

Don't Mention It: Why People Don't Share Job Information, When They Do, and Why it Matters

Alexandra Marin^a

November 23, 2011

^a University of Toronto
Department of Sociology
725 Spadina Ave.
Toronto ON Canada M5S 2J4
alexandra.marin@utoronto.ca
Phone: 1-416-946-5880
Fax: 1-416-978-3963

Marin, Alexandra. (In Press). Don't Mention It: Why people don't share job information, when they do, and why it matters. *Social Networks*. doi:10.1016/j.socnet.2011.11.002

Network-based job search is especially likely to foster workplace segregation and limit status attainment when information flows through homophilous ties. This paper takes the perspective of information holders and examines how the use of strong versus weak ties – which tend to be homophilous and heterophilous, respectively – differs with characteristics of labour markets in which jobs are located. Using in-depth interviews with entry-level white collar workers I show that information holders with opportunities to mention specific jobs to specific people do so only 27% of the time. Because they hesitate to share information if they are uncertain the information is specifically sought, information flows more commonly to strong ties, whose career goals are more likely to be known. Information is more likely to be shared with weak ties if it concerns occupations for which one may be specifically credentialed, since receiving relevant training serves as signal of interest in such jobs. These findings suggest that the homophily of referrals and their inequality-generating effects may vary across occupations.

Keywords: social networks, job search, information flow, labour markets, social capital, weak ties

1. Introduction

The use of social networks in the labour market has been frequently implicated in the creation and re-creation of inequality. Research on the mechanisms linking network-based job searches to inequality suggests that network-based job search is especially likely to foster workplace segregation and limit status attainment when information flows through homophilous ties. This paper takes the perspective of information holders and examines how the use of strong versus weak ties – which tend to be homophilous and heterophilous, respectively (Lawrence 2006, Mollenhorst et. al. 2008) – varies with characteristics of labour markets in which jobs are located.

While several scholars have explained the use of strong and weak ties in the labour market by theorizing about the types of ties or types of networks that hold the most information, the flow of job information cannot be explained simply by the resource content of networks. Information available through social networks only makes it to job seekers when information holders choose to share it. Therefore, a full explanation requires an account of the ways in which information holders exercise agency in deciding what to do with this information (Emirbayer and Goodwin 1994). Theories of how information holders make decisions to share or withhold job information are implicit in much of the research on the use of social networks in job search and recruitment; however, research collecting data on this subject directly from information holders is scarce (See Smith 2005, 2007 for a notable exception). While arguing that network-based recruiting helps organizations and job seekers deal with imperfect information in the labour market, the literature has failed to problematize the ways in which potential referrers must also deal with imperfect information to evaluate their network members' aptitudes and interests. This paper studies

information holders directly to understand when they share and withhold information, why they make the choices they do, and to show that information holders' decision-making process affects the likelihood of sharing information with strong and weak ties differently in different labour markets.

These findings are based on a study that addresses when and why information holders share or withhold information using in-depth interviews in which information holders discussed specific job openings of which they had been aware. Information *sharing* is the dependent variable, holding constant both knowledge of job information and connections to potential applicants. This approach allows the study of not only the successful information flow captured in job seeker and job applicant studies (Granovetter 1973; Granovetter 1974; Lin, Ensel, and Vaughn 1981; Lin, Vaughn and Ensel 1981; Fernandez and Weinberg 1997), but also instances in which job information was not shared or not shared with particular network members.

Information holders in this study with opportunities to mention job openings to their network members do so only 27% of the time. Consistent with theories explicit and implicit in the literature, information holders wish to be helpful to their network members and are concerned with their reputations and thus with evaluating their network members likely performance in a job opening (Granovetter 1973, Smith 2005, 2007, Fernandez and Weinberg 1997). In this population, both of these factors promote information sharing. However, information flow is hindered by information holders' reluctance to appear intrusive by offering unsolicited career advice. As a result, they report that they do not share information if they do not know their network member to be looking for *that* job and they do not share information unless the topic of job openings comes up in conversation. The conditions that favour information flow vary with tie

strength and with the extent to which occupations are open to people with a wide variety of work and education backgrounds. As a result, the likelihood of information sharing is similarly structured: information sharing is more likely to be shared with strong ties or with weak ties when occupations are tightly linked to specific educational backgrounds. This in turn has implications for the ways in which, and the conditions under which, network-based hiring is likely to be linked to status attainment and workplace segregation.

2. Social Networks, Job Search and Inequality

Social networks are an important source of job information for job seekers and job changers (Granovetter 1973, 1974, 1995 Lin, Vaughn, and Ensel 1981, Marsden and Gorman 2001, McDonald 2005, McDonald and Elder 2006). Approximately half of job-changers first learned of their jobs from a network member and about half of job seekers use their networks in searching for jobs (Marsden and Gorman 2001). More importantly, organizational research on hiring has shown that job applicants who are referred have an advantage over non-referred applicants. They are more likely to be interviewed, even controlling for the appropriateness of their resumes, and if interviewed they are more likely to be hired (Fernandez and Weinberg 1997).

Because social networks play a critical role in matching people to job openings, they have been frequently implicated in creating or re-creating workplace segregation, a key factor in creating the gender wage gap (Fernandez and Sosa 2005, Petersen and Morgan 1995, Reskin et. al. 1999, Reskin and Padavic 1995). Studies of job seekers consistently show that women who use networks to search for work and especially who learn of their job openings from a same-sex contact are more likely to work in female dominated jobs and occupations (Drenea 1998,

Hanson and Pratt 1991, Mencken and Winfield 1998, Straits 1998). Workers who learned of their jobs from co-ethnics are similarly more likely to work in ethnically segregated jobs (Elliot 2001). Findings at the organization level are consistent with this: women are more likely to refer than men and women disproportionately refer other women (Fernandez and Sosa 2005). These gendering effects of referrals are so strong that Rubineau and Fernandez (2005) argue that even in the absence of biases in hiring or turnover, network-based hiring can re-create or exacerbate gender segregation.

In addition to affecting workplace segregation, network-based hiring may influence job seekers' status attainment. While there is some debate as to whether and for whom finding a job through social networks leads to a better job (Bridges and Villemez 1986, Lin 1999, Mouw 2002*a*, 2002*b*, 2003, 2006 McDonald 2005, McDonald and Elder 2006, Montgomery 1992), the characteristics of the contact who provides information matters. Among job seekers who learn of their jobs from network ties, those who used high-status contacts achieved higher-status positions than those who used lower status contacts (Lin 1999; Lin, Ensel, and Vaughn 1981, Lin, Vaughn, and Ensel 1981).

Social networks foster workplace segregation and limit status attainment when information flows to homophilous ties. Theories of how network-based recruitment re-creates such inequality have presented this as the result of the information holders hoarding opportunities, and sharing information only with those whom they define as members of their ingroup, thus guarding occupations or workplaces from outside incursions (Tilly 1998, Grieco 1987). Others have presented this as the unfortunate but foreseeable result of homophilous social networks (Fernandez and Sosa 2005, Rubineau and Fernandez 2005). Social networks are homophilous,

therefore it stands to reason that information travelling through networks will follow homophilous paths, even where no ill-intent, opportunity hoarding or deliberate exclusion exists. Neither approach calls attention to conditions under which homophily is likely to vary: Strong ties are more homophilous than weak ties (Lawrence 2006, Mollenhorst et. al. 2008) and information shared through weak ties should reach less homophilous contacts than information shared through strong ties.

The literature suggests that the extent to which network-based hiring promotes status attainment or ascriptive segregation depends in part on the extent to which information is passing through strong or weak ties. Lin (1999, 2001) argues that weak ties are particularly useful for job seekers using their networks for status attainment. Among job seekers who learned of their jobs from network ties, those who attained high-status positions used higher-status contacts more often than those with lower status positions (Lin 1999; Lin, Ensel, and Vaughn 1981, Lin, Vaughn, and Ensel 1981). These findings come together in Social Resources Theory which posits that high-status contacts, by virtue of the networking opportunities provided by their organizational positions, have more diverse social networks, possess more influence, and are more likely to be familiar with higher status openings than low-status contacts (Lin 2001). Because strong ties are more likely than weak ties to be homophilous, job seekers are more likely to reach higher status contacts and higher status positions through weak ties than through strong ties (Lin and Dumin 1986, Lin 2001, Loury 2006, Wegener 1991).

Network-based information flow re-creates ascriptive segregation in the workplace because people tend to refer people who are similar to themselves. If one group is disproportionately represented among employees, it tends to be disproportionately represented among referred

applicants (Fernandez and Sosa 2005). Because weak ties are less homophilous than strong ties (Lawrence 2006, Mollenhorst et. al. 2008), workplace segregation is less likely to be recreated or exacerbated by network-based information flow when people share information with weak ties than when they share with their strong ties.

