

Immigrants and Job Search: An Institutional Perspective

Arent Greve¹, Janet W. Salaff², Elic Chan²

¹Department of Strategy and Management, The Norwegian School of Economics and Business Administration, Breiviksveien 40, NO-5045 Bergen, Norway

Tel: +47-98449229, Fax: +47-55959430, Email: arent.greve@nhh.no

Department of Sociology, University of Toronto, 725 Spadina Ave., Toronto, ON, M5S 2J4, Canada

Email: salaff@chass.utoronto.ca

Email: elic.chan@utoronto.ca

Paper presented at ITW08, 13th International ITA workshop, Krakow, June 4-6, 2008.

Keywords:

Segmented labor markets, immigration, social capital, internet job search, signaling.

Abstract: Highly educated immigrants face barriers to employment in Canada, especially in acquiring jobs similar to those they held prior to migration. We analyze labor markets as institutionalized hiring practices that conform to a set of well-known criteria to signal suitability for employment. This exploratory study focuses on the outcome of the job searches of PRC immigrants. We compare three job search paths—the internet, social networks, and employment agents—to describe how each constructs and filters signals about their capabilities and appropriateness for various jobs. We determine which path results in better employment. Analyzing data from 303 respondents to our on-line survey and 28 follow-up interviews, our results suggest that the internet is the best path to obtain good, higher level jobs. Their social capital does not reach into the mainstream labor market and they end up with low level jobs.

1. Introduction

Studies show that immigrants are poorly integrated into their host countries' labor markets, Professionals in particular do not reach their potential, [1-5]. Yet the mechanisms advocated to improve their labor force position, social capital, are unlikely to work. We study how the impersonal internet a vastly different alternative to social capital, eases access to skilled jobs for Chinese immigrants in Canada. This is particularly important because since the 1960s, the developed nations have competed for professionals and immigrants with technical skills, who added their numbers to global migration streams. Canada's liberal immigration policy, based on a points system that assesses human capital [6], attracts about 230,000 immigrants yearly—nearly half of whom are professionals and technical workers, and over 10% of incoming immigrants are Mainland Chinese (PRC) [7]. Yet, they face great difficulties in acquiring well-paying, professional jobs especially at the same level as the jobs they held prior to emigration. What are the mechanisms that continue to sort and rank migrants, promoting or hampering their insertion into the labor force? Here we look at the jobs immigrants get within a few years of arrival, a key to their long term integration into society.

The importance of social capital looms prominently in the literature on the job search. There is much research on the use of contacts to get jobs, and findings overwhelmingly point to success of this method. Lack of success is attributed to having poor social capital. We argue that the literature which applauds social capital in the job search has limited explanatory value for new immigrants. Most research is based on studies of people who are well integrated into the social system. Although a growing body of this social capital literature now discusses immigrants, it mainly focuses on entrepreneurs or job seekers within enclaves. We need to look at how social capital works for immigrants aiming at mainstream jobs. If the phrase “the medium is the message” is to be taken seriously, then we need to explore what lies in social capital as a message system that helps or hinders job search success. Side by side with social capital is the internet, the newest job search method. We ask if the features of the internet as a message system can improve immigrants’ chances in the job search in the mainstream labor market of the host country. A comparison is needed.

Our research uses an institutional framework to understand the integration of immigrants in the labor market. In an institutionalized hiring structure, there are appropriate ways to search for jobs and for employers to look for employees [8]. These job paths entail the applicant providing information which the employer acts on, and the key to hiring lies in the nature of the information and how it is used. Our project centers on the mechanisms by which international migrants, rich in human capital in one part of the globe, translate their skills and experiences into terms congruent with those in the host society. We focus on the institutionalized paths to the job, and analyze the message that the different paths carry about the applicant. The paths to jobs influence how people can present their human and social capital to the labor market. Immigrants are outsiders to the social system and have little control over hiring, but they can use diverse job search paths to influence the information that employers can access in the hiring process. We find the paths to jobs are message systems with several features which can hinder or benefit those poorly integrated in the labor market. These features are the subject matter of this study.

Our data come from recent immigrants from the People’s Republic of China (PRC) to Toronto, Canada. We conducted an on-line survey in 2004 (N = 303) and qualitative interviews with a 10% subsample (N = 28). In the pages that follow, we first discuss the flows of skilled migrants, the newcomers on the block. We then review the migration and settlement literature. We turn to literature on the institutionalization of North American labor markets and the research on different job search paths. We discuss how the internet, social networks, and agents reach into different labor markets, and how each of these paths carry sparse or rich information of job seekers. To distinguish these paths further, we introduce the useful concept of signaling, referring to the cues given off by the job searcher in the job search [9]. We turn to our methods and then present the results of our analyses.

1.1. Migration and settlement

Scholars of social mobility and stratification as well as migration have sought to understand why people do not get into positions fitting their skills. Paradigms have increasingly shifted from economic arguments that faulted the unsuccessful for their shortage of human capital to

the interpretation of the meaning of skills themselves. Fundamental in this paradigm shift was the work of segmented labor market theorists in the 1970s, whose analyses of large data sets consistently found well educated women and minorities held proportionately few higher level jobs [10]. They explained these findings by the characteristics of economic institutions. Introducing concepts of primary and secondary labor markets and institutionalized career ladders, their research pointed to the socially constructed dimensions of economic institutions. In the 1980s, researchers to an even greater degree saw success as a process of social construction. Coleman's [11] studies of social class and achievement among American students, Bourdieu's [12] work on culture and class stratification in France, were turning points in establishing the power of social definitions in creating class distinctions. Lin [13], Erickson [14], and others' current research on social contacts link success in the job search to the reach of the job searcher's social ties, in another approach to the social construction of achievement in the labor market.

The insistence that international migrants need good human capital to succeed and the more questioning view that the interpretation of their human capital is a social construction, are echoed in the migration literature. Current literature explores how the range of capitals, their financial, human, social, and cultural capital, influence immigrants' labor market success. The receiving nations welcome those with financial capital [15, 16]. Yet some argue that like human capital, money is not enough for success [17, 18] Weighing in on the human capital side, some challenge the credentials that immigrants bring, arguing that their poor labor market performance is evidence that they need better human capital for better jobs. Reitz [4] and Li [2] study how getting domestic credentials can improve immigrants' earnings. But how do we distinguish human from social capital? Do these courses add to immigrants' human or just help them adapt to a foreign labor market?

Some stress the interchangeability of resources. Alba and Nee [19, 20] study the sorting mechanisms of diverse forms of capital, linking immigrants' jobs to their resources. Portes' [21] studies on ethnic entrepreneurship points out that those with unacceptable credentials to the host society gatekeepers can substitute their rich, often transnational, social contacts and start ethnic businesses. Bauder [22] posits that regardless of their skills and training, suitable job holders are defined at the point of hiring by whether they present appropriate cultural attributes. This interactionist interpretation emphasizes the learning process by which migrants adjust the cues they give off in their performances at the time of job interviews.

Our study builds on these approaches, exploring how recent, skilled PRC immigrants to Toronto learn to place themselves in the labor market. We argue that employers do not comprehend the human capital that the immigrants possess. It takes some time for the entrants to understand this and to package their human capital in acceptable ways. Here we trace the outcome of different job search methods (paths) on job attainment. In the search for a job, the incumbents translates their human capital into social and cultural terms acceptable to the host society. We argue that the very manner in which immigrants search for jobs, the alternative job paths that they use, presents different features of their human and social capital and some are more beneficial to the poorly integrated newcomers than others.

