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Fall 2009

Job seeking and job application in social networking sites : predicting job seekers' behavioral intentions

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ABSTRACT

JOB SEEKING AND JOB APPLICATION IN SOCIAL NETWORKING SITES: PREDICTING JOB SEEKERS' BEHAVIORAL INTENTIONS

by
Maria Marcella Plummer

Social networking sites (SNSs) are revolutionizing the way in which employers and job seekers connect and interact with each other. Despite the reported benefits of SNSs with respect to finding a job, there are issues such as privacy concerns that might be deterring job seekers from using these sites in their attempts to secure a job. It is therefore important to understand the factors that are salient in predicting job seekers' use of SNSs in applying for jobs.

In this research, a theoretical model was developed to explicate job seekers' intentions to use SNSs to apply for jobs. Two aspects of intentions to use SNSs to apply for jobs were examined: (i) the likelihood of using these sites to submit applications, and (ii) the likelihood of sharing personal information requested by recruiters and potential employers using SNSs to recruit employees. Factors that could determine preference for the use of traditional job boards over SNSs in applying for jobs were also investigated. The initial theoretical model tested in this research was anchored on the Unified Theory of Acceptance and Use of Technology (UTAUT), and thus, variables such as performance expectancy, effort expectancy and social influence were predicted to have an impact on job seekers' intentions. Other factors hypothesized as having an influence on job seekers' intentions to apply for jobs using SNSs were: privacy concerns; perceived justice (trust that the information revealed in SNSs will be used fairly in the job candidate selection process); perceived risks; and the provision of information on a distinctive

function within some SNSs referred to, in this study, as the "inside connections" feature (which illustrates to job seekers their social network connections to potential employers). Data for this study were gathered through an online survey from 490 registered users (alumni and students hoping to graduate soon) of career services databases managed by two universities in New Jersey, USA.

The test of the measurement model of the initial research model suggested that survey respondents did not sufficiently distinguish performance expectancy from intention to apply for jobs using SNSs. Thus, an alternative model with only intention to share information with recruiters and potential employers using SNSs to recruit employees as the dependent variable was developed. The results of the test of the alternative model suggest that performance expectancy and privacy concerns are the most dominant direct predictors, and that social influence specific to image and perceived justice are indirect predictors. However, effort expectancy and risk beliefs did not influence directly the intention to share information with recruiters and potential employers using SNSs to recruit employees. The R^2 value for this alternative model was 37.3%. Exploratory analyses suggest that all of the model variables, except the provision of information on the "inside connections" feature, have a significant influence on intention to apply for job using SNSs and preference for job boards over SNSs.

The results of this study suggest that, in efforts to encourage the use of SNSs for securing a job, designers should pay significantly more attention to promoting the usefulness of these sites and to providing job seekers with more control in handling their personal information in order to alleviate privacy concerns. This study provides insights into predictors of job seekers' behavior in SNSs that can inform future research.

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A Dissertation
Submitted to the Faculty of
New Jersey Institute of Technology
in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Information Systems

Department of Information Systems

January 2010

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Dedicated to my mom, Mildred Plummer and my late dad, Philbert Plummer for their love and for helping me to develop the intellectual curiosity and discipline necessary to undertake and complete this Ph.D. research.

ACKNOWLEDGMENTS

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CHAPTER 1

INTRODUCTION

1.1 Objectives

The primary objective of this dissertation research is to understand the factors that influence job seekers' intention to use social networking sites to apply for jobs. Two main aspects of applying for jobs using social networking sites are examined: the actual use of job application tools provided within sites such as Linkedin.com and the sharing, through connections, of personal information with recruiters and employers who use these sites to recruit employees. A secondary objective is to determine factors that predict the preference of traditional job boards over social networking sites in applying for jobs.

1.2 Problem Statement and Research Questions

It has long been established that job search involving the use of "personal contacts" is comparatively more efficient and less costly than other methods such as job fairs and employment agents (Brown, 1965). Also, in general, the jobs secured through personal contacts are usually more rewarding (in terms of salary and benefits) and more satisfactory than those found using the other previously noted methods (Granovetter, 1995). Social networking sites (SNSs) provide the social spaces that can facilitate connections between job seekers and recruiters through personal contacts. Thus, recently, there have been reports of the increasing use of these sites by employers for gathering intelligence about potential employees (SHRM, 2007; NACE, 2008) and by job seekers for expanding their professional networks and for job search (Beyond.com Inc., 2008).

In view of the potential benefits and reported popularity of SNSs in job search, it is surprising that the research community has given very little consideration to recruitment efforts in the context of SNSs. It is important to determine if these sites are truly appealing to job seekers and to identify factors that could encourage or deter job seekers from using them in applying for jobs. In particular, personal information privacy concerns and perceived justice (trust in the fairness of use of personal information in the job candidate selection process) are important considerations. The potential risks of using SNSs in employee recruiting and job search have been discussed in prior literature (Rosenblum, 2007; Davis, 2009).

Prior studies on job seekers' perceptions, attitudes or behavior with respect to online recruitment have focused primarily on the context of organizational web sites, and to a limited extent on job boards. The findings of these studies cannot be directly applied to recruitment and job seeking in SNSs because the advantages and disadvantages intrinsic to SNSs are unique. For example, unlike in job boards and organizational career sites, information about SNSs' users and their online connections can help job seekers in determining the personal contacts who can introduce them to current employees of an organization or company that might be of interest to them. However, privacy issues are more prominent in SNSs as they are likely to contain more personal information about their users.

The main dependent variable investigated in this research is "behavioral intention to apply for a job using social networking sites," which involves the willingness to share personal information with recruiters and potential employers. The antecedents of this behavioral intention examined include: social influence; effort expectancy; performance

expectancy; the provision of information on the "inside connections' feature described in Chapter 2; personal information privacy concerns; perceived justice or trusting beliefs in the candidate selection process; and, perceived risks in using SNSs for job seeking activities.

