Targeted ○ ○ ○ ○ ○ Targeted
Entry Level Positions ○ ○ ○ ○ ○ High Level Positions
Informative ○ ○ ○ ○ ○ Not Informative
Low Skill ○ ○ ○ ○ ○ High Skill
Efficient ○ ○ ○ ○ ○ Inefficient
Easy ○ ○ ○ ○ ○ Difficult
Small Company ○ ○ ○ ○ ○ Large Company

3.10. Walk-ins are:

| | 1 | 2 | 3 | 4 | 5 | |

Modern ○ ○ ○ ○ ○ Traditional
Not Targeted ○ ○ ○ ○ ○ Targeted
Entry Level Positions ○ ○ ○ ○ ○ High Level Positions
Informative ○ ○ ○ ○ ○ Not Informative
Low Skill ○ ○ ○ ○ ○ High Skill
Efficient ○ ○ ○ ○ ○ Inefficient
Easy ○ ○ ○ ○ ○ Difficult
Small Company ○ ○ ○ ○ ○ Large Company

Section 2c

4.1. For the following section please indicate the degree to which you agree with the statements made.
(Strongly Disagree = 1, Strongly Agree = 5)

	1	2	3	4	5

Networking allows me to discover what a job is really like.	⊙	⊙	⊙	⊙	⊙
Written job postings always state the exact things employers are looking for	⊙	⊙	⊙	⊙	⊙
Certain types of job sources are better suited to looking for certain types of jobs	⊙	⊙	⊙	⊙	⊙
No matter what type of job you are looking for, "who you know" is more important than "what you know"	⊙	⊙	⊙	⊙	⊙
The recruitment techniques used by an organization tell me a lot about that organization.	⊙	⊙	⊙	⊙	⊙

Please answer the following questions based on your current job.

5.1. Did you use the following sources to find out about the job opening for your current job?
Please answer yes or no for each source.

	Yes	No
Help wanted ads	⊙	⊙
Internet job postings	⊙	⊙
Recruitment agency (i.e. Headhunter)	⊙	⊙
Government Recruiting Agencies	⊙	⊙
Outside Networking (friends, family, colleagues outside the organization)	⊙	⊙
Inside Networking (friends, family, colleagues inside the organization)	⊙	⊙
Prior experience with the organization (consulting, internship)	⊙	⊙
Union job posting	⊙	⊙
Job Fair	⊙	⊙
On-campus recruitment	⊙	⊙
Walk-in	⊙	⊙
other, specify	⊙	⊙

5.2. Specify which of the selection procedures were used in the assessment process for your current job by indicating a yes or a no, regarding whether or not the selection procedure was used.
Please answer yes or no for each assessment procedure.

	Yes	No
Job interview	⊙	⊙
Job knowledge test	⊙	⊙
Abilities test	⊙	⊙
Reference check	⊙	⊙
Intelligence test	⊙	⊙

Integrity test	⊙	⊙
Personality test	⊙	⊙
Medical exam	⊙	⊙
Drug test	⊙	⊙
Security check	⊙	⊙
Work samples	⊙	⊙
Simulation exercise	⊙	⊙

5.3. Did you do any of the following activities to prepare for the assessment procedures required for your current job?
Please answer yes or no for each activity.

	Yes	No
Review the company website	⊙	⊙
Study for the interview/exam based on the qualifications required	⊙	⊙
Discuss the organization with current or former employees in the company	⊙	⊙
Discuss the position with people in similar positions	⊙	⊙
Contact references	⊙	⊙
Look for information on the industry to which the company belongs	⊙	⊙
Think about the types of questions which might be asked	⊙	⊙
Review your resume	⊙	⊙
Prepare a cover letter	⊙	⊙
Discuss the requirements of the job with the hiring manager	⊙	⊙
Request a copy of the job description	⊙	⊙
Other (specify)	⊙	⊙
Nothing	⊙	⊙

5.4. Prior to accepting the position you currently hold, did the hiring manager or an organizational representative do any of the following:
Please answer yes or no for each activity.