1.2. Labor markets

Job paths are part of the labor market institutions. Labor markets are embedded in and created by institutional structures, and job seeking and hiring processes are regulated by formal and informal rules. The social and institutional systems that underpin them generate understandings of legitimate employees [23]. These expectations include appropriate education, experience, and other background data, such as class, culture or immigrant status [24]. Employers assess job applicants as suitable or unsuitable for a job based on these expectations. When recruiting potential candidates, employers view the applicants' qualifications against their expectations and sort them for appropriate jobs [25].

Since different countries organize their labor markets in diverse ways, the matching process is culture specific, with expectations embedded in the institutional structure of the labor market in which they were created. As such, these expectations reflect an institutionalized structure that is understood at home, but not shared internationally. Hence, if a job applicant moves between cultures, potential employers must interpret the candidate's abilities within their institutional framework. The labor market structures that the recent PRC immigrants take for granted contrast with what they encounter in Canada.

1.3. North American labor market sectors

For new immigrants, the key to integration into the labor market of the host country is accessing preferred jobs. According to dual labor market theory, the North American labor market is sharply divided between primary and secondary labor market sectors, with the desirable jobs in the primary sector. Mobility between these market segments is restricted [10, 26]. While each of these labor market sectors try to recruit suitable and familiar employees, they draw on immigrants as their prime labor force to different degrees. Mainstream firms in the primary sector, including the civil service, are large and often unionized. They pay well, their employees cannot be terminated readily, and they are often promoted internally. Although this is changing [27], the primary sector still pays more, and gives their employees better benefits. Protecting their advantages as well as risk averse, primary sector employers look for familiar mainstream cultural attributes [24]. The sector recruits proportionately few outsiders and hence few immigrants.

Practicing professions (as engineering, medicine, and architecture) form segments within the primary sector albeit with considerable power to control access to jobs [28]. The conventions about what constitutes a professional are tied to the credential-producing educational institutions in Canada, in which the professions have input. Employers consider candidates appropriate for highly-skilled positions by looking at their credentials, as well as local experience, and related personal contacts. Professions close ranks against those with a foreign education, whose career milestones they do not understand, requiring local certification and practice for outsiders [6, 29].

The secondary labor market consists of low wage firms, whose dead-end jobs offer few chances for mobility. Small proprietorships with narrow profit margins have little commitment to non-kin employees. Well-known fast food and retail chains earn super profits and have sec-

ondary sector employment conditions. With little bargaining power, immigrants supply labor for these low-wage jobs, many of which are non-standard work arrangements [30].¹

Ethnic enclaves, such as Chinatowns, part of the secondary labor market, are based on ethnic recognition, recruiting members from specific cultural in-groups [32, 33]. Enclaves are built on ethnic characteristics, speaking the same language, producing or selling ethnic products. Cultural paths to hiring are common to enclave jobs. It is, however, not clear whether enclave jobs pay new immigrants better [33] than other sectors or worse [34]. Part of the reason for the discrepancy in findings lies in the populations sampled: the most exploited enclave workers are in the hard to study grey or illegal economy.

1.4. Paths to jobs in North America

Most careers are channeled through institutionalized structures of positions, starting with educational credentials and continuing through a set of positions as they gain experience [28, 35, 36]. People have developed habits in the ways they search for jobs; employers are also habit bound in their search for candidates. Employers make decisions according to a logic of appropriateness [8], matching candidates for positions that reflects prior experiences, thus finding people that look like successful prior incumbents. In Canada the main routes to access the job market are the internet (including on line advertising), social networks, and agents.² Among these, the internet is the least institutionalized path, while the others are connected with organizational fields, each of which has their own institutionalized practices.

.1 Internet and job search

Research on the internet and labor markets is recent, but studies on who uses the web in the job sphere find, not unexpectedly, that the internet is rapidly spreading as a means to search for jobs, as well as to other uses in everyday life [37]. A large-scale survey in 15 European Union countries found that the on-line job search is the third most popular use of the internet [38]. Di Maggio and Bonikowski [39] found that using the internet in the job and home, resulted in larger pay rises compared to non-users. Hadass [40] found in a large corporation that an estimated 20-25% of jobs were gotten through the internet. Most of these jobs were middle management and technical positions. A study of job placements in Norway found a similar percentage of internet job placements [41]. Primary sector companies increasingly use on-line methods of recruitment for their rank and file jobs. Over 90% of large US companies place recruiting ads on their web-pages [42]. Several Canadian web-sites advertise jobs for the mainstream labor market, and internationally many web-sites are dedicated to hiring. Kennedy et al. [43] find no gender differences in on-line job searching, despite other gender differences in the use of the internet. Similarly, Greve and Salaff [44] in another analysis on this current sample, find that women and men use the internet to the same extent in getting jobs.

1. An estimated 22% of the Canadian labor force is paid minimum wage, around CAD 8.00 per hour, which is a minimal estimate of the size of the secondary labor market [31].

2. Job fairs, newspaper ads, and walk-ins play a minor role, and we group them as “other.”

Internet & jobs

The success of the on-line job search partly depends on the job level. Those who are stigmatized or poorly placed may simply wish for a chance, a hearing and apply on-line like many others. At the low end, McDonald and Crew [45] report that welfare recipients in Florida using the internet find better jobs than those using traditional searches. Two studies find that unemployed take a longer time to find jobs on the internet than people holding jobs [46, 47]. Clearly, holding a job while looking for another one sends signals of employability to potential employers. Fountain [48] finds that the internet benefits unemployed through the large number of jobs and applications due to low screening costs. She does not compare with already employed people searching job. The internet also gives more employment options to the unemployed living in sparsely populated regions, because it reaches a wider geographical area than local media [49]. Finally, the act of applying for a job on line sends positive signals that the applicant is adept at technology [45, 48]. In contrast, the elite and those who are well integrated get less of an advantage from competing openly with many others. Feldman and Klaas [50] find that internet job search is less effective for managers and professionals than personal networking except when the job seekers are looking for jobs over large geographical areas, considering both small and large firms expecting high salary gains.

Of most interest to us are comparisons of the internet and other job paths in finding jobs. Haddass [40] finds that workers hired through the internet have shorter job duration than those hired through social networks. He attributes this finding to lower quality job matches. It is also likely that getting jobs through friends or agents brings with it social obligations and these social ties lengthen job duration.

Studies point to key features of the internet as a medium that, as we will see, affects immigrant job applicants. First, technical positions are the most frequently advertised, which suits skilled workers, the bulk of immigrants to Canada. These ads detail the human capital, education, speciality, and other skills, required for the position, and candidates can assess whether or not they are capable of doing the job before applying [51]. This openness eases the job search for newcomers unfamiliar with the labor market in the host country. Next, institutional controls over the medium help ensure evenhandedness. Posted jobs on mainstream web-sites are directed to everyone who qualifies, not pitched to any particular ethnic group. Employers or agents who want to direct hirings to an in-group do so through a medium whose access is more restricted, such as web pages in an ethnic language. Further, on-line applications can only contain sparse information. A number of cultural features that may disqualify the applicant can be filtered out. Although their name signifies ethnicity, job seekers can tailor resumes to conceal gender, age, and even parts of their job histories and education [52]. Immigrant applicants may hide other disfiguring personal characteristics: accents and color are invisible. By helping people send the right signals, or rather, by preventing them from sending the wrong ones, use of the internet should help newcomers land mainstream jobs.