Prior IS research (e.g. Smith et al. 1996 and Stewart and Segars, 2002) has touched slightly on the importance of some of the abovementioned factors, such as information privacy concerns, in determining the likelihood that individuals in the "information age" would not apply for a job because they do not want to provide certain kinds of information about themselves. These studies, however, have bundled the inclination to apply for a job with other behavioral intentions such as refusal to purchase a product, and removal of contact information from direct mailing lists for catalogs, products, and services.

It is suggested here that, in investigating online behavioral intentions, applying for a job should be singled out from other activities such as shopping for two reasons. Firstly, in an online recruitment setting, job seekers do not only play the role of a buyer. They are sellers of their expertise, qualifications and experience, and therefore are expected to be more obliging with regard to the provision of personal information. Secondly, there are some risks associated with registering with an online recruitment site that do not exist in online shopping. For instance, there is the possibility of managers discovering, from identifying information submitted online by job seekers, whether the individuals whom they supervise are seeking alternative employment.

The main objective of this study is, therefore, to identify within the unique under-explored context of social networking sites, the antecedents of job seekers' intention to

apply for a job, which in many respects, is distinct from online activities such as shopping. The primary research question investigated in this study is as follows:

RQ 1: What salient factors influence job seekers' behavioral intentions to use social networking sites to apply for jobs?

In online recruitment, it is possible for the same vacant position to be advertized by more than one recruiter in more than one online location. Therefore, job seekers who are not inclined to apply for a job using SNSs may choose to do so using an alternative type of website. Based on the results of the SHRM (2007) survey, job boards are likely to be the most commonly considered alternative. A secondary objective of this research is to examine, to a limited extent, preference for the use of SNSs over job boards (or vice versa) in applying for a job, and the factors that explain such preference. Accordingly, the second research question investigated in this study is as follows.

RQ 2: What factors explain preference for use of SNS over job boards (or vice versa) for job application purposes?

The factors considered in answering research question RQ2 included privacy concerns, frequency of use of social networking sites, and demographic attributes such as age, gender and education.

1.3 Research Contributions

This research has broad applicability for the burgeoning use of SNSs for professional services. SNSs have a large pool of members, many of whom are using these sites expressly with the aim of advancing their careers. Like many online services, SNSs are therefore expected to evolve to meet the needs of their members. Thus, with respect to practical implications, the results of this study can inform designers on issues that are to

be considered in further personalizing and enhancing the services that they provide to both job seekers and recruiters in their community.

In terms of research contribution, this research demonstrates that IS theories in adoption/utilization that are applicable in organizational domains may not have the same predictive power in explaining the use of social media. With regard to the use of professional services (e.g. online recruitment) within SNS, performance expectancy or perceived utility of these sites in achieving the outcome desired from the use of these sites is the most dominant factor in predicting intentions to use. Factors such as privacy concerns and trust in others (e.g. recruiters and potential employers) with whom one interacts in the use of these services play a more significant role than social influence and effort expectancy (or ease of use) in predicting the use of these sites for the specific service. It is therefore not sufficient to apply directly classic technology acceptance and utilization theories that have demonstrated robustness in organizational settings to explain the use of online services in the context of social media, because issues such as social influence and perceived ease of use do not appear to be as significant in this context.

1.4 Organization of Dissertation

This dissertation is organized into ten (10) chapters. The following summarizes the content of each chapter.

Chapter 1 states the objective this dissertation, the research problem and the research questions answered in this investigation. It also outlines the practical and theoretical contributions of this research.

Chapter 2 provides background information on online recruitment and job seeking in the context of social networking sites. This background information is important

because this research focuses on job seekers' perceptions and intended behavior within this context.

Chapter 3 presents a review of prior research that examined the job seekers' behavior online. These studies focused primarily on job seekers' perceptions, attitudes and behavior within the context of organizational web sites. It was important to review these studies in order to determine whether important findings about job seekers' behavior in other contexts can inform the current research.

Chapter 4 presents a review of prior studies on Internet users' behavior that were used in informing the development of the initial theoretical model proposed for investigation in this research.

Chapter 5 presents the research questions and initial research model investigated in this study. This chapter also presents the theoretical justification supporting the hypothesized relationships in the initial model.

Chapter 6 describes the online survey methodology used in this investigation. This description includes the survey questionnaire development process; the sample selection strategy and response rates; and, the statistical methods used in the data analysis.

Chapter 7 gives an account of a pilot study conducted earlier as part of the questionnaire design and refinement process.

Chapter 8 describes key attributes of the participants in this study such as demographics, employment status, occupation and experience with SNSs. This chapter also reports the results of various tests of the psychometric properties of the scales used to measure constructs in the research model. Additionally, it presents for investigation an

alternative research model in view of the changes to the initial measurement model that were necessary in order to establish construct validity.

Chapter 9 reports the results of the test of the alternative research model presented in Chapter 8. It also reports the results of analyses used to determine factors that are likely to predict applying for jobs using SNSs and preference for the use of traditional job boards over SNSs in applying for a job.

Chapter 10 concludes this dissertation with a discussion on this study's contributions in terms of practical and theoretical implications, its limitations, and recommendations for future research directions.

CHAPTER 2

JOB SEEKING AND RECRUITMENT IN SOCIAL NETWORKING SITES

2.1 Introduction

The domain of focus in this dissertation research is social networking sites. Thus one of the objectives of this chapter is to provide background information on the capabilities afforded to job seekers and recruiters in social networking sites and to describe trends in the use of these sites for the purposes of recruiting and job seeking. Another objective is to highlight some issues from the job seekers' perspective, associated with the use of these sites in attempting to secure job opportunities.