	Yes	No
Introduce you to your potential colleagues	⊙	⊙
Provide a tour of the work location	⊙	⊙
Provide information about working conditions (hours of work, salary benefits, vacation)	⊙	⊙
Provide information regarding the positive and negative aspects of the job	⊙	⊙
Provide you with a simulation of the job	⊙	⊙

None of the above were provided	○	○
Other (specify) _____ -	○	○

6.1. The following series of questions pertain to HOW YOU FEEL about your current job, and the organization you work for. Please select the response which most accurately reflects your opinion regarding your current job.
(Strongly Disagree = 1, Strongly Agree = 5)

	1	2	3	4	5
Deciding to accept this job was a smart move on my part:	○	○	○	○	○
I had a very good understanding of my job before I accepted it.	○	○	○	○	○
I was surprised by some aspects of my job after I started it.	○	○	○	○	○
In reality, my job is not what I had initially expected it to be.	○	○	○	○	○
I am satisfied with my job	○	○	○	○	○
I am satisfied with the organization for which I work	○	○	○	○	○
I am satisfied with my pay level	○	○	○	○	○
I am satisfied with my work environment	○	○	○	○	○
I intend to leave this job within one year	○	○	○	○	○
I believe the recruitment sources (or job information sources) used to advertise for my current job were appropriate	○	○	○	○	○
I would be happy to spend the rest of my career in this organization	○	○	○	○	○
I enjoy discussing my organization with people outside of it.	○	○	○	○	○
I really feel this organization's problems are my own.	○	○	○	○	○
I think that I could easily become as attached to another organization as I am to this one.	○	○	○	○	○
I do not feel like part of the family at this organization	○	○	○	○	○
I do not feel emotionally attached to this organization	○	○	○	○	○
This organization has a great deal of personal meaning to me.	○	○	○	○	○
I do not feel a strong sense of belonging to this organization.	○	○	○	○	○
I feel a sense of pride working for my organization	○	○	○	○	○
The management style of organization I work for is very participative	○	○	○	○	○

6.2. The following group of questions ask why you decided to accept your current job. Please select the response which most accurately reflects the reasons for accepting your current job.
(Strongly Disagree = 1, Strongly Agree = 5)

	1	2	3	4	5
I decided to accept this job because of the salary level	○	○	○	○	○
The location was very important to me in accepting this job	○	○	○	○	○

One important reason I accepted this job was because of the opportunities for advancement.	○	○	○	○	○
I wanted this job because I believed it would be challenging.	○	○	○	○	○
I decided to accept this job because I believed the manager of the position would be a great person to work with	○	○	○	○	○
I accepted this job because the organization has a good reputation regarding the treatment of its employees.	○	○	○	○	○
I wanted this job because I have friends who work for the same organization.	○	○	○	○	○
The medical benefits available played a big part in my decision to accept this job.	○	○	○	○	○
The pension plan was an essential consideration in accepting this job.	○	○	○	○	○
The amount of vacation time is important to me when considering whether to accept a job.	○	○	○	○	○
The type of organization I work for is more important to me than the amount of money I make when deciding to accept a job.	○	○	○	○	○
The level of autonomy I will have in my work is an important consideration when I accept a job.	○	○	○	○	○
At the time I accepted my current job, I had other job prospects.	○	○	○	○	○

The following groups of questions pertain to questions about yourself, your employment history and the organization for which you work.

7.1. Were you already employed during your search for this job?

    ○ Yes ○ No

7.2. At the time you accepted your current position, did you have any other job offers to choose from?

    ○ Yes ○ No

7.3. If Yes, how many job offers did you have to choose from?

    ○ One other job offer
    ○ Two other job others
    ○ Three or more job offers

7.4. How long did you search for a job before receiving the offer you choose?

    ○ I was not searching for a job.
    ○ less than 1 week
    ○ 1-2 weeks
    ○ 2 weeks to 1 month
    ○ 1-3 months
    ○ 3-6 months

    ◯ 6 months to one year
    ◯ more than one year

7.5. At the time you were hired, was the unemployment rate in the industry you were hired in:
    ◯ Very low
    ◯ Low
    ◯ Medium
    ◯ High
    ◯ Very high

7.6. When you were originally hired, how favourable to the candidates was the job market in the area you were searching?
    ◯ Highly Favourable
    ◯ Moderately Favourable
    ◯ Neither Favourable or Unfavourable
    ◯ Moderately Unfavourable
    ◯ Highly Unfavourable

7.7. How long have you been working in your current position?
    ◯ Less than one year
    ◯ 1-3 years
    ◯ 4-5 years
    ◯ 6-10 years
    ◯ 11-15 years
    ◯ 16-25 years
    ◯ More than 25 years

7.8. How many years of work experience do you have in similar or related positions?
    ◯ Less than one year
    ◯ 1-3 years
    ◯ 4-5 years
    ◯ 6-10 years
    ◯ 11-15 years
    ◯ 16-25 years
    ◯ More than 25 years