Using the internet to search for jobs is so easy that many more people submit applications. Automated web searches makes it possible for job-seekers to learn about many vacancies on line. Applying on line is nearly effortless; in the time it would take to make one phone call to inquire if there is a vacancy, the applicant can send numerous resumes. The more applications for jobs people send, the higher the likelihood of getting a job interview that may lead to an of-

fer. We call this a numbers game. Submitting applications in response to a large number of vacancies raises the probability of getting interviews. Further, job seekers can themselves post their resumes, widening others' knowledge about them.³ The voluminous increase in applications prompts deluged firms to develop techniques to process and screen on-line applications efficiently. As employers routinize the assessment procedures [46], this further reduces information content of the messages that is not relevant to job performance. The Web still works within the constraints of labor market institutions, and our study will explore the implications of the nature of messages carried by the medium for immigrants.

.2 Social capital

There is a long tradition of research on the direct and indirect contacts, the social networks, that help people get a job [13, 53]. Contacts mediate about 40% of all jobs [40, 41, 54, 55]. Most researchers argue that social capital give the best jobs. Reasons are, to begin with, people's contacts pass on news about job openings that are not well known or publicized, and those who know prestigious people can learn about the best positions [56, 57]. Some people act informally as brokers to connect job seekers to jobs, such as headhunters for prime positions. In these cases, social capital works best for those with a lot of it [58]. The value of social capital is thus contingent. People's connections can only help them get a job in the sector in which their networks are embedded. The networks must reach directly into firms, and people's contacts need to be willing to share insider news about vacant jobs. Well-placed contacts are more able to transfer information about good jobs than poorly placed people, and their suggestions are taken more seriously [59]. Networks reach is also gender specific. Whereas women's networks help them in their family work, men's social networks more effectively link them to work spheres [60, 61]. Similarly, immigrants are poorly embedded in the host society's social and organizational fields where they search for jobs, cutting migrants off from the mainstream careers they want to pursue [19, 62]. Their networks may not know about good jobs.

There are key features of social capital that are likely to limit immigrant job seekers' ability to span networks. Social capital conveys the richest information, details about the job searcher's attachments to organizations, knowledge of particular others, and cultural milieu [63]. Their association with others lends credibility to a person's consideration for a job. On the other hand, their association with others who are viewed negatively by employers will also affect them. With culture and co-association so central to social networks, we can see the likelihood of newcomers being captured in ethnic enclaves or other secondary sector jobs.

.3 Agents

Since employers cannot easily find out if a person who has not worked in Canada is a suitable employee, they charge agents with the task. Agents have wide networks to employers but do not usually place immigrants in good jobs. Agents are bifurcated. A few agents are high level head-hunters and rarely choose new immigrants for high level jobs. Most agents engage in low end, mass job placement, locating part time, temporary, and unskilled jobs, thereby serving the

3. Agents are active and scour the web for posted resumes on behalf of companies, see below.

short-term labor needs of the secondary sector. Since agents are people, they are likely as much as the employers they represent to heed the cultural cues of those posting resumes and place them in circumscribed jobs. Agents pursue new immigrants who post resumes, and place them in secondary sector jobs [64].

1.5. Signaling

Many of the obstacles immigrants face flow from the labor market institutions that lack procedures for recognizing people's ability to do the work. The three main job paths give only ambiguous information about the applicant's human capital. They give off other clues, some of which are not relevant to job performance, but instead bear on social classifications. Hence employers use disparate means to determine whether or not the person will fit in, falling back on a range of conventions [25, 29].

We apply the concept of signaling to describe how employers receive and interpret information about job seekers [9]. Signals refer to direct and indirect information given off by the job applicant. Distinguishing signals by the amount of information, there are firstly sparse signals. These provide the basic information needed to evaluate a candidate, which for skilled workers are credentials, type of education, and job experience. Rich signals include other information on people's identities and social belonging, as social class, ethnicity, age, gender, most of which is not strictly relevant to their ability to do the job. These factors are culturally defined, and depending on the employment sector, signals that do not fit institutionalized characteristics for specific job holders have negative values. Employers interpret the information given them within their institutional frame of reference that they rarely question, and their interpretation of the information provided is central to hiring. Since employers interpret signals through the prism of their own ethnic and social groups, this aids the well placed job applicant, but deters others. In particular, they find immigrants unsuitable for some jobs [65]. Their accented English and lack of readily recognizable academic accreditation and work experience signal immigrants' outsider status to employers. They are often cast as unable to hold managerial and other responsible positions because they signal a lack of proper cultural background [66-68].

In this paper we focus on signaling as a means to understand how the job search works. New-comers need to search for jobs in ways that communicate their job relevant achievements and hide those that might prejudice the employers against them. We argue that the job search can exacerbate immigrants' job search failures, when the paths immigrants use most trigger stereotypes or exclusion. In this case, immigrants on the labor market will have an advantage using media that are information poor, rather than rich in signals. The internet should provide better access than social networks or agents. However, the Web still works within the constraints of the labor market institutions, and its sparse signals can be interpreted in various ways.

2. Methods

To understand how the job path the PRC immigrants use affects the kind of jobs they get, we conducted an on-line survey and obtained a sample large enough for statistical tests. From this we interviewed a sub-sample to learn more details on their job search experiences. Our questionnaire was posted on one author's web page, and announced on two Chinese language web-

sites directed towards the PRC community. The questionnaire contained 27 brief questions on job search in Canada, personal background, and internet habits and took 15 minutes to complete. The survey was accessible from July 28 to Aug. 10, 2004.

303 Chinese immigrants voluntarily responded, all newcomers with relatively similar backgrounds and human capital. 85% had held high-status professions or semi-professions in China, and entered Canada as skilled workers. They are more highly educated than the average Canadian: over 90% have a post-secondary education. A comparison of their demographic characteristics with data from Canadian government immigration statistics shows that they resemble new Chinese immigrants as a whole. Like those studied by other researchers, they come from major cities throughout China, arrived since the late 1990s, and are young to middle aged adults who immigrated with their families [69, 70]. More claim they already held professional positions in Canada than other studies find, possibly because they assume any white collar job is professional. We analyze their responses statistically, using SAS-JMP. See Appendix for distributions of the variables.

Nearly half gave their contact information, and we interviewed 28 of the sample in semi-structured interviews, for an hour or more for a longitudinal perspective on their search for jobs, to find out how the labor market works. They spoke about their jobs in China, the paths to the jobs they held in Canada, and their efforts to re-qualify for Canadian jobs. We did not interview employers and the text that follows takes the applicants' accounts of employers' reactions and expectations.

We identify the quotes in the text from the qualitative sample by survey case number, pseudonyms, their education and university major in China. These respondents are slightly older and more are women and have somewhat lower job achievements than our larger sample. We analyzed their responses by qualitative data analysis software Tinderbox (Eastgate.com).

3. Results

This sample, which had been high performers in the PRC before entering a vastly different institutionalized labor market in Canada is a good population for our study of how institutions shape employment outcomes. Table 1 compares the jobs that they held in China and Canada. Leaving high-status professions or semi-professions in China, a fraction maintained their status in Canada where only half held higher level, professional and managerial jobs compared with China. Women do worse than men, twice the proportion of men as women maintained their professional and managerial positions, and more were unemployed at the time of the survey.