Whether information flows through strong or weak ties may have important consequences for outcomes that are deeply important to sociologists. Yet the question of when information holders share information with strong versus weak ties has been left unasked and we are left only with the assumption that the contacts who *provide* the most information are the contacts who *have* the most information. For example, Granovetter (1973, 1974) argued that because a person's weak ties are less likely to know one another and to have common contacts themselves, these network members lead to non-redundant sources of information. Burt has similarly argued for the information benefits of contacts who are not connected to another or to common third parties (1992, 2000), and Lin and his collaborators have argued that information about high status jobs comes from weak ties because those higher status contacts are more likely to know of high status job openings (Lin 2001, Lin, Ensel, and Vaughn 1981).

In each theory, the greater incidence of information flow is attributed to a greater volume of information held by contacts. This means that the theories contain an implicit assumption of inevitable or at least uniform information flow: Equating the ties that provide the most information with those that have the most information makes sense only if information flow is either inevitable or uniform. Both conditions are implausible if we take seriously information holders' agency in choosing to share or withhold information.

3. Choosing to Tell

The literature suggests two explanations of when and why information holders choose to share information. The first treats information exchange as a low-cost and relatively risk-free method of doing a friend a favour (Granovetter 1974) or building relationships with possibilities for reciprocity or mutual benefit (Finlay and Coverdill 2002, Fernandez and Castilla 2001, also Bian 1997). Understood in this way, there is little reason to view information sharing as problematic; given knowledge of an opening and a potential applicant, sharing information is an obvious or automatic thing to do.

The second proposed explanation of when information holders share information is common in both lay wisdom and the literature: information holders may choose not to share information out of concern for their own workplace reputations (Rees 1966). Organization-based studies of referral hiring have theorized, based on comparisons of referred and non-referred job applicants, that information holders pre-screen network members before providing referrals (Fernandez and Weinberg 1997, Kirman et. al. 1989). Information holders, particularly those who know of jobs within their own organizations or those who are in a position to make repeated referrals, will only refer those applicants whom they believe to be qualified and reliable workers. If information holders believe that their reputations would be harmed by poor performance on the part of their referrals, they are likely to refrain from referring them.

The importance of reputational concerns among information holders is well-supported empirically by Smith's (2005, 2007) study of urban low-income, black information holders, one of the only studies to study information holders directly. Many of Smith's respondents, particularly those who believed they had strong reputations to risk, were reluctant to share information with their network members because they feared these network members were

unreliable workers. Often respondents were wary precisely because they had been burned in the past (2007).

In populations where steady employment is common and workers' life circumstances are compatible with reliable work habits, information holders have limited reason to fear that friends who are sufficiently qualified to be hired will prove to be unreliable workers. Information sharing under these circumstances should be common. If information holders mention job openings simply because they are nice, we can account for withholding information only with the unthinkable explanation that information holders are sometimes – capriciously, perhaps – not nice, a conclusion not supported by the literature or my own interviews.

4. Decision-Making, Tie Strength and Occupations

Understanding the withholding of information under circumstances where concerns for reputations are less salient requires an appreciation of network tie strength and labour market characteristics. Before mentioning a job opening, information holders must not only identify potential applicants among their network members but also determine whether or not their network members will welcome the available information. The ability to determine network members' interest in job openings will vary with tie strength and occupation.

Both of the motivations cited in the literature – helping a network member and protecting one's workplace reputation – should favour strong ties over weak ties. Information holders are highly motivated to help their strong ties and strong ties may feel obliged to help strong ties find work due to bonds of reciprocity (Smith 2007, Newman 1999). Smith reports that one tenth of her respondents considered tie strength before providing job-finding assistance (Smith 2007). More importantly, Smith argues that strong ties allowed for in-depth knowledge of contacts'

personalities and work habits which often allayed fears that information holders might have about their contacts' work habits. In addition to aiding in the evaluation of network members' work habits, strong ties convey rich information that allows information holders to gauge their likely interest in particular jobs. Bits and pieces of knowledge that information holders have learned about their strong ties over the years can come together to serve as signals of the kinds of jobs in which those network members are interested.

Signals of interest, however, are not always subtle and do not always require combining dozens of small clues collected over years of interaction. A passing mention of law school application, a diploma in human resources, a sociology Ph.D., or job as a hairstylist to a new acquaintance at a party is plenty to signal a potential interest in jobs for paralegals, HR specialists, assistant professors or stylists. People who have worked in or been educated for jobs requiring specific educational or work backgrounds send strong, easily-read signals of their interest in those jobs through these qualifications. A background or credential related to these *closed occupation*¹ jobs provides signals to make it easier for information holders, even those who are weak ties, to evaluate the potential fit between job opportunities they encounter and their network likely interest in these jobs.

Conversely, those who have worked in *open occupation* positions - jobs that draw from applicant pools with a wide variety of career and educational backgrounds - have backgrounds that offer no such signals. In closed occupations, strong ties should have less of an advantage over weak ties than they do in open occupations. A passing mention of a B.A. in sociology or

¹ These definitions of open and closed occupations bear some resemblance to Sørensen (1983), but they are not identical and the two uses of the terms should not be confused.

previous jobs in retail do not have a strong signalling effect. Evaluating likely interest in job openings based on past jobs or on education is trickier for some occupations than for others.

5. Methods

To understand information-holders' decision-making, I treat information flow as a multi-stage process: People learn about job openings and thereby become information holders. They then identify people from within their networks to whom a particular piece of job information might be relevant. Only at this point can information holders make a decision to share or withhold information². As much of this process occurs apart from the job-seeker and reaches job-seekers only when all stages are completed successfully, a process-based understanding is not usefully studied from the perspective of job-seekers. Instead, this requires an information-holder-centred approach.

I collected data by interviewing a sample of 37 insurance agents employed in a Toronto call centre about the knowledge of job openings and their information sharing behaviour. Although call centres are a common setting for the study of social networks, this call centre is quite different from those studied in previous research. As described below, workers are educated, and though turnover is high this is due to vertical and horizontal mobility as well as poaching from other companies, and not to burn-out, terminations, or employee dissatisfaction. This is a setting well-suited to the study of information holders for several reasons. First, these are service jobs being performed in the service sector. Three quarters of Canadian workers are employed in

²Information flow is itself the first stage in the process by which people obtain jobs through social networks. The process continues when job seekers make choices to apply for jobs, and hiring organizations screen applicants and make job offers. These latter stages have been studied extensively (for a review see Marsden and Gorman 2001).

service industries³. Therefore, insofar as the use of social capital varies between sectors, studying the largest sector maximizes the number of jobs to which my findings may be pertinent.

Second, my information holders are employed in entry-level, white-collar positions. They are in a relatively well-paid industry,⁴ and employed by a large and profitable company that offers opportunities for advancement. These jobs, and by extension many of the jobs of which my information holders have knowledge, are likely to be desirable. For many insurance agents, these are the first jobs after completing their educations, and thus are important in setting a trajectory for their careers (Blau and Duncan 1967, Lin, Vaughn, and Ensel 1981). People seeking employment in this sector would therefore be highly motivated to use whatever resources they knew to be available and deemed to be appropriate in order to gain access to knowledge of openings.

Third, due to high levels of turnover among insurance agents because of opportunities for vertical and horizontal mobility, openings are plentiful, ensuring that a supply of information about job openings exists – to be shared or hoarded by those who possess it. Because the formal qualifications for many of these positions are commonly held, those who know of job openings within this industry are likely to have a pool of potential applicants within their existing social networks with whom they can share information if they so choose.

Fourth, insurance agents are not likely to know only of jobs identical to their own. Their own

³Statistics Canada 2004. *Employment by Industry and Sex: CANSIM Table 282-008*. <http://www.statcan.ca/english/pgdb/labor10b.htm>

⁴ In 2000, average weekly earnings for jobs in the insurance industry were \$902.73, compared to \$777.52 in all finance, insurance and real estate jobs, and \$626.45 for all industries (Statistics Canada. 2004).

employer hires for workers across the company in many different kinds of jobs; their short tenures at the company ensure that they know former co-workers currently employed by other organizations; and since many insurance agents have worked or received training in other occupations they retain school and work contacts in other organizations, occupations and industries. These factors all increase the variety of job openings that these information holders are likely to know of, providing data to compare the ways in which they handle information about different kinds of jobs.