2.2 Social Networking Sites – An Overview

Social networking websites (SNSs), by definition (boyd and Ellison, 2008; Ellison et al. 2007; Kandra, 2004), typically provide users with the capability of performing three fundamental tasks: (1) construct personal profiles and control the parts of these profiles that are to be displayed publicly and those that are to be revealed to select groups; (2) invite other users to show a connection with them or be part of their online social network on the basis that they share a mutual relation e.g. friend, colleague or classmate, and (3) view and traverse their list of connections and those made by other users. There are several SNSs; the most popular ones include MySpace, Facebook, Twitter and Linkedin. Some of the primary objectives of SNSs are: to allow their users to share their opinions, interests and activities with others; to create and sustain online user communities; to enable users to expand their social networks and to access new opportunities through these expanded networks. In support of these objectives, SNSs facilitate interaction

among their users by providing them with a variety of services including e-mail, instant messaging, video and/or voice chat, blogs and discussion boards. SNSs also offer a number of services including online shopping and e-recruitment.

2.3 Conventional Use of SNS for Job Seeking and Recruiting

Popular literature on the use of social networking sites in recruiting tends to focus primarily on guiding recruiters in discovering high-quality passive job candidates from these sites. Recruiters are often advised to scan users' profiles; post job vacancies to be viewed by the general user community or announce these vacancies in the Classified section or in special interest groups that are likely to comprise individuals with the required expertise; mine blogs and discussion forums; and strategically expand their networks in order to improve the prospects of connecting with a contact who can recommend an ideal candidate for a vacant job position that they hope to fill (Fitzgerald, 2004; Kandra, 2004). Job seekers or passive candidates, on the other hand, are encouraged in the popular press, to make themselves marketable by following tips such as: (1) including keywords that describe their expertise in their profiles, (2) joining industry-specific groups, (3) contributing to discussion forums and blogs, and (4) making contacts judiciously (Goodman, 2008). The previously mentioned suggestions offered to recruiters and job seekers essentially describe the e-recruiting strategies typically used in social networking sites.

Testimonials given by job seekers in SNSs who successfully landed a good job or recruiters who found an ideal job candidate are often used in anecdotes describing the possible outcome of using the strategies noted earlier. For example, Fitzgerald (2004 p.

46) reports the following from a testimonial given by a user of the SNS, tribe.com: "A friend on Tribe had sent him word of the Blue-Stream job after hearing about it from another Tribe member he knew from the site's yoga interest group, which happened to include yet another member who knew a Blue-Stream director."

Other testimonials are similar to the previously noted example in that they tend to describe information acquired fortuitously. A more systematic approach to helping job seekers in contacting individuals who can possibly assist them in securing an advertised vacant position is to show them the path in their social networks through which they can make these valuable contacts e.g. a former classmate of a friend of a friend. Linkedin, Xing and Jobster have adopted such an approach in their services to job seekers and have differentiated themselves from other SNSs, including other business oriented sites like Ryze and Plaxo. Accordingly, the approach used by Linkedin.com is described in Section 2.6 in order to illustrate how profile details and social networks articulated online can be leveraged in directing job seekers to resources or contacts who can assist in improving their chances at securing jobs of interest to them. However, prior to describing Linkedin's approach, the advantages of personal contacts with respect to the outcomes resulting from job search efforts, as described in traditional recruitment literature, are discussed in Section 2.5.

2.4 Trends in the Extent of Use of SNSs for Job Seeking and Recruiting

Social networking sites have become an extremely valuable resource to both job seekers and employers. In general, these sites are IT conduits through which professionals may establish new relationships rather than or in addition to expending the time and incurring

the expense in attending offline social events. A poll of over 4000 visitors to Beyond.com (a network of niche career communities) found that, of the 30% of respondents who were members of SNSs, 49.3% and 20.3% indicated that they used these sites primarily for job searching and for professional networking, respectively (Beyond.com Inc., 2008).

With respect to employers, evidence suggests that social networking sites are becoming increasingly popular as a source of job candidates (NACE, 2008). In the Job Outlook 2008 survey by the National Association of Colleges and Employers (NACE), seventeen (17%) percent of responding employers, as compared to eleven (11%) percent of the respondents in a similar survey of the previous year, indicated that they would use social networking sites as part of their recruiting efforts.

In a 2007 survey of recruitment professionals on advances in e-recruiting by SHRM (Society for Human Resource Management), 19% of respondents indicated that their organizations used social networking sites to review information posted by job candidates. Of this 19%, about 21% indicated that their organization had eliminated a job candidate within the 12 months preceding the survey on the basis of the information discovered from a social networking site (SHRM, 2007). Many employers who previously used SNSs to check the profiles of potential hires are now planning to advertise job vacancies or network with potential candidates in these sites (NACE, 2008). Despite the growing popularity of SNSs in job seeking and employee recruiting, research in this context has been limited to assessing the extent of use of these sites by job seekers (Beyond.com Inc., 2008) and by recruitment professionals (NACE, 2008; SHRM, 2007).

2.5 Personal Contacts and Job Finding Outcomes

In the job search process, the old adage "it is not what you know, but who you know" rings true irrespective of whether you met "who you know" online or offline. Traditionally, recruitment research has analyzed methods through which jobs are secured by identifying three basic categories: formal means; personal contacts and direct application (Granovetter, 1995). With formal methods, the job seeker uses the services of an impersonal intermediary between himself/herself and the prospective employer. Examples of impersonal intermediaries are newspaper advertisements; self appointed employment agents; professional associations; universities sponsoring job fairs, interviews and placement activities; and placement committees in certain professions such as (e.g. religious leaders). Personal contacts are acquaintances or friends who were first introduced to the job seeker in a context that is not related to the job seeker's current search for a job. Personal contacts can assist a job seeker in obtaining more information about a job or by recommending him/her to the employer or a representative of the employer. With direct application, the job seeker visits or writes directly to the potential employer without having heard about a specific job opening from personal contacts or through formal means.

In early studies on job finding methods such as Brown (1965), 'personal contacts' were found to be the most preferred of the three job finding methods previously described. The explanation often advanced in support of this discovery is that individuals are likely to use a cost-benefit analysis in selecting their job search preferences. Job searches involving the use of "personal contacts," are comparatively more efficient and less costly. Also, in general, the jobs secured through this method are usually more rewarding (in terms of salary and benefits) and more satisfactory than those found using

other methods (Holzer, 1988). This explanation was supported by one of the foundational studies on getting a job through contacts, Granovetter (1995), in which data were gathered from 282 professional, technical and managerial (PTM) men in Newton, Massachusetts, a Boston suburb. The participants in Granovetter's study had changed jobs within the five year period prior to the study. In summary, evidence of the following was reported in Granovetter (1995).