7.9. What is the size of the organization you are working in?
    ◯ Very small (1 to 19 people)
    ◯ Small (20-99)
    ◯ Medium (100-499)
    ◯ Large (500 or more)

7.10. What is the nature of your current position?

    ○ Manager

    ○ Professional

    ○ Technical trade

    ○ Sales

    ○ Clerical

    ○ Production worker with no specific trade

7.11. Please specify the type of industry in which you are working:

    ○ Natural resources

    ○ Manufacturing

    ○ Construction

    ○ Transportation

    ○ Communication

    ○ Retail

    ○ Financial

    ○ Education

    ○ Health care

    ○ Information technology

    ○ Government

    ○ Other (specify)

7.12. Please provide your job title:

7.13. Does your current organization conduct performance reviews?

    ○ Yes (If yes go to question 56 if no, go to question 61)

    ○ No

7.14. If you have received performance reviews has your performance been judged as:

    ○ Poor

    ○ Below Average

    ○ Average

    ○ Above Average

    ○ Excellent

7.15. If performance reviews are conducted, are they related to promotional opportunities?

    ○ Yes

    ○ No

    ○ Not Applicable

7.16. If performance reviews are conducted, are they related to salary increases or bonuses?

    ⊙ Yes

    ⊙ No

    ⊙ Not Applicable

7.17. Since starting your current job have you:
(Choose all that apply)

    ☐ Received a promotion

    ☐ Received a salary increase

    ☐ Received a bonus

7.18. If you have been promoted, how many times have you been promoted since you began working for this organization?

    ⊙ N/A

    ⊙ Once

    ⊙ Twice

    ⊙ Three times

    ⊙ More than three times

7.19. Have you had a previous job? (If yes please answer the following questions. If no please proceed to question # 72)

    ⊙ Yes

    ⊙ No

The following questions pertain to your PREVIOUS job. Please respond based on your PREVIOUS job. For the purposes of this study a previous job would be a job you had just prior to your current job.

8.1. How long ago was your previous job?

    ⊙ Less than one year ago

    ⊙ 1-3 years ago

    ⊙ 4-5 years ago

    ⊙ 6-10 years ago

    ⊙ 11-15 years ago

    ⊙ 16-25 years ago

    ⊙ More than 25 years ago

8.2. Thinking about your previous job, which recruitment sources did you use, to find out about the job opening?

	Yes	No
Help wanted ads	⊙	⊙
Internet job postings	⊙	⊙

Recruitment agency (i.e. Headhunter)	○	○
Government Recruiting Agencies	○	○
Outside Networking (friends, family, colleagues outside the organization)	○	○
Inside Networking (friends, family, colleagues inside the organization)	○	○
Prior experience with the organization (consulting, internship)	○	○
Union job posting	○	○
Job Fair	○	○
On-campus recruitment	○	○
Walk-in	○	○
other, specify _____	○	○

8.3. Thinking about the selection procedures you underwent for your previous job, what selection procedures were used?

	Yes	No
Job interview	○	○
Job knowledge test	○	○
Abilities test	○	○
Reference check	○	○
Intelligence test	○	○
Integrity test	○	○
Personality test	○	○
Medical exam	○	○
Drug test	○	○
Security check	○	○
Work samples	○	○
Simulation exercise	○	○

8.4. Did you do any of the following to prepare for the selection procedures required for your previous job?

	Yes	No
Review the company website	○	○
Study for the interview/exam based on the qualifications required	○	○
Discuss the organization with current or former employees in the company	○	○
Discuss the position with people in similar positions	○	○
Contact references	○	○

Look for information on the industry to which the company belongs	○	○
Think about the types of questions which might be asked	○	○
Review your resume	○	○
Prepare a cover letter	○	○
Discuss the requirements of the job with the hiring manager	○	○
Request a copy of the job description	○	○
Other (specify)	○	○
Nothing	○	○

8.5. Prior to accepting the position, you previously held, did the hiring manager or an organizational representative do any of the following:

	Yes	No
Introduce you to your potential colleagues	○	○
Provide a tour of the work location	○	○
Provide information about working conditions (hours of work, salary benefits, vacation)	○	○
Provide information regarding the positive and negative aspects of the job	○	○
Provide you with a simulation of the job	○	○
None of the above were provided	○	○
Other (Specify)	○	○

8.6. How long did you work in your previous position?

- ○ Less than one year
- ○ 1-3 years
- ○ 4-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16-25 years
- ○ More than 25 years