Table 1: Immigrants' job in China and Canada

Row%	Professionals & Managers	Self Employed	Technician	Office work, clerical	Skilled labor	Labor	Unemployed	N
Last Job in China								
Men	86.3	0.5	5.5	0.0	5.9	0.0	1.8	219
Women	80.9	1.2	4.8	11.9	0.0	0.0	1.2	84

Internet & jobs

Total	84.9	0.7	5.3	3.3	4.3	0.0	1.7	303
Current Job in Canada								
Men	43.5	1.8	7.3	1.4	7.8	16.9	21.5	219
Women	27.3	7.1	10.7	12.0	3.6	8.3	31.0	84
Total	39.3	3.3	8.3	4.3	6.6	14.5	24.1	303

3.1. Factors that influence job levels in Canada

Table 2 “Predicting job levels” analyzes what influence the status of these newcomers’ current job. Since only those with jobs at the time of the survey are included, Table 2 excludes 24% of the surveyed population who are unemployed. The dependent variable is job level, ranked as: 1) professionals and higher level management; 2) middle and lower level management; 3) technicians; 4) skilled and unskilled labor, and clerical workers. We use a multivariate ordinal logistic regression model to test the effects of using different paths to get jobs.

Table 2: Predicting job levels

Variables	Coefficient B	Odds ratio	Std. error	Confidence intervals B	
Intercept (1)	-2.55**		0.51	.	
Intercept (2)	-2.05**		0.50	.	
Intercept (3)	-1.48**		0.50	.	
Gender (Male)	0.15	1.16	0.18	-0.18	0.49
Length of stay in Canada	0.45**	1.57	0.09	0.27	0.64
PhD	0.47	1.60	0.64	-0.83	2.04
Master	0.61	1.84	0.32	-0.06	1.26
Bachelor	-0.00	1.00	0.31	-0.66	0.62
Profession: Engineer	0.80**	2.23	0.29	0.26	1.42
Profession: Science	0.97**	2.63	0.34	0.32	1.68
Profession: Humanities	-2.12**	0.12	0.66	-3.64	-0.96
Path to job: Internet	0.65**	1.92	0.23	0.21	1.11
Path to job: Social capital	-0.05	0.95	0.23	-0.48	0.39
Path to job: Agent	-0.43†	0.65	0.26	-0.96	0.09
Model -Loglikelihood	29.32**				
N = 230	df = 11				

** p < 0.01; * p < 0.05; † p ≈ 0.10

All tests are two-tailed.

Assessing the job levels of those who used different paths to get jobs, we find that getting a higher level job using the internet is nearly twice as likely using social capital, and three times

as likely using agents, or other paths to jobs.⁴ To separate the effects of paths to jobs from other influences, we introduce a set of control variables. People within the fields of science or engineering have higher odds of getting higher level jobs, while those in the humanities, mainly women, are more than eight times as likely to get low level jobs as those in other occupations. We can see a learning effect. Each additional year experience in the Canadian labor market increases the likelihood of getting better jobs. With less education, and more prominent in the humanities, women get lower status jobs than men. However, the exclusion of the unemployed means that we cannot fully assess the ways the labor market discriminates on gender.

Table 3 cross-tabulates the status of the current job of those surveyed against their paths to jobs, again showing that the internet locates better jobs than other paths. While the internet accounts for 59% of the professional and managerial level jobs (level 1) social capital gets the lowest fraction of 36% of level 1 jobs, and more labor jobs. Agents locate good jobs for a few people, but are also responsible for 45% of the worst jobs (level 4). Clearly, the paths to jobs inserts these women and men in diverse sectors of the Canadian labor market.

Table 3: Job level by Source of job^a

Row %	Level 1	Level 2	Level 3	Level 4	N
Internet	59	7	13	20	69
Social capital	36	17	20	27	66
Agents	39	8	8	45	38
Other sources	42	9	23	26	57
Total % (N)	45 (104)	10 (24)	17 (38)	28 (64)	230

a) Level 1 is the highest job level, Chi-square = 16.9, p = 0.05.

3.2. Paths to jobs

Through discussions with the qualitative sample, we learned about the process by which they developed their understanding of the labor market. With little knowledge of the Canadian labor market on arrival, facing institutional barriers to social placement, they became active agents in assessing alternatives and learning from experiences. Testing the outcomes of different paths to jobs figured in this process. The 28 qualitative respondents had held a total of 72 jobs in Canada, found as follows: internet, 22; social capital, 14; agents, 18; other: 28 (job hunting organizations, work shops, job fairs, walk-ins, newspapers at library).

.1 The internet

Learning about the labor market is essential to getting good jobs, and the internet made an important contribution. The respondents were unfamiliar with the internet before arrival. While

4. Odds are distributed from 0 and upwards, 1 means there is no effect, numbers between 0 and 1 are negative effects, showing it is less likely to happen. Numbers above 1 show increased likelihood.

Internet & jobs

used in China for news and other communications, many lacked a high speed line, and only a few had their own email accounts. None had used the internet in China for getting jobs. In contrast, in Canada, 30 per cent of those surveyed consider themselves “always connected.” Some have their own web pages, and several run internet forums. Others use it for their jobs. Most logged on daily, the majority staying on-line five hours a day.

Several features of the internet enabled job seekers to use the web as a tool to learn about the institutional structures of the labor market while searching on line for a job. These were the internet’s programmability, its automatic and reflexive nature, and the likelihood of chance findings. Automated web searches made it possible for Shu (#12, BSc industrial automation engineering) to get responses about available jobs easily from the web. Shu posted his resume on www.workopolis.com. *“It sends you e-mail automatically, everyday, 7 or 8 at least, 20 at most.”*

As well, the ease of copying messages enabled multiple job applications, and numerous replies. Since the internet facilitates numerous postings to job vacancies, the job search becomes a number game with random job matching, giving better jobs on average than a system that discriminates against them.

Tang (#32, MSc material sciences and engineering) gave up looking for a job in his field, and took an MBA from University of Toronto. He then posted his resume on over 200 web-ads, and found a financial analyst position. He recounted that a friend had sent out 2000 responses to vacancies posted on the internet. Sometimes they forget that they have applied for certain positions because companies may take some time to get back to them.

Xiao (#106, MSc engineering) had developed a routine to checking for jobs on line, and through this habit learned more about the labor market:

I found all my jobs from the internet. The way I found out those web-sites was because there were many computers in my first working place. During the lunch hour, I used the computer to search new opportunities. I’d print those advertisements I’m interested in. After that, I’d have my lunch. In the afternoon, I would do my job and during my break compare the advertisements I found to see which jobs I could possibly get, and I’d send my resume online. If the employers left their e-mail address and fax number, I would send my resume to them via e-mail and fax another copy to their office, because I know some older managers can’t read from the computer screen. I also tried to make my resume easy to read. This really helped me get responses.

Serendipity and chance hits were common. Shu (#12) became licensed as an electrician through a co-op program. He then volunteered in a switch production factory as a wiring technician. Through a series of on-line searches Shu was alerted to an an opening as an electrician in a treatment plant for the Municipality of Toronto.

I wanted to apply as a cleaner, and then I went to the home site, www.toronto.ca, and found they also needed an electrician. I sent my resume; I am too lazy to change my resume and even forgot I applied this position. And they invited me to take the test.