- Job related information obtained from personal contacts was likely to be more relevant and of a higher quality. For example, it was noted that personal contacts could provide information about the company's culture, the supervisor's attitudes and personality, and the congeniality of prospective co-workers.

- Individuals who found jobs using personal contacts were more likely to be satisfied with their jobs than those who found their jobs through other means.

- There was a strong association between income level and job finding method in that individuals who reported using personal contacts to find their jobs were likely to earn higher salaries than those who used other procedures.

- Newly created jobs that were easier to customize in order to suit the needs, preferences and abilities of selected job candidates were more likely to be secured through personal contacts than via direct application or formal means.

- For individuals who found their jobs through personal contacts, the percentage of 'stayers' (individuals who have not considered changing jobs) was comparatively higher than the percentage of 'movers' (individuals who thought about looking for another job). One of the arguments advanced in support of this finding was that personal contacts who assisted in finding a job often acted as a bridge that facilitated the new employee's integration into the social circles of the workplace. Thus individuals who found jobs through personal contacts had relatively less difficulty fitting in and were therefore less likely to consider moving.

Social networking sites (SNSs) provide the social spaces that can facilitate connections between job seekers and recruiters through personal contacts, and can improving job seekers chances of realizing the above-noted benefits. In view of the potential advantages of using SNSs in job search, it is important to determine how appealing these sites are to job seekers and to identify factors that could encourage or

deter job seekers from using them in applying for jobs. In particular, personal information privacy concerns and perceived justice (trust in the fairness of use of personal information in the job candidate selection process) and perceived risk in terms of loss of job opportunities are important considerations being considered in this study.

2.6 Illustrations of "Inside Connections" Feature in SNSs

LinkedIn, with its introduction of JobsInsider™, was the first SNS to provide an application that informs job seekers of inside connections they have to employers associated with vacant positions advertized in Linkedin and in some popular job boards (LinkedIn.com, 2005). Thus, in this section, Linkedin's JobsInsider™ feature is being used as an example in explaining how it is possible to illustrate inside connections to employers of interest to a job seeker and in discussing issues associated with revealing such information.

In Linkedin, like in other SNSs, users can create profiles and articulate individuals with whom they have connections. In creating or updating a profile, a user can stipulate his/her current employer as well as prior organizations/companies or institutions to which he/she has been associated. Essentially, completing a Linkedin profile is like creating a resume using a resume builder. When a user makes a new online connection, he or she typically does not know the extent to which this new connection may expand his or her network. Linkedin defines a user's network, as shown in Figure 2-1, as individuals to whom that user is directly connected as well as individuals who are two degrees (e.g. a friend of a friend) or three degrees (e.g. a colleague of a friend of a friend) away from the

user. This arbitrary boundary of a user's network is used because Linkedin makes it possible for a user to be introduced to another user who is at most three degrees away.

Your Network of Trusted Professionals

You are at the center of your network. Your connections can introduce you to 88,600+ professionals — here's how your network breaks down:

1	Your Connections Your trusted friends and colleagues	36
2	Two degrees away Friends of friends: each connected to one of your connections	800+
3	Three degrees away Reach these users through a friend and one of their friends	87,700+
	Total users you can contact through an Introduction	88,600+

1,133 new people in your network since November 7

Figure 2.1 Network statistics provided by Linkedin.com.

When job seekers choose to view the details of job vacancies advertized in LinkedIn that are of interest to them, like most recruitment sites, they are provided with the job description (including responsibilities and compensation), the skills required, the company description and details of the job application process. However, additionally, LinkedIn utilizes profile details and networks of individuals within job seekers' networks in order to inform them of the professional contacts who can introduce them to the hiring manager or recruiter responsible for filling the position of interest to them. This "inside connections" information is tailored based on the job seeker viewing the job vacancy details. Figure 2-2 is an illustration of a job seeker's "inside connections" based on LinkedIn's definition of a users' network. Figure 2-3 shows the "inside connections" segment of a job vacancy details page, generated by LinkedIn's JobsInsider™, for a