8.7. How many years of work experience do you have in similar or related positions?

- ○ Less than one year
- ○ 1-3 years
- ○ 4-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16-25 years
- ○ More than 25 years

8.8. Why did you leave your previous position?
(Choose all that apply)

- ⊓ Career advancement
- ⊓ Salary increase
- ⊓ More challenging job
- ⊓ Less stressful job
- ⊓ Location of job
- ⊓ Benefits package of job
- ⊓ More closely related to education
- ⊓ Downsized/Laid off
- ⊓ Fired
- ⊓ Personality conflicts with co-workers
- ⊓ Other (Specify) [_____]

8.9. What is the size of the organization you were working in?

- ⊂ Very small (1 to 19 people)
- ⊂ small (20-99)
- ⊂ Medium (100-499)
- ⊂ Large (500 or more)

8.10. What was the nature of your position in your previous job?

- ⊂ Manager
- ⊂ Professional
- ⊂ Technical trade
- ⊂ Sales
- ⊂ Clerical
- ⊂ Production worker with no specific trade

8.11. Please specify the type of industry you were working in:

- ⊂ Natural resources
- ⊂ Manufacturing
- ⊂ Construction
- ⊂ Transportation
- ⊂ Communication
- ⊂ Retail
- ⊂ Financial
- ⊂ Education
- ⊂ Health care
- ⊂ Information technology
- ⊂ Government

     ⌐ Other (specify) [_____]

8.12. Please provide your job title:
[_____]

Section 9

9.1. The following section relates to how you perceive yourself in general. Please respond to the statements indicating the degree to which you agree or disagree with them as they relate to how you perceive yourself.
(Strongly Disagree = 1, Strongly Agree = 5)

	1	2	3	4	5
I will be able to achieve most of the goals that I have set for myself.	⌐	⌐	⌐	⌐	⌐
When facing difficult tasks, I am certain that I will accomplish them.	⌐	⌐	⌐	⌐	⌐
In general, I think I can obtain outcomes that are important to me.	⌐	⌐	⌐	⌐	⌐
I believe I can succeed at most any endeavor to which I have set my mind.	⌐	⌐	⌐	⌐	⌐
I will be able to successfully overcome many challenges	⌐	⌐	⌐	⌐	⌐
I am confident that I can perform effectively on many different tasks.	⌐	⌐	⌐	⌐	⌐
Compared to other people, I can do most tasks very well.	⌐	⌐	⌐	⌐	⌐
Even when things are tough, I can perform quite well.	⌐	⌐	⌐	⌐	⌐

Demographics

The following questions relate to demographics.

10.1. Please state your age in years.
[_____]

10.2. What is your highest level of education?
     ⌐ Less than high school
     ⌐ High school diploma
     ⌐ Technical diploma
     ⌐ College diploma
     ⌐ University certificate
     ⌐ Bachelor's degree
     ⌐ Masters' degree
     ⌐ Doctorate

10.3. What is your gender?

⌒ Female ⌒ Male

10.4. Are you a visible minority?

⌒ Yes ⌒ No

10.5. Are you of aboriginal descent? (registered Indian, Inuit or Métis)

⌒ Yes ⌒ No

10.6. Are you a person with a disability?

⌒ Yes ⌒ No

10.7. There are times when things happen and we have to be absent from work.
Please think about the amount of time you have had to take off work in the past 12 months, without considering vacation time or statutory holidays, how many days have you had to take off work in the last 12 months?

| Submit form | Clear form |

This form was built with Infopoll Designer.