Finally, these jobs require two months of full-time paid training. After completing their training, new hires must pass a licensing exam. Those who do not pass may not work as insurance agents, and become a wasted investment for the employer. Employers who must invest heavily in employee training before they can fully evaluate competence will be more cautious in their hiring (Barron et. al. 1985) and may also turn to network recruitment to take advantage of potentially lower turnover rates among network hires (Castilla 2005, Neckerman and Fernandez 2003, Sicilian 1995). In fact, this organization pays referral bonuses of at least \$500 for employees who refer successful applicants who stay on the job at least six months.

I interviewed current employees because employees have frequent opportunities to learn of and share job information. They know when their own organizations are hiring, an event which will be relatively common given the high rates of turnover within these jobs, and they hear about job openings from former coworkers with whom they maintain loose ties (Mouw 2003). They also know potential applicants, through personal networks, which tend to be homophilous by education (Marsden 1987, McPherson et. al. 2006) and through ties to former schoolmates and coworkers who are likely to have similar qualifications. These respondents are in a strong

position to provide information about job openings; however, being entry-level workers in a large bureaucratized organization, they are not in a position to exert influence on hiring a process likely to be different in its network paths and mechanisms (Bian 1997, Yakubovic 2005). I limited the research to a single industry and workers in a single occupation in a single organization because the qualitative nature of the study precluded a large sample and because we do not yet know variations that might occur across different employment sectors.

5.1 Interviews

All call centre insurance agents were invited to participate in this research. Each received an email from the human resources manager informing them of the research I was conducting and encouraging them to participate. I interviewed 37 of approximately 70 eligible employees over a five week period in May and June 2004. Of these, fifty-six percent were women. The mean age was thirty years old, the median was of 28. Most respondents had either a university degree (46%) or a college diploma (32%), though some had degrees (16.2%) or diplomas (2.7%) in progress. One respondent (2.7%) had a graduate or professional degree. Eighty-nine percent were full time. Only one person listed their employment status as “looking for work” during the survey portion of the interview, though at least half mentioned looking for work or “keeping their ears open” during the open-ended portions.

I asked each respondent to list job openings of which they had been aware in the past year, beginning with jobs with their own employer, then jobs in their own industry, and finally outside their own industry. Once I had compiled a list of jobs I asked respondents “Is there anyone you know who you could see in this job?”. This wording was intentionally open to the respondents’ interpretation to allow each respondent to determine the criteria for naming alters. In fact,

information holders' accounts of why they could see particular alters in jobs most often took the form of explaining their alters' qualifications – credentials, related experience or perceived relevant personality-characteristics – for the job in question. I followed up by asking for each person listed (hereafter “potential applicants”) why they had named that person, whether they had mentioned the job opening to that person and why or why not. This research design captures information sharing from information holders to particular targets, but it is less likely to capture the kind of passing mentions of job opportunities that do not pertain to a specific job or are not targeted to particular job searchers that recent research suggests may also be important in linking networks, jobs, and status attainment (Lin and Ao 2008).

The next segment of the interview consisted of a series of questions, known as name interpreters (Marsden 1990, 2005), about each of their network members⁵. These included questions about network members' demographic characteristics, the relationships between respondents and each network member, about how close they were to each person, and about the connections between network members. Respondents completed this portion of the interview by entering their answers in a laptop computer, which generated the questions from the list of all names mentioned during the open ended portion of the interview. Finally, a single-page survey collected information about each respondent, including sex, age, marital status, family status, and education level.

I recorded and transcribed all interviews and imported them into Nud.Ist software for

⁵ Name interpreters were administered for all alters mentioned as sources of job information or potential applicants as well as for a quasi-random sample of alters named in response to name generators earlier in the interview. Because I am studying the flow of job information *conditional on* the identification of a potential applicant, only data from applicants named as potential applicants are analysed here.

qualitative data analysis. Using the coded data, I created three sets of matrices (Miles and Huberman 1994)⁶ recording relevant qualitative data from each interview, with each set corresponding to a different unit of analysis. The first set of matrices recorded relevant information about each respondent. The second set of matrices recorded information about each job that respondents listed including how the information holder had heard about the job, what they knew about the job, and information about the job itself, such as the job title, the name of the employing company, and the industry in which the job was located. The third set of matrices recorded information about each person listed as suitable for each job opening, including descriptions of why information holders believed them to be suitable, whether or not information was shared, and respondents' reasons for sharing or withholding information. I created one of these matrices for each person named as suitable for a job *for each job for which they were mentioned*. Therefore, if one person was mentioned as suitable for three different jobs, I created three matrices for that person. Each of these 181 matrices represents an instance in which information could pass from information holders to potential job applicants. These *job-alter pairs* form the primary data source for the findings presented here⁷.

In addition to qualitative data collected from the interviews, I draw on quantitative measures of tie strength and occupational closure. Tie strength is measured using respondent reports from the self-administered, laptop-based survey administered at the end of each interview.

⁶ I call these “matrices” after Miles and Huberman (1994) who do the same. However, the format could be described equally well by the word “Tables” with the added benefit of not creating possible confusion with the matrices commonly used in network analysis.

⁷ These job-alter pairs are not independent because they are clustered by job, by network member, and of course by respondent. Therefore, no tests of significance are attempted or reported.

Respondents were asked for each network member, “How close are you to <name>?” (Marsden and Campbell 1984). Network members to whom respondents reported being “not at all close” or “somewhat close” were coded as “not close.” Network members to whom they were “very close” were coded as close.

I coded occupational closure based on the job titles or descriptions provided by information holders. I coded jobs as open if no specific training or education is available for those occupations. Examples of open occupations listed are customer service representatives, sales positions, and mortgage associate. I coded occupations as closed if licenses, certificates, college diplomas or university degrees closely related to the occupation can be obtained pre-hire⁸. The distinguishing factor was the availability of such training rather than a requirement that all occupation incumbents possess the training. For example, Canadian colleges commonly offer diplomas in human resources or travel and tourism, but such credentials are not required to be a recruiter or travel agent, two occupations that I would code as closed because they make possible potential signals to information holders. Closed occupations in the data include police officer, computer programmer and marketing associate.

6. Findings

6.1 Opportunities to Share Information and Actual Information Sharing

As expected, every insurance agent interviewed had been aware of job openings in the past

⁸Though I present it here as a dichotomy, there is a continuum between open and closed labour markets (for example Weeden (2002) measures occupational closure a composite of the extent to which occupations use several closure mechanisms). I am currently developing more precise measures of occupational closure that can be used where occupational codes are available. However these were qualitative interviews where respondents provided only job titles, it was not possible to assign occupational codes to job openings, making a more precise measure difficult to develop.

year. A few respondents mentioned that they had likely known of additional job openings which they could not recall during the interview. However, the patterns that these memory lapses are likely to follow are consistent with the findings reported here. Information holders are more likely to forget to list job openings that they did not associate with anyone, and more likely to forget job openings that they never discussed with anyone. Job openings that the information holder thought about long enough to at least associate with a potential applicant and job openings that were at some point salient enough to communicate with someone about are likely to have been stored in memory. One respondent reported, “I’m sure if I actually sat down and took a bit longer, I could remember a couple more things, but unless it’s something that catches my mind, I’m not going to dwell on it for long, right?” and another said “Only the ones that catch your eye in the first place really register with you.” If jobs for which information holders never identified potential applicants and jobs that were never mentioned to potential applicants are more likely to be omitted from the data, this suggests that information sharing and information sharing conditional on the identification of a potential applicant are even *less* common than reported here.

Although all respondents were themselves in the same job, the job openings of which they were aware varied. The jobs included both ones that were similar and others that were dissimilar to their own, jobs inside and outside of their own organization, and jobs within and outside of their industry. Most jobs listed appeared to be geared towards workers in the early stages of their careers. Respondents listed a mean of 6 jobs each, for a total of 222 jobs. Most of these (mean=3.4) were job openings with the insurance company or its parent bank. However, respondents also commonly knew of openings in other companies with each knowing a mean of

2.6 such jobs. Within the insurance company and bank, respondents knew not only of jobs as insurance agents, the jobs in which they worked, but jobs in other insurance-related areas such as claims or underwriting and openings selling insurance in specialized markets, such as high-risk clients and commercial or marine policies. In addition to these insurance jobs, respondents commonly knew of jobs that were not directly related to the insurance or finance industry. These included jobs in human resources, information technology, marketing and administration. Outside of their own organization, respondents commonly knew of jobs similar to their own at other insurance companies. Since many insurance agents come into job information as part of their own ongoing job searches, many of the jobs of which they are aware are similar to those they currently hold. Respondents whose background or training are in unrelated areas were often also aware of openings in their areas of training, jobs they hear of through former schoolmates or colleagues, or because their own job searches are focussed on those areas.