particular job seeker, John Doe. Of course, the information provided is likely to be very different for each job seeker viewing the details for the same job.
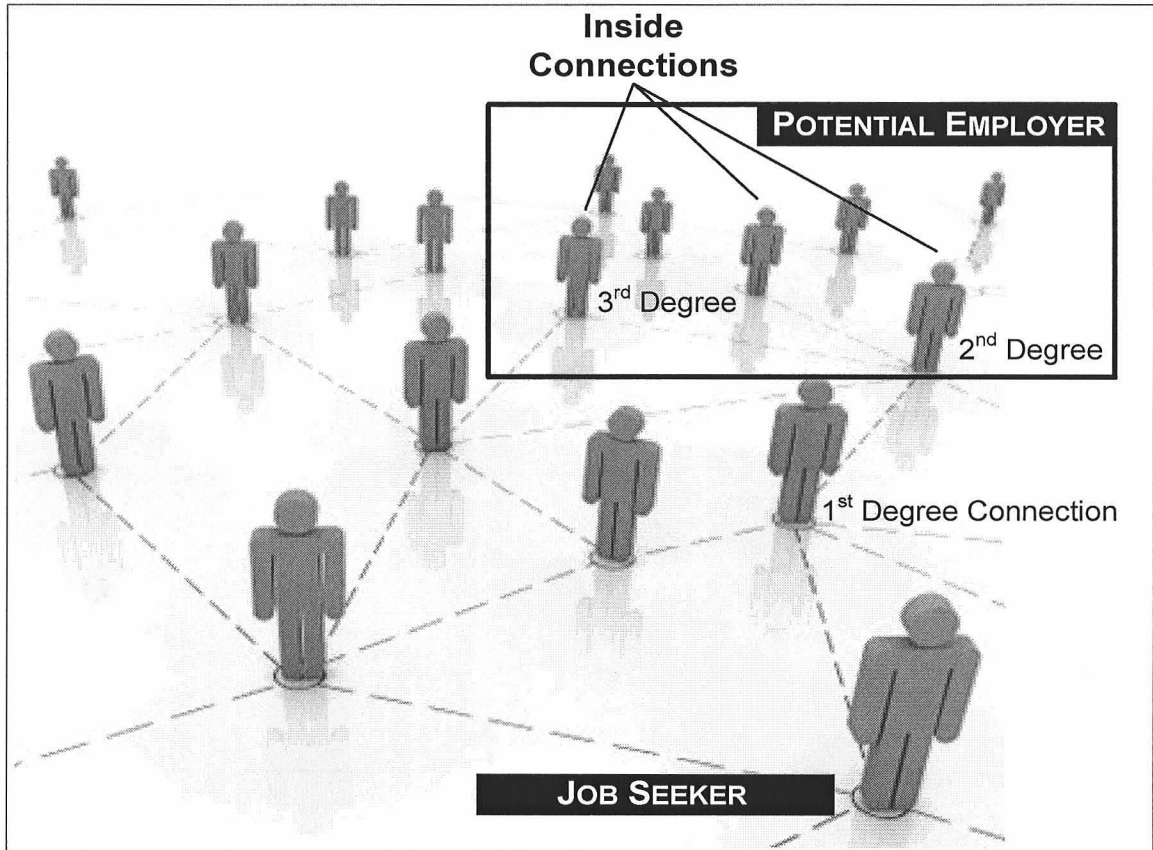
Figure 2.2 Illustration of "Inside Connections."

Figure 2.3 Linkedin's display of a job seeker's inside connections to the company "COM."

There are some obvious benefits from making visible the linkages between job seekers and potential employers. For instance, in Linkedin, job seekers are encouraged to utilize their inside connections with potential employers to help them land a desired job. Individuals identified as having inside connections may provide valuable information to job seekers or may even provide referrals. Also, in some job vacancy postings in Linkedin, it is explicitly stipulated that referrals through networks are preferred. This seems to suggest that recruiters value referrals from trusted personal contacts with social network connections to both the job seeker and the employer. There are, however, some risk implications in terms of the uncertainty of whether or not information about personal contacts will help or hurt the job seeker's chances at securing a desired job.

One of the objectives of this study is to analyze the effects of the provision of information on the capabilities of LinkedIn's JobsInsider™ feature on job seekers' expectations with respect to the performance of SNSs in helping them secure a job. In

this study, the more general term "inside connections" is being used instead of JobsInsider™.

2.7 Concerns with the Use of SNSs in Job Search and Application

There is a plethora of obvious examples of behavior on SNSs that might negatively influence a recruiter's or manager's recruiting decisions, e.g. someone bragging about how he or she took a previous employer's confidential client list and is now earning substantial revenues from it, or the posting of sexually suggestive photos and comments on his or her page (Davis, 2009). Such actions can be damaging to an individual's future career particularly given the permanence of the record that is created in doing so and the unavailability of a "technical silver bullet to purge inappropriate or damaging information once it has been broadly disseminated" (Rosenblum, 2007 p. 40).

There are also examples of how information revealed on SNSs can negatively impact a hiring decision that are not very obvious. For example a job seeker who establishes a network connection with a recruiter or hiring manager may unknowingly provide access to personal information that the recruiter or hiring manager may not otherwise obtain through other aspects of the recruitment process such as interviews. For instance, a job seeker may normally refrain from revealing in an interview that he/she is the single parent of very young children. However, that information might be deduced from pictures posted in the job seeker's online album, and unfortunately in some cases, it may have a negative impact on potential employer's decisions to hire that job seeker.

2.8 Chapter Summary

This chapter provided background information on recruitment in the context of social networking sites because, in this research project, job seekers' perceptions and attitudes towards job seeking and application within this context are examined. A definition of social networking sites was presented followed by an outline of how these sites are typically used by recruiters to identify qualified job candidates and by job seekers in their attempts to secure a desirable job. An overview of statistical trends in the extent of use of SNSs for recruitment and job seeking was then provided.

The discussion in this chapter also focused on the importance of personal contacts within a job seeker's social network in improving the outcome from his/her job search efforts. LinkedIn's JobInsider™ feature was described in order to illustrate how profile details and social links articulated in social networking sites can be used to provide a job seeker with information about the personal contacts within his/her network who can introduce him/her to individuals who currently work with an employer of interest to the job seeker. The effects of making job seekers aware of such a feature are investigated in this dissertation research.

CHAPTER 3

LITERATURE REVIEW: JOB SEEKERS' BEHAVIORAL IN OTHER ONLINE RECRUITMENT CONTEXTS

3.1 Introduction

In general recruitment research, the main issues of concern are applicants' attitudes and behavior. Accordingly, the outcomes most commonly investigated are: person-organization and person-job fit perceptions; job/organization attraction; job pursuit intentions; acceptance intention; and job choice. In online recruitment, however, the focus is typically on the early stages of recruitment because it is at this stage that the applicant and recruiter interact with each other through the Internet. Thus, outcomes of interest in online recruitment research are usually limited to that stage and include: organization attraction, perceptions of person-organization and person-job fit, test taking motivation and perceptions of the quality of the recruitment website. In this chapter, studies that have examined these outcomes are outlined. Summaries of the studies reviewed in this chapter are presented in tabular format in Appendix A

3.2 Organization Attraction Defined

Organizational attraction has been noted to be the primary and the most immediate objective of recruitment (Rynes and Barber, 1990); it is therefore not surprising that it has been given significant attention in research on online recruitment. There is, however, very little consensus on how the concept of "organizational attraction" is defined and measured in prior studies. Highhouse et al. (2003) present the most comprehensive description and measure of this concept. These authors distinguished empirically three

distinct components of organizational attraction: general attractiveness, prestige and behavioral intentions. Attractiveness pertains to preliminary attitudes about the organization as a potential employer. Prestige refers to the degree to which the organization is perceived as being well regarded. Intentions relates to plans to pursue actively employment with the organization. Another important finding derived from Highhouse et al.'s (2003) analysis is that the relationships among the components of organizational attraction and the behavior 'organization pursuit' are consistent with Fishbein and Ajzen's (1975) theory of reasoned action and Ajzen's (1991) theory of planned behavior. That is, the influences of organization attractiveness and prestige on organization pursuit are mediated by intentions.