Appendix J

Table of Spearman Correlations between predictor and criterion variables for Study 3 (continued on next page)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 Firm size	2 84	1 15	---																				
2 Self-efficacy	33 36	5 87	09	---																			
3 Perceived info received	2 95	1 53	06	16	--																		
4 Perceived info gathered	9 04	1 90	19	09	34	---																	
5 Affective commit	26 11	6 51	- 00	24	11	- 06	----																
6 Gender[a]	1 62	0 49	- 01	16	- 06	- 15	14	---															
7 Designated group[b]	0 25	0 44	- 06	02	09	12	- 06	- 09	-----														
8 Life partner[c]	1 56	50	02	04	03	00	02	- 06	- 08	---													
9 Dependent Child [d]	1 53	50	- 04	- 11	- 12	- 13	- 01	- 01	05	- 40	---												
10 Education	4 61	1 87	17	- 02	02	21	- 06	- 14	07	02	- 06	---											
11 Occupation Group[e]	3 08	1 63	- 15	- 06	- 02	- 19	01	10	01	- 09	03	- 36	----										
12 Age	38 07	10 65	- 06	10	00	- 05	06	- 02	- 00	20	- 11	- 05	- 03	----									
13 Previous Experience	2 22	1 20	04	21	- 02	07	10	04	- 06	22	- 15	03	- 05	42	----								
14 Promotion[f]	1 21	1 01	14	15	09	10	08	- 04	10	03	02	02	11	- 09	01	----							
15 Number promotions	1 48	0 98	06	05	07	06	05	- 10	09	- 05	01	02	- 17	- 13	02	- 74	--						
16 Job Satisfaction	3 88	1 01	05	34	13	01	57	13	- 06	- 07	- 08	- 08	06	12	09	10	04	---					
17 Formal[g]	72	45	14	- 04	08	23	- 10	- 08	13	- 04	- 03	08	- 00	- 02	01	- 02	02	- 05	---				
18 Internet[h]	0 53	0 50	19	- 03	13	22	- 06	- 08	10	- 04	- 04	14	- 03	- 06	- 02	04	06	- 01	66	----			
19 Informal[i]	0 64	0 48	01	- 08	17	27	- 04	- 08	- 04	- 04	- 09	11	- 08	- 10	- 05	- 00	07	- 07	- 10	01	---		

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
20 Turnover	2 57	1 43	- 06	- 10	- 05	07	- 53	- 20	12	- 07	- 02	07	- 01	- 11	- 08	- 04	01	- 44	14	15	04	---	
21 Perceived Fairness	16 33	3 22	09	50	16	- 05	39	22	- 08	05	- 12	- 11	04	10	14	10	- 01	55	- 03	- 03	- 10	- 23	---
22 Job Expectancies	14 02	3 28	02	19	13	- 04	41	13	- 05	06	- 07	- 06	02	07	12	01	- 06	40	- 03	- 05	- 04	- 38	39

Note All significant at *p* < 001 (2-tailed) if r ≥ 15, p< 01 if r≥ 12 and at p< 05, if r ≥ 1, otherwise N S = non significant,
[a] 1=male,2=female [b]0=not designated group, 1=designated group [c]0=no life partner, 1=life partner [d]0=no dependent child,, 1 dependent child [e] 1=manager, 6=production worker
[f to l] 0=source not used, 1=source used

Appendix K

Perceived Job Informativeness Factor Analysis

- 4 Factor solution of Sources Informativeness
- Situational Sources
- Insider Sources- similar to informal
- Written -Help wanted ads & internet
- Recruiter Sources
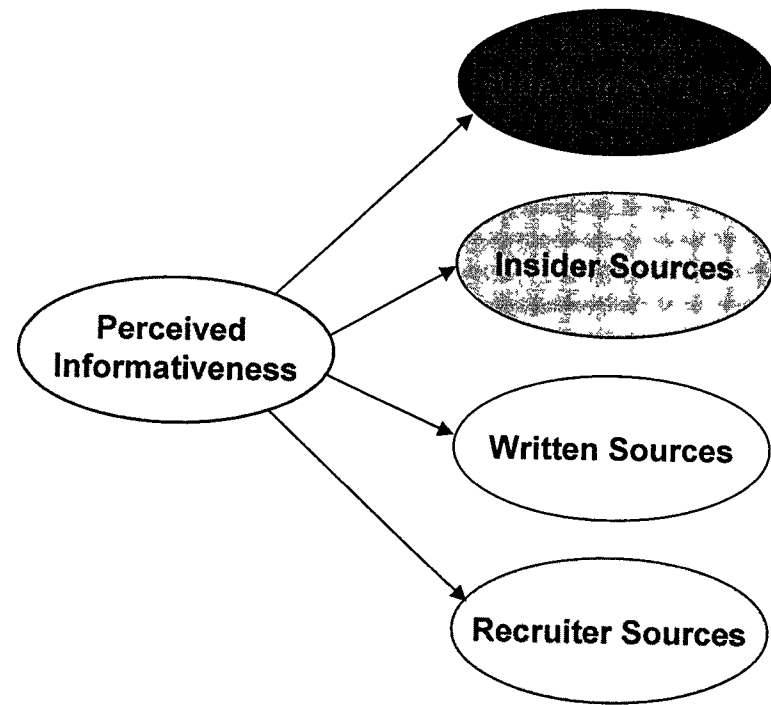
Appendix L

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