Internet & jobs

Well-organized search engines give applicants a chance to take an exam on line before they have an interview, which was an advantage to Shu. It was this exam that clinched his job. With a BSc degree in electrical engineering behind him, he out ranked nearly 400 competitors. Shu earns among the highest salaries in our qualitative sample.

Respondents realized that the internet removes some negative labeling. Since interviews were not requested until there was a short list, late in the process, they were not penalized at the outset for their accent and other cultural traits. For example, Lao (#259 BSc in engineering) was keen on a position, and combined on-line application with phoning the employer to get an interview:

I got the information from the web-site Monster.com. It is a German company, I sent my resume to them and called them several times before they gave me the interview.

Sparse signaling gave Mao (#4, BSci, quality engineer) an opportunity to land a job interview where he could talk about what they could do. But it was not enough to sway the employer's assumptions.

I look for jobs from Monster.com and Workopolis, but after you finished your resume and sent it to the company, the probability to get an interview is not high. Still, I got several interviews from factories and agents. ... When I looked for a job in manufacturing, the people in this industry seemed very traditional. I told them that my customer was Ford, they said that their customer also was Ford and asked where is my factory's location. I said it was in China, then their attitude changed, they said "Oh, it is not Canadian experience" and stopped the interview. Because I didn't write that the location of my company is in China, the beginning of the interviews was always good, but it became strange after they asked where I got my engineering experience. There's a standard called TS9000 in manufacturing. Your customer, like Ford or GM, will require this standard, so there should be no difference between China and Canada, but it seems that the employers don't believe in your experience in China.

Mao's experiences were simply not understood and disregarded. His potential employers would only accept Canadian work experience. He was met with disbelief when he suggested that Chinese firms obtained international uniformity by adhering to standards. In his case, applying through the internet got him to the interview, but could not get him hired because of this disbelief. The signal 'TS9000' was positive, but the signal 'China' negative.

As these immigrants learned about the local job market, they increasingly used the internet to find a position. Overall, jobs found on the Internet were relatively higher level, with more professional, more science and engineering positions compared to other sources. Professional or semi-professional positions accounted for six of the 22 jobs, but the pay level was not uniformly higher. However, discerning offerings on the internet itself was a learning process. Naive users at the outset, they came to understand the signals of the various web pages. Among these were signifiers of their greenhorn status to Chinese agents working Chinese web pages.

We refer to the use of on-line Chinese webpages to get jobs as a form of Internet use rather than social capital [39], because the applicant does not mobilize those in her social networks.

However, these pages send out strong signals to employers and agents that browse Chinese webpages, familiar with the needs and qualities of the applicants.

Yu (184, BA Electrical Engineering MSc Wireless Telecommunications) had been a manager in an IT company. She got her first Canadian job through the Chinese website, 51.ca. Certainly, the agent contacting her through these sites knew that as a new immigrant, she must be desperate.

It was a Chinese company, not too big. I was a customer representative. The company sells products, and we answer the customers' questions regarding the products. The salary is CAD 1500 per month, and I have to work from Monday to Friday from 9:00 am to 6:00 pm. The customers are Chinese. This is my first job, if I didn't take it; somebody would.

Only 14% of their first jobs were gotten through the internet, mainly clerical and labor positions, rising to 40% for the second job, and 60% for the third. These were increasingly better jobs, showing that use of the internet entailed a learning process. As Shu put it: "*The internet is the most important and most effective way for searching jobs. Finding jobs depends on your ability and chance; most of all, you have to try, no job will find you.*"

.2 Social capital

Almost half of the jobs our respondents got using social capital are labor or clerical jobs. Many were temporary jobs at a low hourly pay, and the firm let them go when they had to make them permanent workers. The characteristics of social capital which led to a poor outcome started with these immigrants' social networks that did not reach into the networks that can provide higher level jobs. Hao (#108, engineer, laser technology), formerly a top level manager in China, found he could not practice engineering in Canada. He used social capital for several jobs, but only the first had good results. He contacted his former classmate who had a contract position in a British Columbia university. This fellow naturally knew what Hao could do:

I was lucky. My classmate taught at Victoria University. I worked as his lab assistant for half a year after I arrived at Canada. That means I had a job as soon as I landed. Actually other people could do that job also. He just helped me to get through the period of adjustment after landing.

Unfortunately, his friend took another position in the United States, and Hao lost his job. Although he had gotten his first job through a good contact, he was not well integrated into his contact's social fields, and when this job abruptly ended, he could not continue.

After my classmate went to the States, I was on Employment Insurance, I studied ESL (English as a Second Language) and then came to Toronto, where friends told me that it might be better. I next found a job from Job-Bank, on-line, inspecting fire alarm systems in offices for the manufacturer. It lasted one week... Then my friend recommended me as a foreman in a factory making plastic bottles, at (CAD) 14.50 per hour.

It was not their friends' willingness that was a problem. Their links to contacts often were tenuous yet these others went out of the way to help them. Rather, those that helped them were un-

Internet & jobs

likely to work in good firms. Ms. Huang (#10, college diploma, chemical engineering) got a secondary sector job as a technician at CAD 13.50 per hour through a series of indirect personal ties.

When we came here, one of my husband's sister's classmate's classmate in the States helped us find a house. Then one of my husband's middle school teacher's friends, helped us get a job. He called me and told me that his sister knew a person who had heard about a job. He urged me to go there as soon as possible.

Ms. Yang (#30, MSc mechanical engineering) the only one of 28 respondents who got a managerial level job through a personal contact in China who was able to act as a broker to get her a position in Canada. Ms. Yang's parents, both engineers, had pushed her to enter their field, but she did not enjoy engineering. After graduation in 1990, she got her first PRC job, which was advertised in the paper, as a technical manager for a Japanese joint venture cement company. She spent six months in the Tokyo headquarters learning Japanese and getting on-the-job training, then returned to China as field supervisor. However, she found there was little chance of being promoted in a male-dominated, heavy industrial company, so after her contract expired, she took a marketing position in Exxon Mobil's Chinese branch in Dalian and then transferred to the head office in Beijing. After deciding to immigrate to Canada, the VP of Honda Beijing, an Exxon client, sent ahead a reference that landed her a position as a parts analyst at Honda, Canada. Her Japanese language skills and experiences in two countries were highly valued and she was made manager.

Yang's ability to get a job flows directly from her transnational social capital. Her network spans the same organizational fields across three countries and she landed a good job through her past business connections. The client of the firm that employed her in Asia has branches in North America, and knew about this job. This contact testified to her attachment to a similar organization, which certified trust in her suitability. This sort of contact is rare. Although several of our respondents have worked in multinational firms in occupations which resembled those in Canada, when their networks do not cross borders they are not effective in getting jobs. Aware that their social capital does not reach a high level, most avoid such paths. For instance, Mao (#4 BS, Automation Engineering):

(It is almost 3 years since you arrived. Anybody help you look for a job here?) No, sometimes you exchange information with other people, but it is impossible to get a job depending on others. Like me, I have a job, but I am in a low status (a technician) in the company. Even if you have friends, it is hard to get a job from them.

Many turned to contacts for their first "survival job:"

Hao (#108, engineer, laser technology) commented: "Friends' recommendation saves some time. I recommended one of my classmates to my company when my boss said to me that there was a vacancy, do you have a suitable friend for it?"