3.3 Website Features and Organizational Attraction

Prior investigations on the effects of website features on organizational attraction have explored the following as either direct or indirect predictors:

- Web site orientation or the primary purpose for which the website is designed, that is, recruiting, screening or dual purpose (Williamson et al. 2003)

- Perceptions of website content in terms of compensation, culture, and developmental opportunities (Cober et al. 2003), and perceptions of style as it relates to aesthetics and usability (Cober et al. 2003; Zusman and Landis, 2002)

- The level of person-organization fit feedback (high or low) given to the potential applicant (Dineen et al. 2002)

- The amount of organizational information and the amount of job information included in the website (Allen et al. 2007)

- Website content as it pertains to whether the organization is portrayed as encouraging strong social links (e.g. teamwork) or as emphasizing weak social links, that is, autonomy and independence (Koumbis, 2007).

Figure 3.1 shows a graphical representation of the web site features examined in the above noted studies and the relationships that can be drawn from the findings of these studies. The study citation and the web site features examined in that study have matching superscripts. For example, Cober et al. (2003) with the superscripts a, b, and c, studied the features organizational information, job information and aesthetics with matching superscripts a, b, and c, respectively.
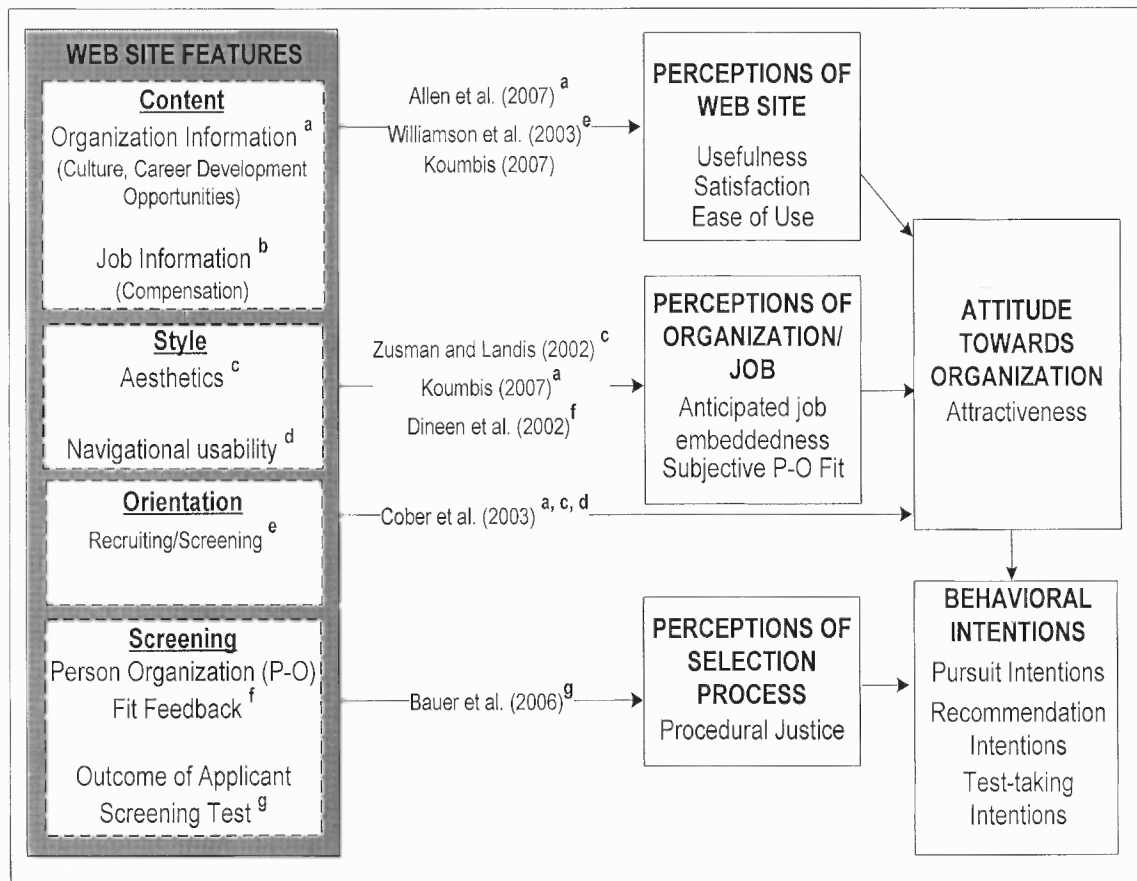
Figure 3.1 Relationships found in studies that examined web site features as antecedents of organizational attraction.

The main conclusions drawn from the studies noted earlier and illustrated in Figure 1.3 are outlined below.

- Websites designed to sell the benefits of working in an organization (or websites with a recruiting orientation) were generally viewed as providing more useful content than those designed to capture information from applicants (or websites with a screening orientation), and were therefore more likely to lead to greater organizational attraction (Williamson et al. 2003).

- Job seekers would rather pursue and accept positions in organizations with more attractive web pages than jobs in organizations with less attractive web pages (Zusman and Landis, 2002). However, in Cober et al. (2003), website aesthetics was found to have no impact on organizational attraction measured in terms of intentions to pursue a job at the organization or to recommend the organization to others.