Respondents identified potential applicants for 122 of the jobs that they listed. Potential applicants were identified for 72% of closed labour market jobs compared to 52% of open labour market jobs. Qualitative data in which respondents explained how they identified potential applicants suggests that while open labour market jobs potentially apply to more people, they are less likely to bring any particular person to mind. For each job for which they identified a potential applicant, information holders identified a mean of 1.5 potential applicants. This resulted in a total of 181 job-alter pairs. Job openings and network members are clustered by respondent, with each respondent listing a number of each. Job-alter pairs are clustered by both job and network member since respondents could list more than one person as suitable for each job or list the same network member as suitable for multiple jobs. precisely because they are

often not especially and not obviously suited to anyone in particular. Therefore, these units are not statistically independent or even dependent in any simply ordered sense. However, because these include only job openings for which a potential applicant was identified, each of these job-alter pairs consists of one opportunity to share job information and holds constant both knowledge of a job opening and the identification of a network member whom to inform. Therefore, rates based on job-alter pairs are comparable across jobs and job types for which more or fewer potential applicants are identified.

Less expected than the ubiquity of job information was the infrequency of information sharing. Respondents shared knowledge of 17.6% of the jobs they listed, a mean of 1.05 per information holder. Respondents shared knowledge of job openings a mean of 1.5 times each⁹. One respondent passed along job information eight times and nine respondents never shared job information with any network members. Many of the jobs respondents did not mention were ones for which the information holders had identified no suitable candidates within their social networks. Nonetheless, looking only at job-alter pairs, where information holders were able to name a suitable candidate, respondents told those network members about job openings only 27% of the time. Women told of job openings more often than men did. Women shared knowledge of 20% of jobs they listed and compared to 13.7% for men. Looking at job-alter pairs, women shared knowledge of job openings 36% of the time, compared to 17% for men¹⁰.

⁹Information holders shared job information a mean of 1.5 times each, but only shared knowledge about 1.08 job openings because they sometimes shared knowledge of one job opening with more than one person.

¹⁰This is consistent with findings (Fernandez and Sosa 2005) that women are more likely to be referrers than men and with Ashwin and Yakubovich's (2005) finding that Russian women provide job finding assistance as one way of taking care of the people around them.

Information holders were somewhat less likely to share information about jobs in which they themselves expressed interest. Based on job-alter pairs, information holders mentioned jobs 20% of the time when the jobs were jobs they were interested in for themselves and 28% of the time that they expressed no interest¹¹.

Further analysis shows that the alters identified as potential applicants affect the likelihood of information sharing. Information holders shared job information 31.3% (N=48) of the time when they knew potential applicants to be looking for work but 24.8% (N=133) of the time when they did not know them to be looking for work. In addition to the alters themselves, their relationship with the information holders matters. Information holders shared information 41% (N=68) of the time if the potential applicant was a strong tie, but only 19% (N=105) of the time if the potential applicant was a weak tie. Information holders' accounts of their decisions to share or withhold information shed light on this finding.

6.2 It's the Obvious and Nice thing to Do

Information holders who reported mentioning job openings to potential applicants in their networks often reacted as though their actions required no explanation. Most commonly, they rephrased and repeated their descriptions of why they believed the person was suitable for the job. For example, when explaining why he mentioned an internal programming job to a programmer friend, one respondent said simply "It's in computers ... Computers is computers.

¹¹45 of the 181 job alter pairs were for jobs that information holders were interested in for themselves. Expressions of interest in the job were coded from the qualitative data. However, it is worth noting that no respondent listed their own interest in a job as a reasoning for not mentioning a job opening. Further, as this surprised me, in later interviews I pressed several respondents on this point – the instrumental downsides to sharing information about jobs that interested them – and all seemed genuinely perplexed that anyone would think this way. If self-interest explains the difference, this self interest does not appear to be acted in self-consciously.

That's it." Another mentioned a job opening to a friend and said "She works sort of like a service job right now. That's why I told her." Others said "I knew that's what she did." and "Basically I passed it along to other people because they were in a similar kind of job."

When information holders explain their sharing of job information by pointing to the reasons they believe a person to be suitable for a job, they imply that this suitability is sufficient to explain information sharing. The identification of a potential applicant and the sharing of job information are treated as one and the same; once a potential applicant is identified, the sharing of information requires no further explanation. Yet further explanation *is* required, precisely because information sharing is not inevitable once a potential applicant is identified. Information sharing is not even the modal outcome. A desire to be nice can explain why people share information, but it does not explain why most frequently they do not.

6.3 Protecting Workplace Reputations

Information holders spoke of concern for their workplace reputations. However, this concern is mentioned most often as a positive reason *for* having referred network members, a reason for not referring unknown persons, or as a *hypothetical* reason for not referring a network member. Unlike the findings of Smith's (2005, 2007) inner city study, among these white collar workers, only one cited reputation as a reason for not referring a network member for a particular job. Respondents more commonly referred to their contacts' likelihood of doing well when explaining why they would refer these contacts for jobs within their own organization. For example, I asked one respondent who had mentioned a job opening to a friend whether he would have listed himself as a referrer if his friend had chosen to apply. He replied,

Oh yeah, definitely. [Interviewer: Why definitely?] He's a good worker From what

I've known of him a long time ago and from what I know, he's very responsible. And he's doing well for himself.

Another respondent answered a similar question saying,

Yeah, I would. She's a good working person. All those people I've told about, they're all good people. I would tell them. I would refer them. [Interviewer: Do you think that it's important to be a good person before you refer somebody?] Oh yeah, sure, because a person comes into the organization, they have to be at least a decent worker. When they come into the actual company to work that I'm working at as well, they have to have some type of viable skills that they're going to put to use. They're going to actually come in to work. They're not going to be people who don't come in or people who don't work at all, right?

Information holders are clear in explaining that this screening is primarily related to concerns with their reputation with their employer. The second respondent quoted above explains,

It's different if I'm referring you to somewhere else than if I'm referring you to here. If I'm referring you to here then I put my name on whatever paper that you're turning in and you actually use me as a reference point when you're talking to people in an interview, right?

Another says,

Because I work here, if you maybe have a bad attitude or you're always late, then maybe if I'm late once they might start to associate me with that person because that person is always late. And maybe the next time around that I recommend somebody or refer to someone to work here and they put my name down, they might not take on that person.

Information holders' reluctance to refer contacts who may not be reliable is particularly striking, given that the organization pays employees for referring successful applicants. I asked respondents if they were aware of the bounty program; and though most were, the lure of \$500 did not outweigh the importance of protecting their reputations. One information holder mentioned an opening to a friend who was not interested himself but wanted to pass the information to some of his clients. When I asked her if she would serve as a referrer for these applicants, she said,

Well just because in that case I don't know the person that he would refer And in that case I didn't feel comfortable doing that because I wouldn't know the person. And that's important to me actually. If I'm going to refer somebody it has to be somebody that I know and that will be good and stuff like that. Because I know a manager will ask me the questions and I don't want to have to lie to get that person the job. I want to be as honest as possible and if I have good confidence in the person then I don't have to make stuff up or lie about the person. I'd be more comfortable, too. And because these people might be working for you and also your name is attached to them So I said look it up in the Workopolis¹² because I know that's where we post for externally and that way you can work up from there.

6.4 Not Wanting to Intrude

When asked why they didn't share information, information holders most frequently said that they did not know the network member in question to be looking for work or looking for that particular kind of position. One said,

They didn't let me know that they were looking for a position I wouldn't actively call somebody and say here is a position. Go and do it. Unless they tell me 'Look if you have something, let me know.' No, I wouldn't actively do that.

However, as noted earlier, information holders frequently withheld information even when they knew potential applicants to be looking for work. Often it was not simply knowing that a person was looking for work that was at issue, but knowing that they would likely be interested in a *particular job*. So, when they knew someone to be searching for a particular kind of job, they did pass along job information. For example, another information shared job information with a friend who he knew to be a computer programmer,

I know he was looking to get out of his job. And I told him there was some kind of a computer programming job that was available, and that was last year sometime. But I sent him the description I just said, you know, we have a posting here for my company. It's for a computer programmer or whatever. I told him the description and then I said, you know, it seems like it pays ok money. Do you want me to send it to you?

¹²Workopolis.com is a web site on which organizations list job openings.

In the absence of being explicitly told that their network members are searching for information, information holders infer what their network members may want and rule out passing along information to network members who are already working, and to network members who are looking for work in other fields or whose education has specialized in other fields.