As they became more knowledgeable, they gave up on their social capital, aware that their friends were not very useful in getting good jobs, reaching mainly into secondary or enclave labor markets. Many changed their job paths. The fraction of the qualitative sample using so-

cial capital dropped from 31% for the first job, to 10% for the second, and down to 7% for the third.

.3 Agents

Our qualitative respondents got a sizable proportion, 18 of their 72 jobs, through agents. A novel experience, without a precedent in the PRC, many learned about agents from their friends. As well, scouring the internet for posted resumes, agents actively promote themselves. Agents mostly place them in low level jobs while taking a substantial percentage (20-30%) of their earnings as a fee. Nearly three-quarters of the jobs our respondents got through agents are low level. However, a couple with rare marketable skills were headhunted for good positions.

Wang (#3 BSc degree, Economics, MBA from China) was one of only two respondents who got good jobs through agents. Wang had worked in financial analysis in the PRC, getting jobs through personal networks. Since he did not know anyone in Canada, he viewed agents as his social capital, believing that the agent's networks would become his networks. Wang's education in the field of finance widened his opportunities over those schooled in fields that were protected in Canada, and he was headhunted. Agents got him three banking jobs, which specialized in financial analysis of trends in the PRC, each one better than the last, convincing Wang of his chosen method: *"According to my own experiences, the job-searching agent is the best way, because they can find all types of jobs for you."*

Most, however had bad experiences through agents. Reflecting this, the high proportion, 31%, that got their first jobs through agents, dropped to 15% for the second and third jobs.

3.3. Gender

Gender sends strong signals, and being female penalizes immigrants [71]. There had not been many differences in the professional standing of these women and men in China. Although fewer women had been high and middle managers, as many women as men, 58%, had held professional positions. However, on arrival, female immigrants are less likely to get higher level jobs and more likely to be unemployed than males (Table 1).

The internet is an aid to women as it is to men. Returning to the survey results, we see that only slightly fewer women (86 per cent) than men (95 per cent) surveyed applied through this means. Landing jobs is harder than applying: 30 per cent of the surveyed sample found their current jobs through the Internet, slightly fewer women than men. The Internet provides these women and men with more higher level jobs than any other information channel: 50 per cent of all jobs that women respondents got through the Internet are professional level jobs compared to men, 62 per cent. Similarly, of the seven women with higher salaries, four of the highest paid got their jobs through the Internet. At the same time, however, women also do poorly on the net. Five of twelve in the lowest pay bracket (below CAD 10) got their jobs through the Internet. Further, many women remained unemployed, even though they also tried to use the Internet to get jobs.

There are fewer women than men in the positions that do well on line. Engineers and scientists can improve their chances at professional, managerial, and technician jobs by using the inter-

net, compared to those in the humanities. Since women are less likely to be engineers and technicians and more likely to be in the humanities or medicine, they do not benefit from the internet job search as much as men.

Institutionalized gatekeeping and assessing PRC immigrant women through a gendered lens impedes their progress. The PRC skilled female immigrant must minimize the gatekeepers' power to control or mischaracterize her. Although job search methods cannot solve institutional discrimination against immigrant women, they can ease their way through these institutions. She needs to learn about available jobs, in itself not easy. Next, she needs to apply in ways that avoids being disregarded because she gives off the wrong signals: being foreign and being female. The use of the Internet makes a difference. Using the Internet enables the women to broaden their circles and gather information to start a new career in Canada. The Internet gives them an entry to the Canadian industrial world. It is a beginning.

3.4. Learning to get a job

Entering Canada places immigrants in a new institutional framework. When respondents realized that the ways they were looking for jobs were not successful, they sought to get around institutional barriers. They enrolled in workshops on resume writing and self-presentation skills, and they learned what signals they need to make a suitable self-presentation. They took new degrees and switched fields. Different jobs give them work experience in Canada, help them to become familiar with the labor market, forge new networks, and raise their chances of getting other jobs. Consequently, those in our survey who have lived in Canada over a longer time period (albeit no more than a few years) have achieved better positions than more recent arrivals (Table 2).

Half of those interviewed have taken, or are currently enrolled in, university courses or other programs to get local recognizable skills to adapt to institutional expectations and signal the qualities that the employers seek. There are results: those who got local schooling have better jobs than the others. Among our 230 respondents employed at the time of the survey, 76 have a Master degrees; 67% of those with foreign Master degrees hold level 1 job positions, compared to 41% of those with a Chinese Masters degree.

Some observers assume that re-credentialing is a sign of improving their human capital. Yet most of the respondents interpret the return to school as improving their cultural capital, as a way to get out of their dead end job search. As one said, *"The government isn't telling us, but our friends do. I learned at the ESL class that I had to recertify myself in my computer field to get a job."* Returning to school reconstructs their biographies and signals their familiarity with Canadian culture, helping them get jobs. Shu (#12, BSc industrial automation engineering) took it for granted that the new immigrant had to go to school. By certifying as an electrician, Shu got a job at a technical level. He noticed that many electrical engineers merely followed the lead of other immigrants, not realizing that many certificates might work:

You have to study; but the new immigrant lacks information, in fact there are more than 300 certificates we can get; but most people only know 'electrician.'

Internet & jobs

As time passes, they learn the efficacy of different job paths. PRC immigrants quickly find how to locate jobs on line. By the time we talked with them, nearly all of our respondents had searched for jobs on the internet. As respondents changed jobs, they bypass their narrow social circles. As the fraction using social capital dropped, they increasingly gravitated to the internet as a source of jobs.

The goal of these respondents, primary sector jobs for which they have trained, was hard to achieve. They primarily held secondary sector jobs: 63 of the 72 jobs our qualitative respondents held were in the secondary sector, 12 of these in Chinese firms. Even for those in primary sector positions, not all earn high wages.

It was the internet search that got most their primary sector jobs. Social contacts lead them into the secondary sector of immigrant labor, not into the primary sector. Yet, once they entered a sector, it was hard to change, even when they change job paths. The previous job held becomes a powerful signal in itself, and it is hard for them to change sectors. Getting re-established is not accomplished in one stroke.

4. Discussion

Professional careers are embedded in social and institutional structures. Our on-line survey and follow up qualitative interviews found that many PRC immigrants are miscast for Canadian job market structures. Their job search problems go deeper than their poor contacts, owing to the widespread denial of their skills that is grounded in institutional structures. These new immigrants are faced with two problems: having skills that are not accepted and not knowing well-placed people in the new society.

New immigrants, who are from a society in which their job market structure and expectations differ from that found in the new country, face institutional impediments that keep them from good jobs. Although they are highly trained for specialized professional jobs in their home nations, they are unfamiliar with the Canadian labor market, which is also unfamiliar with them. Their human capital and other attainments acquired in the home country are largely unappreciated. Professional associations act as gatekeepers, blocking these skilled immigrants from recognition in Canada. With their main signals attached to ethnicity and the status as immigrant, not to their credentials, they are tracked into labor market sectors that they cannot easily leave. The signals they send trigger responses by employers or agents, who slot them into the secondary or ethnic labor force, and a series of substandard jobs.

The internet proves helpful by relating information and expanding their knowledge base about jobs. In fact, by enhancing their knowledge, interview experience, and exposure to the Canadian labor market, the internet is a useful tool that makes them better applicants for jobs. It augments their strengths, and masks what employers perceive as their weaknesses. Using the internet, immigrants receive better information about the job market, while they send sparse signals to potential employers. Through the use of the internet, they learn how the Canadian labor market operates and how workers are hired, enabling them to send more favorable signals. The role of chance went past the qualities of the net to the role of chance. The internet allows numerous postings to job vacancies, the resulting numbers game, with random job match-

Internet & jobs

ing, gives on average better jobs than the system that discriminates against immigrants. They find more and better opportunities to get good jobs through on-line searches.