- Perceptions of website content in terms of information provided about compensation, culture and career development opportunities had a positive influence on organizational attraction (Cober et al. 2003). Website style as it pertained primarily to navigational usability also had a positive influence on organizational attraction (Cober et al. 2003).

- The level of feedback on person-organization fit (high or low) received by an applicant and an objective measure of person-organization fit (the degree to which the organization exhibits characteristics that are similar to those of the applicant) indirectly affected organizational attraction (Dineen et al. 2002).

- The amounts of (a) job opportunity related information and (b) organization information provided to job seekers were positively associated with job seekers' attitudes towards the website; and these attitudes were in turn positively associated with attitudes (such as degree of attraction) towards the organization (Allen et al. 2007).

- An organization's website conveys information about the extent of social interaction in its work environment by placing more emphasis on either teamwork or autonomy/independence. It was demonstrated that this information influenced perceptions of anticipated job-embeddedness, particularly perceptions of social links or the degree and regularity with which the applicant expected to interact with co-workers. The level of anticipated job-embeddedness in turn positively impacted organizational attraction.

3.4 Applicants' Beliefs and Concerns, and Organizational Attraction

With respect to applicants' concerns and beliefs with regard to online recruitment environments, the following variables were demonstrated to be important in predicting organizational attraction and pursuit intentions: outcome expectancy (an individual's belief that a desired outcome will result from a specific behavior); information privacy concerns (perceived security of employment-related information provided online); procedural justice (described as the fairness of the screening procedure during the online application process); and experience with computers. Figure 3.2 illustrates the relationships that were explored. Similar to Figure 3.1, the study citation and the applicants' beliefs or concerns examined in that study have matching superscripts.
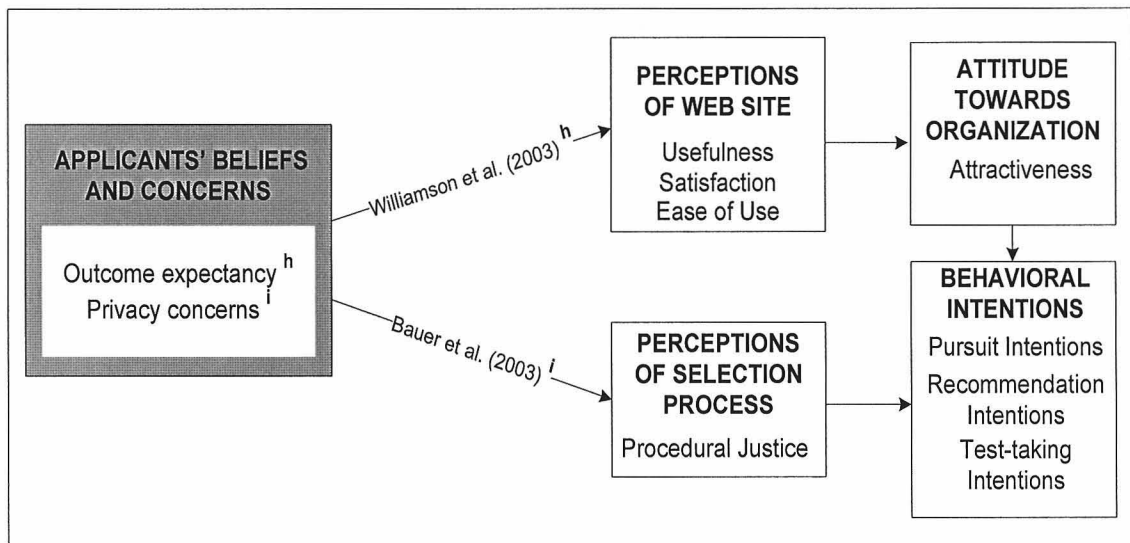
Figure 3.2 Relationships found in studies that examined applicants' beliefs and concerns as antecedents of organizational attraction.

In Williamson et al. (2003), outcome expectancy was found to have an indirect positive relationship with organizational attractiveness, which was mediated by perceptions of website content usefulness. In Bauer et al. (2006), it was demonstrated that generally, for job applicants, the lesser the concern about personal information privacy,

the better the perception of procedural justice. Also, applicants with more positive perceptions of procedural justice tended to have more favorable reactions such as higher test-taking motivation, higher organizational attraction, and greater organizational pursuit intention. In a field study involving actual applicants to a State's personnel department in the US, experience with computers moderated the relationships between procedural justice and (a) test-taking motivation and (b) intention toward the organization (Bauer et al. 2006). Although the domain of the Williamson et al. (2003) and the Bauer et al. (2006) was online recruitment in organizational web sites, some of the findings of these studies were used to inform the current research, which focuses on the context of SNSs.

3.5 Online Recruitment Service Quality in Online Career Centers (Job Boards)

Research evidence suggests that national or general purpose job boards tend to generate a larger quantity and higher quality of job candidates than career sections of organizational websites (SHRM, 2007). However, e-recruitment studies tend to focus more on applicants' perceptions of individual organizational web sites than on perceptions of virtual career centers such as job boards. In the literature search for this review, only one study (Tong et al. 2005) focusing applicants' perceptions of virtual career centers was discovered.

Tong et al. (2005) argue that for online recruitment centers such as job boards, job seekers' perception of service quality is an important consideration because "websites with low service quality for job seekers may experience a decrease in the number of active job seekers... this, in turn, may lead to a reduction in the number of employers who are willing to subscribe to the recruitment service" (p.698). In a carefully designed

laboratory experiment, Tong et al. (2005) investigated the association between perception of 'overall service quality' and (a) the cognitive measures of mental overload, and (b) the objective measure of time spent completing online job seeking tasks. In summary, the findings of Tong et al.'s (2005) study were as follows:

- There was a significant negative correlation between performance time and perception of overall service quality.

- There was a significant negative relationship between overall mental workload and perception of overall service quality. There were similar significant negative relationships between perceived overall service quality and mental workload for each task except the first one, create an account.