While use of these criteria may seem to exclude only those network members to whom the information is not relevant, the context suggests otherwise. First, all the network members discussed in these questions are people whom information holders have identified as people they could see in these jobs. Second, insurance agents are not hired from a pool of unemployed people who are looking for work as insurance agents. The insurance agents I interviewed have backgrounds in human resources, marketing, IT, retail, personal-training, and birth-coaching among other areas. Many had been employed while conducting the job searches that brought them to this job. Based on this, information holders have every reason to believe that some of these network members may, unbeknownst to them, be in a position to find their information useful.

This reluctance to mention information to people whom they do not know to be looking for jobs or particular jobs is no doubt partly a practical concern – information holders cannot share all information they have with everyone they encounter, or even everyone to whom it could potentially be of interest. However, it is also motivated by a sense that offering information that is not solicited, or at least known to be of interest, is presumptuous or intrusive. One respondent explains not telling an acquaintance about a job, saying,

It's one of those things. Again, it's somebody that I wouldn't know well enough to – Discussing work plans or employment and stuff like that. It's one of those things that you tend to probably discuss with people who you're a little closer to. I think it can be a

little sensitive sometimes.

Information holders also fear providing unsolicited information because they may appear over-eager to recruit into their own organization. This reluctance to appear overly eager to recruit may be not only in spite of the bounty that the organization pays referrers, but because of it. People who appear to be overly-eager to bring their network members into the company fear appearing to be considering their own interests or the interests of their employer before those of their friends. One information holder explained not having mentioned a job opening saying,

I thought of a family friend who has a daughter who's in university, but she hasn't told me whether she's looking for a job right now. So I didn't just approach her and say 'Hey are you -' Like I'm not actively recruiting people into this industry, into the company, either. Like if she had come and asked me at the time, I probably would have told her about it if she was looking for something.

6.5 Not Bringing it Up

Information holders especially avoided initiating the transfer of information or initiating contact for the purpose of sharing job information. Information holders speak of opportunities to share information as things that have to come up rather than things that they can create. For example, one said he had not told a friend about a job opening because, "I don't really speak to him that often. That's why I didn't really get a chance to tell him." Another respondent said of a job advertisement for a job closely related to a friend's job,

If she was sitting right there, I might have said 'Hey, that's kind of like your job! Check it out.' But I would have only mentioned it in passing in that way. It certainly wouldn't have been something that I would have torn out and saved for her later on.

Another commented,

If somebody was looking if I saw them the next time, it wouldn't be an urgency, like just if I see them on a regular basis, like my sports team or something, I would see them and say 'oh, I saw on Workopolis this came up.' then that's it. And then I felt like I helped a

little but, but, you know, not done anything.

Often the opportunity to share information provided by the company of the network member and an opening in an appropriate conversation is more important than whether or not the network member has solicited job information.

I don't think I would have. Because I'm not really that close to her. I don't see her that often. I guess if it came up in conversation, I would, but I wouldn't initiate calling her up and letting her know of it, just because we're not that close. No, I don't think I would have called her.

Accounts of instances in which information was shared often reveal that information is shared when career goals are already the topic of conversation, not because information holders make a point of bringing up job opportunities. For example, one information holder said,

I knew she was looking for a job and I think what happened was I think she called me and she mentioned that she's really looking to get out of this job. And I said 'ok, I know of a summer position at my workplace,' and I let her know about it.

Another said,

Well it came up in conversation because she was just complaining about how she didn't like her position right now and how she was looking for something new. And I said 'Well why don't you consider this?'

No information holder indicated that they had or would withhold information if they were quasi-solicited for information in this manner. However, the likelihood of having such conversations is not spread uniformly across the network.

6.6 Avoiding Awkwardness if it Doesn't Work Out

In addition to concerns about how their offering of information might be interpreted by network members, information holders are concerned that referrals may leave them feeling responsible for any unfavourable outcomes that may result from applications. Respondents did

not want to risk leaving their network members disappointed if they applied and were not hired. For example, one respondent explained that though she might refer network members to more senior level positions – even person who did not quite qualify for the job – she would not refer them to entry-level positions. She explained that a network member who did not qualify for a senior position might be offered a more junior position, but “if you apply for sales and you don't get the job, so be it. You're on your way and [out] the doors.”

One respondent, explaining why he told an acquaintance about a job opening, but referred him to the company web site rather than submitting his resume, said

I don't want to feel the pressure of ‘Give me your resume and I'll submit it in.’ If she wanted to submit her resume she could do it online at any time [Interviewer: You talked about not wanting to feel pressure. Can you explain what you mean by that?] Just that I guess in regards to having her wonder why haven't they called me and not having the response for her. And also the pressure of what if she really doesn't qualify. How do I let her know ‘you're not suitable for this position?’

As Smith found (2005, 2007), information holders' attitudes towards referrals are based on their past experiences with referring. One of my respondents recounted his experience of having referred his brother,

I felt really bad for my brother when he got the phone call and they said they weren't going to hire him. I think he was very disappointed too because – I think a lot of it too was because he'd seen me do well in this company and my brother thought ‘oh, this would be a great opportunity for me as well.’ That if he did this, that it would work out for him as well. So he saw how well I was doing and you know he was excited because he had graduated, too and stuff. And he would have been excited that he got a full-time job right after college and it would have been full benefits and stuff like that. And it would be a little bit of what he was doing because he took business in college. So I think he got– I thought he thought that would be a great opportunity so we were both disappointed. [Interviewer: So if they were hiring again, would you recommend him again?] I'd like to, but I don't think my brother could go through it if they didn't hire him.

This concern could result in the kind of pre-screening that results in better matches and a stronger

applicant pool among referrals than among non-referred job applicants (Fernandez et. al. 2000, Fernandez and Weinberg 1997, Wanous 1980). However, it is theoretically distinct because the concern information holders express here is not for managing their reputations with their employers, but with managing their relationships with their network members.

7. Explaining Variations In Information Sharing

7.1 Information Sharing and Tie Strength

Information holders base their decisions to share or withhold information on their desire to help their network members, on their concern for their own reputations, on a reluctance to appear intrusive or to initiate contact for the purpose of sharing job information, and on fears of awkwardness that might result from a negative outcome. Each of these reasons should favour information sharing with strong ties over weak ties. Gauging a network members' likely interest in jobs or particular jobs is not always easy and knowledge of the information needs of strong ties is greater than that for weak ties (Erickson 1996). Information holders can use broad and in-depth knowledge of their strong ties to determine likely interest in a particular job. For example, one information holder who listed her sister as suitable for a job as a banking assistant working for her employers' parent company said,

Just because I know my sister doesn't have a college or university degree and I know the banking assistant doesn't require one. Also, it's an entry-level position which is easier for my sister. My sister's young. She's coming back from mat[ernity] leave. So knowing that she does not have a college or university degree. Also knowing that she has a lot of service [experience] My sister does have some accounting experience. That's why I thought it would be best for her.

In deciding that her sister is suitable for this job, she draws on several kinds of information about her sister: her education, her life-course, her skills and job experience, including not only the

titles of past jobs, but also the kinds of work involved in doing those jobs. This broad information would be less available to weak ties, making it more difficult for those information holders to judge how welcome or useful knowledge of this job opening would be.

Knowing a network members' information needs is easiest when they have been discussed explicitly. Strong ties are more likely to have explicitly discussed their career plans and their feelings about their current jobs. Respondents view these discussions as personal and not conversations to be had with casual acquaintances. Yet these conversations facilitate information flow both because they help conversation partners to determine if job information will be welcome, and because they create opportunities for information holders to share information in a relevant conversation without having to raise the topic.

For those information holders who prefer not to initiate contact for the purpose of sharing job information and who share information only during encounters intended for other purposes, scheduling constraints will structure the flow of information (Gibson 2005, Moody 2002). Besides slowing the information flow process, awaiting opportunities rather than initiating contact is most likely to benefit contacts with whom information holders interact frequently and with whom career-related conversations are more common. These will often be strong ties, though they may also include work-based ties who are in daily contact regardless of tie strength.

In addition, strong ties and the intimacy they entail give information holders the freedom to be a little intrusive either without fear of offending or without minding offending. Information holders state that their willingness to provide unsolicited and potentially unwelcome information depends on how close they are to the network members in question. Respondents often explained that they would not suggest a job opening unless they were specifically asked to do so and

suggested that they believed doing so would be intrusive. However, some of these same respondents *did* provide unsolicited information. For example, one man who had earlier in the interview expressed reluctance to initiate transfer of job information later told me about the role he played in a friend's job search:

He was working for somebody. He went to school and all that and he was working for a factory. I said 'how come you're working for a factory?' I said 'This is ridiculous.' So I told him to fax his resume to the same lady, same place. And when I talked to him, I explained to him how they do the interview, what questions they ask and things all of that nature. And then he prepared and he went and passed. He referred me [*sic*], because he knew me.