Their personal channels are narrow. Recognizing that their social capital is inferior, they decreasingly look for jobs through people they know, and fewer use agents. Instead, increasingly, they get jobs through the internet. It takes time, and it is difficult for new immigrants to build social capital and connections to the mainstream economy of the host country. Few can regain what they lost by migrating. However, while the internet does not break down the wall behind the institutional structure of Canada's labor market, it helps immigrants find ways to climb over it, to adapt and send more effective signals.

By tracing the methods with which skilled immigrants get jobs, we deepen our understanding of the institutions of the Canadian labor market. In particular, by studying the outcomes of the different paths to jobs they use, our institutional approach elaborates how social capital affects labor force attainment. Our study opens many new issues that need further exploration. Is the relative success in the internet use temporary, linked to its relative novelty as a job search tool that in itself is valued by employers? Will future job postings use even more sparse signaling, such as requiring on line tests? Or will they become more culturally embedded by requiring video clips of interviewees?

Past these issues, how can the North American labor market respond to their new labor force? A new way of thinking is needed. Presently, managers are seen as cultural insiders, while the workers are the outsiders. Yet, if we seek out those already trained in other nations, and if we move towards a multiethnic labor force, cultural traits must be integrated. An international comparison is useful. Many countries compete for skilled workers, and some have developed various methods to accredit them [72]. At the other end, some countries develop ways to centralize information of job vacancies and make them more openly accessible, such as trying to post all vacancies on the internet [41]. These issues point to the need to change their frames and think through the current taken for granted means of evaluating job contenders. Managers must learn how to take advantage of immigrants' multi-cultural skills and their transnational networks, and how to benefit from hiring through the internet. Much research remains to be done in this area. This project is a starter, and it may lead managers as well as job seekers in a direction of using the internet creatively to improve matching of jobs to applicants.

5. References

- [1] P.S. Li, "Earning disparities between immigrants and native-born Canadians," *La Revue Canadienne de Sociologie et d'Anthropologie/The Canadian Review of Sociology and Anthropology* **37**, 2000, 289-311.
- [2] P.S. Li, "The market worth of immigrants' educational credentials," *Canadian Public Policy* **XXVII**, 2001, 23-38.
- [3] J.W. Salaff, and A. Greve, "Why do skilled women and men emigrating from China to Canada get bad jobs?" in *Women, Migration and Citizenship: Making local, national, and transnational connections*, edited by E. Tastsoglou, and A. Dobrowolsky, Ashgate Publishing Company, Aldershot, UK and Burlington, VT, p. 85, 2006.
- [4] J.G. Reitz, "Immigrant skill utilization in the Canadian labor market: Implications of human capital research," *Journal of International Migration and Integration* **2**, 2001, 347-378.
- [5] M. Boyd, and D. Thomas, "Skilled Immigrant Labour: Country of Origin and the Occupational Locations of Male Engineers," *Canadian Studies in Population* **29**, 2002, 71-99.
- [6] R.R. Iredale, *Skills transfer, international migration and accreditation issues: a comparative study of Australia, Britain, Canada, New Zealand and The United States*, University of Wollongong Press, Sydney, 1997.
- [7] Citizenship and Immigration Canada, *Facts and figures: immigration overview 2002. Permanent and temporary residents*, Citizenship and Immigration Canada, Strategic, Policy, Planning and Research, Ottawa, 2003.
- [8] J.G. March, *A Primer on Decision Making: How Decisions Happen*, Free Press, New York, 1994.
- [9] M. Spence, "Job Market Signaling," *The Quarterly Journal of Economics* **87**, 1973 August 1973, 355-374.
- [10] P.B. Doeringer, and M.J. Piore, *Internal Labor Markets and Manpower Analysis*, D. C. Heath and Company, Lexington, MA, 1971.
- [11] J.S. Coleman, E.Q. Campbell, C.J. Hobson, J. McPartland, A.M. Mood, F.D. Weinfeld, and R.L. York, *Equality of educational opportunity*, U.S. Government Printing Office, Washington, DC, 1966.
- [12] P. Bourdieu, *Distinction: a social critique of the judgement of taste*, Harvard University Press, Cambridge, Mass, 1984.
- [13] N. Lin, *Social capital: A theory of social structure and action*, Cambridge University Press, Cambridge, UK, 2001.
- [14] B.H. Erickson, "Good networks and good jobs: The value of social capital to employers and employees," in *Social Capital: Theory and Research*, edited by N. Lin, K. Cook, and R.S. Burt, Transaction Publishers, New Brunswick, NJ, p. 127, 2001.
- [15] A. Ong, *Flexible citizenship: The cultural logics of transnationalism*, Duke University Press, Durham, NC, 1999.

- [16] L. Wong, and C. Ho, "Chinese transnationalism: Class and capital flows," in *Transnational identities and practices in Canada*, edited by V. Satzewich, and L. Wong, UBC Press, Vancouver, p. 241, 2006.
- [17] D. Ley, "Explaining Variations in Business Performance Among Immigrant Entrepreneurs in Canada," *Journal of Ethnic and Migration Studies* **32**, 2006, 743-764.
- [18] J.W. Salaff, S.- Wong, and A. Greve, *Hong Kong: The migrant city*, Manuscript in preparation, 2008.
- [19] R. Alba, and V. Nee, *Remaking the American Mainstream: Assimilation and Contemporary Immigration*, Harvard University Press, Cambridge, MA, 2003.
- [20] V. Nee, and J. Sanders, "Understanding the Diversity of Immigrant Incorporation: A Forms-of-Capital Model," *Ethnic and Racial Studies* **24**, 2001, 386-411.
- [21] A. Portes, L.E. Guarnizo, and P. Landolt, "The Study of Transnationalism: Pitfalls and Promise of an Emergent Research Field," *Ethnic and Racial Studies* **22**, 1999, 217-237.
- [22] H. Bauder, "'Brain abuse' or the devaluation of immigrant labor in Canada," *Antipode* **35**, 2003, 699-717.
- [23] M. Granovetter, "The sociological and economic approaches to labor market analysis: A social structural view," in *Industries, Firms, and Jobs: Sociological and Economic Approaches*, edited by G. Farkas, and P. England, Plenum Press, New York, p. 187, 1988.
- [24] P. Bourdieu, "Economic capital, cultural capital, social capital. (Ökonomisches Kapital, kulturelles Kapital, soziales Kapital)," *Soziale Welt Sonderheft* **2**, 1983, 183-198.
- [25] A. Weiss, "Human Capital vs. Signalling explanations of wages," *Journal of Economic Perspectives* **9**, 1995, 133-154.
- [26] D. Hiebert, "Local geographies of Labor market segmentation: Montreal, Toronto, and Vancouver," *Economic Geography* **75**, 1999, 339-369.
- [27] A. Kalleberg, "Nonstandard employment relations: Part-time, temporary and contract work," *Annual Review of Sociology* **26**, 2000, 341-365.
- [28] P. Osterman, "White-collar internal labor markets," in *Internal Labor Markets*, edited by P. Osterman, The MIT Press, Cambridge, MA, p. 163, 1984.
- [29] D.B. Bills, "Credentials, signals, and screens: Explaining the relationship between schooling and job assignment," *Review of Educational Research* **73**, 2003, 441-469.
- [30] K. Hudson, "The new labor market segmentation: Labor market dualism in the new economy," *Social Science Research* **36**, 2007, 286-312.
- [31] R. Stackhouse, "We should index the minimum wage," *The Globe and Mail Web exclusive*, August 21, 2007,
- [32] A. Greve, and J.W. Salaff, "A social network approach to understand the ethnic economy: A theoretical discourse," *GeoJournal* **64**, 2005, 7-16.
- [33] A. Portes, "Immigration theory for a new century: Some problems and opportunities," *International Migration Review* **31**, 1997, 799-825.

- [34] P. Kwong, *Chinese America: The untold story of America's oldest new community*, New Press, New York, 2005.
- [35] A. Greve, *Turnover and career mobility*, Alma Mater, Bergen, 1992.
- [36] H.C. White, *Chains of opportunity: System models of mobility in organizations*, Harvard University Press, Cambridge, MA, 1970.
- [37] P. Kuhn, and M. Skuterud, "Job search methods: Internet versus traditional," *Monthly Labor Review* **123**, 2004, 3-11.
- [38] J.-P. Neuville, "Les bons 'tuyaux' du marche de l'emploi. Internet peut-il faire de 'l'economie de la qualite' un marche? (Good 'tips' in the labor market. Can the internet make an 'economy of quality' a market?)" *Sociologie du Travail* **43**, 2001, 349-368.
- [39] P. DiMaggio, and B. Bonikowski, "Make money surfing the web? The impact of internet use on the earnings of U.S. workers," *American Sociological Review* **73**, 2008, 227-250.
- [40] Y.S. Hadass, "The effect of internet recruiting on the matching of workers and employers," *Working paper. Harvard University* 2004,
- [41] H. Hagtvet, *Undersøkelse om rekruttering av arbeidskraft* (An investigation on recruitment of labor), Aetat, Oslo, 2005.
- [42] P. Cappelli, "Making the most of on-line recruiting," *Harvard Business Review* **79**, 2001, 139-146.
- [43] T. Kennedy, B. Wellman, and K. Klement, "Gendering the Digital Divide," *IT & Society* **1**, 2003, 149-172.
- [44] A. Greve, and J.W. Salaff, "Can the internet help? How immigrant women from China get jobs. A Survey on PRC Immigrants' Employment Status in Canada," in *Chinese Women and the Cyber Networks*, edited by K.E. Kuah-Pearce, Amsterdam University Press, Amsterdam, p. 65, 2008.
- [45] S. McDonald, and R.E. Crew, "Welfare to web to work: Internet job searching among former welfare clients in Florida," *Journal of Sociology and Social Work* **33**, 2006, 239-254.
- [46] P. Kuhn, and M. Skuterud, "Internet job search and unemployment durations," *American Economic Review* **94**, 2004, 218-232.
- [47] S. Eriksson, and J. Lagerström, "Competition between employed and unemployed job applicants: Swedish evidence," *IFAU - Institute for Labour Market Policy Evaluation Working paper 2004-2*, 2004,
- [48] C. Fountain, "Finding a job in the internet age," *Social Forces* **83**, 2005, 1235-1262.
- [49] R.W. McQuaid, C. Lindsay, and M. Greig, "'Reconnecting' the unemployed: Information and communication technology and services for jobseekers in rural areas," *Information, Communication and Society* **7**, 2004, 364-388.
- [50] D.C. Feldman, and B.S. Klaas, "Internet job hunting: A field study of applicant experiences with on-line recruiting," *Human Resource Management* **41**, 2002, 175-192.

- [51] B. Anderson, "Everyday Research in the Knowledge Society: Who Uses ICTs to Find Job and Health Information," *Chimera Working Paper* **2004-12**, 2004,
- [52] D.J. Schleef, "Lawyers on-line: Professional identity and boundary maintenance in cyberspace," *Research in Community Sociology* **6**, 1996, 193-214.
- [53] M. Granovetter, *Getting a job: A study of contacts and careers*, Harvard University Press, Cambridge, MA, 1974.
- [54] G. Lai, N. Lin, and S.-Y. Leung, "Network resources, contact resources, and status attainment," *Social Networks* **20**, 1998, 159-178.
- [55] J.M. Podolny, and J.N. Baron, "Relationships and resources: Social networks and mobility in the workplace," *American Sociological Review* **62**, 1997, 673-693.
- [56] Y.- Bian, "Bringing strong ties back in: Indirect ties, network bridges, and job searches in China," *American Sociological Review* **62**, 1997, 266-285.
- [57] C.- Cheung, and Y. Gui, "Job referral in China: The advantages of strong ties," *Human Relations* **59**, 2006, 847-872.
- [58] B.H. Erickson, "Culture, Class, and Connections," *American Journal of Sociology* **102**, 1996 1996/07, 217-251.
- [59] R.M. Fernandez, and I. Fernandez-Mateo, "Networks, race, and hiring," *American Sociological Review* **71**, 2006, 42-71.
- [60] J.A. Stoloff, J.L. Glanville, and E. Bienenstock, "Women's participation in the labor force: The role of social networks," *Social Networks* **21**, 1999, 91-108.
- [61] B. Wellman, "Men in networks: Private communities, domestic friendships," in *Men's friendships*, edited by P. Nardi, Sage Publications, Newbury Park, CA, p. 74, 1992.
- [62] B. Czarniawska, and R. Wolff, "Constructing new identities in established organizational fields," *International Studies of Management and Organization* **28**, 1998, 32-56.
- [63] P. Bourdieu, "The forms of capital," in *Handbook of Theory and Research for the Sociology of Education*, edited by J.G. Richardson, Greenwood Press, Westport, CT, p. 241, 1986.
- [64] CAPE, "Engineering access report, Final report: Survey of immigrants with engineering backgrounds settling in Ontario, engineering employers and community supports," 2006,
- [65] F. Henry, and E. Ginzberg, *Who gets the work? A test of racial discrimination in employment*, The Urban Alliance on Race Relations and the Social Planning Council of Metropolitan Toronto, Toronto, 1985.
- [66] H. Bauder, "Habitus, rules of the labor market and employment strategies of immigrants in Vancouver, Canada," *Social & Cultural Geography* **6**, 2005, 81-97.
- [67] K. Pendakur, and R. Pendakur, "The colour of money: earnings differentials among ethnic groups in Canada," *Canadian Journal of Economics* **31**, 1998, 518-548.
- [68] F. Tomlinson, and S. Egan, "From marginalization to (dis)empowerment: Organizing training and employment services for refugees," *Human Relations* **55**, 2002, 1019-1043.

- [69] Z. Liang, "Demography of illicit emigration from China: A sending country's perspective," *Sociological Forum* **16**, 2001, 677-701.
- [70] S. Wang, and L. Lo, "Chinese immigrants in Canada: Their changing composition and economic performance," *International Migration* **43**, 2005, 35-72.
- [71] R.A. Wright, and M. Ellis, "The ethnic and gender division of labor compared among immigrants to Los Angeles," *International Journal of Urban and Regional Research* **2**, 2000, 583-600.
- [72] L. Remennick, "Career continuity among immigrant professionals: Russian engineers in Israel," *Journal of Ethnic and Migration Studies* **29**, 2003, 701-721.