When asked to explain why he had been so active in this friend's job search despite have expressed such reluctance to share job information he said,

Because he was my close friend. He was the first person I knew in Toronto. When I came to Toronto I stayed at his place. I stayed at his place. It was a very close friend of mine. So we are friends. Just last week I went to his wedding in Ottawa.

This explanation along with a second example he provides of a very similar scenario, suggests that his concerns about the appropriateness of providing unsolicited information did not apply to people to whom he was close.

Because information holders are less concerned about providing unsolicited information to close ties – because they are better able to assess fit, and because they are more motivated to help (Granovetter 1974) and thus willing to intrude – they are also more likely to initiate contact for the purpose of passing along job information rather than waiting to encounter a job-seeker. For example, one respondent explains,

With my sister when things came up I called her right away because it was more urgent I felt for her and sometimes the posting said you needed to have it done by a certain time and stuff like that I would call her if I saw something and said 'I'm going to send you something right now. Look at it. Cause I know she's at home, she can look at it right

away.

Another respondent, also speaking of his sister, explained in an exasperated tone his sister's willingness to make presumptions about his information needs despite his protests,

And she thought I should apply for it because it would be a better pay scale and there'd be a change of scene. She's always sending me something. She's *always* sending me something. Actually, I can't even count them. She's always sending them. I don't even know how she has time to find out all of these Oh, she is very pushy. She's like that.

These examples where information holders play a very active role in others' job searches suggest that with regards to close ties, information holders not only attempt to evaluate what information their network members want, but also make judgements about what information they *should* want and will initiate the transfer of this information rather than waiting for a suitable opportunity, something they are much more reluctant to do for people to whom they are not as close.

7.2 Information Sharing Decisions and Occupations

When information holders overcome their reticence and share information with weak ties, the type of occupation matters (See Table 1). Given knowledge of a job in an open occupation and a potential applicant, information holders share information with 43% of potential strong tie applicants, but only 13% of potential weak tie applicants. When weak ties identified as potential applicants do hear of job openings, these are more often in closed labour market jobs; weak ties listed as suitable for closed labour market openings were told about these openings 53% of the time, compared to 13% for weak ties listed as suitable for open labour market jobs.

<Table 1 about here>

In general, information holders were more likely to share information about closed labour

market jobs than open labour market jobs. Information holders mentioned open labour market jobs to 26% of potential applicants and closed labour market jobs to 44% of potential applicants. This is consistent with the qualitative finding that information holders prefer to be somewhat sure that potential applicants are interested in particular openings before sharing information. Open labour markets are appropriate for people with a wide variety of credentials and experience. These jobs are most likely to be filled by people whose qualifications would make them appropriate for a wide variety of jobs, as well. Because the qualifications of these network members do not immediately suggest an obvious “right” job, information holders are less able to predict whether the information they have will be welcome and thus are less likely to risk a potentially awkward encounter with a weak tie.

8. Discussion

Every insurance agent interviewed knew of job openings and could identify network members they could see filling some of those jobs. Most of the time they did not mention the job opening to potential applicants. This finding is unexpected given that the methods frequently used to study and theorize networks and job search rely on the implicit assumption that information available through networks is accessed unproblematically, and given the understanding that sharing job information is a relatively easy and risk free way to do a favour for a friend or family member. Information holders were more likely to mention job openings to potential applicants among their networks who were strong ties than those who were weak ties. Consistent with Granovetter’s (1974) finding that information flow through weak ties often occurs during casual contact, information holders were especially hesitant to initiate contact for the purpose of sharing job information, especially with weak ties. That information flow is more

common when potential applicants are strong ties may seem inconsistent with the canonical finding that job seekers more often learn of job openings through weak ties (Granovetter 1973, 1974). However, the findings reported here hold constant the availability of information and the identification of a potential applicant. Therefore, the findings are consistent if a job seeker's network contains more pieces of job information among weak ties than among strong ties. This would be the case either because individual weak ties hold more unique information as Granovetter argues, or because weak ties so thoroughly outnumber strong ties. In fact, if weak ties are more commonly sources of information despite being less likely to transmit available information, the amount of information available through weak ties relative to strong ties is even greater than would be suggested by an assumption of uniform or unproblematic information flow.

By far, the most common reasons information holders cited for not having shared job information involved a reluctance to appear intrusive, including by initiating contact or to bringing up career plans if these are not already a topic of conversation. Each of these explanations for reluctance to share job information favours strong ties, since these are the most likely to be in contact and to discuss career goals, and since people are frequently more willing to intrude on those with whom they are closest.

The apparently minimal role of reputation safe-guarding in affecting the decision-making process for information holders in this study may have resulted from the study design or the particular population's characteristics. These findings are notably different from Smith's (2005, 2007), which showed that poor black information holders choosing to share or withhold job-finding aid made their decisions primarily based on their concerns for their own workplace reputations. Information holders in this study expressed concern for their reputations but were

not basing their decisions to share or withhold information on this concern. My interviews began by asking information holders to list job openings of which they had been aware and what they did with information *after identifying a potential applicant*. I asked only about information sharing with network members already identified as potential applicants. People who information holders believed lacked the qualifications for a job are unlikely to be listed as someone they could see in a job. So, it is possible that my respondents did not report declining to share information based on reputational concerns because they did not list people who posed risks to their reputations as potential job applicants. Smith, on the other hand, asked her sample of information holders to talk about what they do when they know of job openings, whether they have ever solicited information on another's behalf, and how they respond when their network members ask for help finding work. Smith's potential applicants may not have been qualified for the jobs they sought, and they often self-identified as interested in job openings by soliciting information.

The populations under study were also quite different. The networks of Smith's information holders included many people with little education, mixed job experience, tenuous attachments to the labour force or life circumstances that interfere with steady employment. The risk of a referral who was hired not working out was high, as evidence by her respondents' tales of having been disappointed in previous attempts to refer network members. Information holders in my sample have networks filled with people who, much like themselves, are educated and have strong ties to the labour market. For example, one of my respondents reported, "I'd say that the people I know or the people I basically walk with are all people who would come in and do work, really. They're good people." In a population of people who assume their network members to be reliable, risk

to a referrer's reputation is more likely to come from inadequate or mismatched skills, training or qualifications – which would preclude listing the network member as a potential applicant – than from poor work habits. While information holders in Smith's sample may have less to fear with regards to their network members not being interested in or open to particular jobs or feeling intruded upon by the offering of job information, they could not be as confident in the labour market success of their network members.

Though they differ on the surface, taken together, these findings and Smith's show that the reasons people have for sharing and withholding information matter. Smith's data show that in a context where information is likely to be widely welcomed and potential applicants are frequently unreliable, the primary concern for reputation will create referral patterns in which people living in poor neighbourhoods are less likely to refer than people living in non-poor neighbourhoods. The results reported here show that in contexts where job information is abundant, but information about the *right* job is less so, concern about sharing information about unwanted jobs dominates information holders' decision-making. The result is a referral network structured such that strong ties are favoured and weak ties are more likely to receive information about jobs that can be prepared for with specific vocational training. The reasons people have for sharing information affect the conditions under which they share information. This, in turn, determines the structure of who receives and does not receive information and ultimately who finds networks helpful for entering what kinds of jobs.

Examining patterns in when information holders do share information shows that in addition to preferring to share information with strong ties, information holders are more likely to share information about jobs in closed occupations – those for which occupation-related training is

available. Besides making it easier to evaluate network members' likely interest, having a more obvious match between job and network members reduces any social awkwardness in the transmission of job information. Even a potential applicant who is not interested in a job opening can see why information holders might think the information to be of interest. Network members may be less likely to view the information as insulting or as a subtle form of unsolicited advice.

These findings suggest that neither homophilous networks nor conscious attempts to hoard opportunities (Tilly 1998, Grieco 1987) may be necessary to account for observed homophily among referrals (Fernandez and Sosa 2005, Fernandez and Fernandez-Mateo 2006). Because information holders more commonly refer strong ties – the ties most likely to be homophilous – network members who are referred to job openings may be *more* homophilous than the network from which they are drawn. More importantly, these findings suggest that the homophily of referrals and their inequality-generating effects should vary across occupations. Occupations that draw from narrowly defined backgrounds may have less homophily between referrers and referred applicants than occupations that commonly hire from a variety of backgrounds. If this is the case then network-based information flow should more strongly lead to workplace segregation and less commonly aid in status attainment in open occupations than in close occupations. Because referrals reach weaker ties in closed occupations, these occupations should feel the effects of network homophily to a smaller extent. Referrals should do more to create and re-create inequality in open occupations than in closed occupations. Further research into referral networks in various labour markets could test this finding on a broader scale.

While strong ties are generally more homophilous than weak ties, not all strong ties are equally homophilous or homophilous along the same dimensions. Many strong ties are kin

(Fischer 1982, Marsden 1987, McPherson et. al. 2006) and the extent and axes of homophily vary between strong ties who are kin and non-kin. Kin ties are more homophilous by race and religion, but less homophilous by age, education and sex (Marsden 1987, McPherson et. al. 2006). While referrals to kin may travel through the most homophilous ties (kin ties) from the most homophilous portion of the network (strong ties) when considering race and ethnicity, they are likely to be less homophilous than other strong ties by sex. Therefore, referrals to cross-sex kin ties might mitigate workplace gender segregation¹³ but exacerbate workplace ethnic segregation.

There may also be interaction effects with the extent to which jobs are sex-labelled. In sex-labelled occupations gender may serve as an alternative signal of potential interest in a job opening. Few of the jobs listed by respondents in this study were strongly sex-labelled, making it impossible to look at differences by sex-labelling of jobs. However, it is possible that because gender stereotypes are most active when no other salient information is available (Ridgeway 1997), gender may be especially likely to serve as a signal for jobs in occupations with no occupation-specific training available. If this is the case, information may be more likely to flow through strong ties in sex-labelled jobs or occupations than in non-sex-labelled jobs or occupations and this discrepancy may be greatest in open occupations. The finding that

¹³This assumes that information holders are identifying cross-gender kin ties as potential applicants and that once they have identified potential applicants they are equally likely to refer cross-sex and same-sex ties. If information holders rely on stereotypes and use gender as a signal of who might be interested in a job opening, kin referrals may still produce gender segregation even though many ties are cross-sex. Research (Ridgeway 1997) suggests that people are more likely to rely on gender stereotypes when more salient information is unavailable, suggesting that stereotypes may be most activated with weak ties, about whom information holders may know little, and in occupations with no specific training available, where training cannot serve as alternative salient information.

information holders are reluctant to initiate contact for the purpose of sharing job information – especially with the weaker ties who are likely to be less homophilous – may mean that the advantage of strong ties over weak ties may be especially strong among non-job-searchers. This may account for recent findings that non-searching may be especially significant in reproducing gender segregation and providing high status jobs to people whose careers are already well established (Kmec et. al. 2010 McDonald 2005, McDonald and Elder 2006).

9. Conclusion

Understanding why information holders choose to share or withhold information is key to understanding when they share information with strong versus weak ties, which is in turn important for predicting the effects of network-based hiring on workplace segregation and status attainment. I collected unique data directly from information holders tracing their treatment of specific pieces of job information. I show that opportunities to share job information are common, but actually mentioning job openings is far less so. Information holders are motivated by a desire to help their network members and by concern for their own reputations, but reluctance to appear intrusive better explains their decisions to withhold information. They share information with their strong ties, whose interests they can infer based on extensive knowledge and share information with weak ties when strong signals of interest in particular job openings are available. Job information is more likely to be shared with weak ties when strong easily-observed signals of interest in the relevant occupation are possible.

This paper contributes to a growing research agenda that goes beyond documenting the effects of network-based job search and examines how referrals actually operate (Fernandez and Weinberg 1997, Fernandez and Sosa 2005, Smith 2005 and 2007, Lin and Ao 2008). The unique

data collected for this study are among the few that look closely at information holders directly (Smith 2005, Ashwin and Yakubovic 2005). I treat information-flow as a multi-step process, to isolate one crucial step in the process: the decision to share or withhold information.

This approach has a number of advantages. First, the primarily qualitative nature of the data allows me to closely examine the agency and perception of information holders, rather than inferring these from job seeker or job applicant data. Second, unlike studies based on job applicants, job seekers, or job changers, this research distinguishes between information not received because there was no job to tell of and information not received because it was withheld. By holding constant the availability of information I dispense with the assumption that greater information flow is the product of more available information. Third, this is the only study of which I am aware that hold constant the availability of information and compares the flow of job information across strong and weak ties, a distinction that is prominent in job search theory, and theoretically significant in understanding the link between network-based job referrals and inequality.

On a theoretical level, these findings prod network analysts to consider the role of agency in creating what we often treat as the effects of social structure. These findings show that structure – including the structure of occupations and labour markets, the relationships between educational trajectories and occupations, and the structure of the networks – matters. It matters precisely because it shapes the effects of agency. A new research agenda for understanding the relationship between referral-based hiring and inequality must go beyond documenting the relationship between the use of network-based methods and inequality-related outcomes to uncover variations in the extent to which referrals generate inequality in different contexts. Understanding how the

agency of information holders and job seekers interacts with relevant structures will be crucial to finding the sources of such variation.

Acknowledgements

In conducting this research and writing this article I have profited enormously from resources accessed through my social network. In particular, I am grateful to Peter Marsden for his advice and extensive feedback throughout this project and to him, David Gibson and Roberto Fernandez for helping to shape my thinking on this research and on social networks more generally. This article has benefited greatly from the comments of Bonnie Erickson, Roberto Fernandez, Sherri Klassen, Wendy Roth, Paromita Sanyal, Barry Wellman and Sandy Welsh. I also thank Julie Bowring and Robert DiPede for reading and commenting from the perspective of non-sociologists, and Stephen DiPede for research assistance. Earlier versions of this article were presented at the Annual Meeting of the American Sociological Association and the Sunbelt International Social Networks Conference. I thank session attendees for their comments.

References

- Ashwin, S., Yakubovich, V., 2005. Cherchez la Femme: Women as Supporting Actors in the Russian Labour Market. *European Sociological Review* 21, 149-163.
- Barron, J.M., Bishop, J., Dunkelberg, W.C., 1985. Employer Search: The Interviewing and Hiring of New Employees. *Review of Economics and Statistics* 67, 43-52.
- Bian, Y., 1997. Bringing Strong Ties Back In: Indirect Ties, Network Bridges, and Job Searches in China. *American Sociological Review* 62, 366-385.
- Blau, P.M., Duncan, O.D., 1967. *The American Occupational Structure*. John Wiley & Sons, Inc, New York, NY.
- Bridges, W., Villemez, W., 1986. Informal Hiring and Income in the Labor Market. *American Sociological Review* 51, 574-582.
- Burt, R., 1992. *Structural Holes: The Social Structure of Competition*. Harvard University Press, Cambridge MA.
- Burt, R., 2000. The Network Structure of Social Capital. *Research in Organizational Behaviour* 22, 345-423.
- Castilla, E., 2005. Social Networks and Employee Performance in a Call Center. *American Journal of Sociology* 110, 1243-1283.
- Drentea, P., 1998. Consequences of Women's Formal and Informal Job Search Methods for Employment in Female-Dominated Jobs. *Gender and Society* 12, 321-338.
- Elliot, J.R., 2001. Referral Hiring and Ethnically Homogenous Jobs: How Prevalent is the Connection and for Whom. *Social Science Research* 30, 401-425.
- Emirbayer, M., Goodwin, J., 1994. Network Analysis, Culture, and the Problem of Agency. *American Journal of Sociology* 99, 1411-1454.
- Erickson, B.H., 1996. The Structure of Ignorance. *Connections* 19, 28-38.
- Fernandez, R., Castilla, E., 2001. How Much is That Network Worth? Social Capital in Employee Referral Networks, in: Nan Lin, Karen Cook, Ronald Burt (Eds.), *Social Capital: Theory and Research*. Aldine De Gruyter, New York, pp. 85-104.
- Fernandez, R.M., Castilla, E., Moore, P., 2000. Social Capital at Work: Networks and Employment at a Phone Center. *American Journal of Sociology* 105, 1288-1356.

- Fernandez, R.M., Fernandez-Mateo, I., 2006. Networks, Race, and Hiring. *American Sociological Review* 71, 42-71.
- Fernandez, R.M., Sosa, L., 2005. Gendering the Job. *American Journal of Sociology* 111, 859-904.
- Fernandez, R.M., Weinberg, N., 1997. Sifting and Sorting: Personal Contacts and Hiring in a Retail Bank. *American Sociological Review* 62, 883-902.
- Finlay, W., Coverdill, J.E., 2002. *Headhunters: Matchmaking in the Labor Market*. ILR Press, Ithaca.
- Fischer, C.S., 1982. *To Dwell Among Friends*. University of Chicago Press, Chicago.
- Gibson, D.R., 2005. Concurrency and Commitment: Network Scheduling and its Consequences for Diffusion. *The Journal of Mathematical Sociology* 29, 295-323.
- Granovetter, M., 1973. The Strength of Weak Ties. *American Journal of Sociology* 78, 1360-1380.
- Granovetter, M., 1974. *Getting a Job: A Study of Contacts and Careers*. Harvard University Press, Cambridge, MA.
- Granovetter, M., 1995. *Getting a Job: A Study of Contacts and Careers*, 2nd ed. University of Chicago Press, Chicago.
- Grieco, M., 1987. *Keeping it in the Family: Social Networks and Employment Chance*. Tavistock, London.
- Hanson, S., Pratt, G., 1991. Job Search and the Occupational Segregation of Women. *Annals of the Association of American Geographers*, 81, 229-253.
- Kirnan, J.P., Farley, J.A., Geisinger, K.F., 1989. The Relationship Between Recruiting Source, Applicant Quality, and Hire Performance: An Analysis By Sex, Ethnicity, And Age. *Personnel Psychology* 42, 293-308.
- Kmec, J., McDonald, S., Trimble, L., 2010. Making Gender Fit And "Correcting" Gender Misfits. *Gender & Society* 24, 213-236.
- Lawrence, B., 2006. Organizational Reference Groups: A Missing Perspective on Social Context. *Organization Science* 17, 80-100.
- Lin, N., 1999. Social Networks and Status Attainment. *Annual Review of Sociology* 25, 467-

487.

Lin, N., 2001. *Social Capital: A Theory of Social Structure and Action*. Cambridge University Press, Cambridge.

Lin, N., Ao, D., 2008. The Invisible Hand of Social Capital, in: Lin, N., Erickson, B.H. (Eds.), *Social Capital: An International Research Program*. Oxford University Press, New York, pp. 107-132.

Lin, N., Dumin, M., 1986. Access to Occupations Through Social Ties. *Social Networks* 8, 365-385.

Lin, N., Ensel, W.M., Vaughn, J.C., 1981. Social Resources and Strength of Ties: Structural Factors in Occupational Status Attainment. *American Sociological Review* 46, 393-405.

Lin, N., Vaughn, J.C., Ensel, W.M., 1981. Social Resources and Occupational Status Attainment. *Social Forces* 59, 1163-1181.

Loury, L.D., 2006. Some contacts Are More Equal than Others: Informal Networks, Job Tenure, and Wages. *Journal of Labor Economics* 24, 299-318.

Marsden, P., 1987. Core Discussion Networks of Americans. *American Sociological Review* 52, 122-131.

Marsden, P., Campbell, K.E., 1984. Measuring Tie Strength. *Social Forces* 63, 482-501.

Marsden, P.V., 1990. Network Data and Measurement. *Annual Review of Sociology* 16, 435-463.

Marsden, P.V., 2005. Recent Developments in Network Measurement, in: Carrington, P., Scott, J., Wasserman, S. (Eds.), *Models and Methods in Social Network Analysis*. Cambridge University Press, Cambridge, UK, pp. 8-30.

Marsden, P.V., Gorman, E.H., 2001. Social Networks, Job Changes, and Recruitment, in: Berg, I., Kalleberg, A.L. (Eds.), *Sourcebook on Labour Markets: Evolving Structures on Processes: Evolving Structures and Processes*. New York: Kluwer Academic/Plenum Publishers.

McDonald, S., 2005. Patterns of Informal Job Matching Across the Life Course: Entry-Level, Reentry-Level, and Elite Non-Searching. *Sociological Inquiry* 75, 408-428.

McDonald, S., Elder, G.H.J., 2006. When Does Social Capital Matter? Non-Searching for Jobs Across the Life Course. *Social Forces* 85, 521-549.

- McPherson, M., Smith-Lovin, L., Brashears, M.E., 2006. Social Isolation in America: Changes in Core Discussion Networks over Two Decades. *American Sociological Review* 71, 353-375.
- Mencken, F.C., Winfield, I., 1998. In Search of the "Right Stuff:" The Advantages and Disadvantages of Informal and Formal Recruiting Practices in External Labor Markets. *American Journal of Economics and Sociology* 57, 135-153.
- Miles, M.B., Huberman, A.M., 1994. *Qualitative Data Analysis, Second Edition*. Sage, Thousand Oaks.
- Mollenhorst, G., Voelker, B., Flap, H., 2008. Social Contexts And Personal Relationships: The Effect Of Meeting Opportunities On Similarity For Relationships Of Different Strength. *Social Networks* 30, 60-68.
- Montgomery, J.D., 1992. Job Search and Network Composition: Implications of the Strength-of-Weak-Ties Hypothesis. *American Sociological Review* 57, 586-596.
- Moody, J., 2002. The Importance of Relationship Timing for Diffusion. *Social Forces* 81, 25-56.
- Mouw, T., 2002. Are Black Workers Missing the Connection? The Effect of Spatial Distance and Employee Referrals on Interfirm Racial Segregation. *Demography* 39, 507-528.
- Mouw, T., 2002. Racial Differences in the Effects of Job Contacts: Conflicting Evidence from Cross-Sectional and Longitudinal Data. *Social Science Research* 31, 511-538.
- Mouw, T., 2003. Social Capital and Finding a Job: Do Contacts Matter? *American Sociological Review* 68, 868-898.
- Mouw, T., 2006. Estimating The Casual Effect Of Social Capital: A Review of Recent Research. *Annual Review of Sociology* 32, 79-102.
- Neckerman, K., Roberto Fernandez, ., v., . 2003. Keeping A Job: Network Hiring And Turnover In A Retail Bank, in: Lounsbury, M. (Ed.), *The Governance of Relations In Markets And Organizations*, pp. 299-318.
- Newman, K., 1999. *No Shame In My Game: The Working Poor In The Inner City*. Vintage, New York.
- Petersen, T., Morgan, L., 1995. Separate and Unequal: Occupation-Establishment Sex Segregation and the Gender Wage Gap. *American Journal of Sociology* 101, 329-365.
- Rees, A., 1966. Information Networks in Labor Markets. *American Economic Review* 56, 559-566.

- Reskin, B., Padavic, I., 1994. *Women and Men at Work*. Pine Forge Press, Thousand Oaks.
- Reskin, B.F., McBrier, D.B., Kmec, J.A., 1999. The Determinants and Consequences of Workplace Sex and Race Composition. *Annual Review of Sociology* 25, 335-361.
- Ridgeway, C.L., 1997. Interaction and the Conservation of Gender Inequality: Considering Employment. *American Sociological Review* 62, 218-235.
- Rubineau, B., Fernandez, R.M., 2005. *Missing Links: Referral Processes and Job Segregation*, American Sociological Association Conference, Philadelphia, PA.
- Sicilian, P., 1995. Employer Search and Worker-Firm Match Quality. *Quarterly Review of Economics and Finance* 35, 515-532.
- Smith, S.S., 2005. Don't Put My name on It: Social Capital Activation and Job-Finding Assistance Among the Black Urban Poor. *American Journal of Sociology* 111, 1-57.
- Smith, S.S., 2007. *Lone Pursuit: Distrust and Defensive Individualism Among the Black Poor*. Russell Sage Foundation Publications, New York, N.Y.
- Sørensen, A., 1983. Process of Allocation to Open and Closed Positions in Social Structure. *Zeitschrift für Soziologie* 12, 203-224.
- Statistics Canada, 2004. *Employment by Industry and Sex: CANSIM Table 282-008*.
- Straits, B.C., 1998. Occupational Sex Segregation: The Role of Personal Ties. *Journal of Vocational Behavior* 52, 191-207.
- Tilly, C., 1998. *Durable Inequality*. University of California Press, Berkeley.
- Wanous, J.P., 1980. *Organizational Entry: Recruitment, Selection, and Socialization of Newcomers*. Addison-Wesley, Don Mills.
- Weeden, K., 2002. Why Do Some Occupations Pay More Than Others? Social Closure and Earnings Inequality in the United States. *American Journal of Sociology* 108, 55-101.
- Wegener, B., 1991. Job Mobility And Social Ties: Social Resources, Prior Job, And Status Attainment. *American Sociological Review* 56, 60-71.
- Yakubovich, V., 2005. Weak Ties, Information, and Influence: How Workers Find Jobs in a Local Russian Labor Market. *American Sociological Review* 75, 408-421.

Table

Table 1: Percent of Job-Alter Ties in which Job Information was Shared by Tie Strength and Availability of Occupation-Specific Education

Tie Strength	Occupation Type	Percent who Shared Job Information (N)
Strong	Open	43% (56)
	Closed	33% (12)
	Total	41% (68)
Weak	Open	13% (90)
	Closed	53% (15)
	Total	19% (105)
Total		28% (173)