3.6 Under-researched Issues in Predicting Job Seekers' Online Behavior

The studies reviewed in this chapter have examined primarily web site features and individual characteristics that predict job seekers' attitudes and behavior. One of the most noticeable aspects of this review is the predominant focus on organizational career sites as opposed to other online recruitment sources. This was not intentional. In the survey of scientific literature upon which this review is based, only one study (Tong et al. 2005) was discovered that focused on job seekers' behavior in a context other than the career sections of organizations' web sites. There is clearly a need to investigate predictors of job seekers' behavior in other online contexts, such as job boards and social networking sites that are growing in popularity as sources of job candidates (SHRM, 2007).

Tong et al. (2005) made a novel contribution by venturing into the under-researched area of online recruitment centers (e.g. job boards) and examining antecedents of job seekers' perception of service quality. This study, however, was very narrow in scope and focused only on the mechanics of applying for a job using these recruitment centers. The effects of other issues such as personal information privacy concerns,

information overload, trust, and characteristics unique to these types of sites, are yet to be investigated.

The previously noted gaps in research on job seekers' behavior suggest the need for future research to provide answers to the following general questions:

- What factors influence job seekers' attitudes and behaviors in contexts such as job boards and social networking sites?

- How do these factors compare with those found to affect job seekers' attitudes and behaviors in organizational career web sites?

3.7 Chapter Summary

This chapter presented summaries of prior research that investigated factors influencing applicants' attitudes and behavior in online recruiting settings. Summaries of these studies are also presented in a tabular format in Appendix A. With the exception of one study (Tong et al. 2005), research in this area focused primarily on career/recruitment websites of individual organizations. Tong et al. (2005) examined perceptions of 'electronic service quality' in online recruitment centers (e.g. job boards). The main conclusion from this study was that the time and the mental workload required to perform basic job search and job application tasks were predictors of perception of electronic service quality.

For studies that dealt with individual organizational recruitment web sites, one of the key outcomes investigated was organizational attraction, and as noted by Highhouse et al. (2003), this construct comprised three distinct components: general attractiveness, prestige and behavioral intentions. In most of these studies, general attractiveness and behavioral intention were treated as dependent variables. The independent variables were primarily website features (e.g. content format and orientation) and applicants' concerns

and beliefs specific to online recruitment (e.g. outcome expectancy and privacy concerns). The relationships deduced from these studies are illustrated in Figure 3.1 and 3.2.

Finally, this chapter highlighted the dearth in research on job seekers' reactions in contexts other than organizational career web sites. The need for research to understand the following was noted: (a) the salient factors that affect job seekers' behavior in contexts such as job boards and social networking sites; and (b) the differences between these factors and those identified in prior research as having an influence on job seekers' behavior within the context of organizational career web sites.

CHAPTER 4

LITERATURE REVIEW: ACCEPTANCE OF ONLINE SERVICES

4.1 Introduction

In prior IS studies, it is not unusual to combine or extend classic technology adoption theories that have demonstrated robustness in organizational settings to explain Internet users' behavior or intended behavior with respect to the use of online services. There are a myriad of examples of the use of this approach including: technology acceptance model (TAM) and innovation diffusion theory (IDT) in Chen et al.(2002); TAM and trust (Gefen et al. 2003) and TAM, trust and risk (Pavlou, 2003). The scope of this chapter, however, is limited to the review of the main studies that have informed the development of the research model and the design of the survey instrument used in this study. In particular, it describes studies that have made seminal contributions to defining and operationalizing the concepts of privacy concerns, trusting beliefs and risk beliefs in the context of online services.

Before the review of relevant studies is presented, an explanation is provided for the shift in focus from the dependent variable "organizational attraction," explored extensively in studies of job seekers' behavior online and discussed in the previous chapter, to the dependent variable "intentions to use SNSs."

4.2 Why Investigate Intention to use SNSs to Apply for Jobs and not Organizational Attraction?

All but one of the studies on predicting job seekers' behavior reviewed in the previous chapter focused on online recruitment in the context of organizational web sites. Thus it was appropriate to study the dependent variable "organizational attraction." These

studies contributed to providing useful information on content and format in the design of the organizational career/job opportunity web sites that would attract job applicants.

In this study, however, the domain of focus is SNSs offering recruitment services to several organizations. In this context, SNSs are the information technology conduit that would lead job seekers to the organization's career web site. Moreover, it is possible to complete applications for jobs within sites such as Linkedin.com. Thus the acceptance of the services offered by the SNSs and not the attraction to any particular organization is the focal point of interest in this study. Consistent with many prior studies on acceptance of online technologies and services, the dependent examined in this study is "behavioral intention."

4.3 Privacy Concerns, Trust and Risk: Predictors of Consumers' Online Intentions

4.3.1   Conceptualization of Internet Users' Information Privacy Concerns

Malhotra et al. (2004) used Social Contract (SC) theory to underpin the conceptualization of the construct "Internet users' information privacy concerns" (IUIPC). According to Malhotra et al.(2004, p. 338), when SC theory is applied to information privacy, "it suggests that a firm's collection of personally identifiable data is perceived to be fair only when the consumer is granted control over the information and the consumer is informed about the firm's intended use of the information." The construct IUIPC was therefore theorized as comprising three dimensions: (1) collection of personal information, users' (2) control over the information collected, and (3) users' awareness of privacy practices in terms of how the collected information is used.

Malhotra et al. (2004) developed a scale to measure this construct and tested the nomological validity of this scale by using a causal model that takes into consideration

the mediating role of risk beliefs and trusting beliefs in predicting behavioral intentions towards releasing personal information at the request of a marketer. The hypotheses tested in this study (illustrated in Figure 4.1) were as follows:

H1 Internet users' information privacy concerns will have a negative effect on trusting beliefs.

H2 Internet users' information privacy concerns will have a positive effect on risk beliefs.

H3 Trusting beliefs will have a negative effect on risk beliefs.

H4 Trusting beliefs will have a positive effect on intention to reveal personal information.

H5 Risk beliefs will have a negative effect on intention to reveal personal information.

H6 A marketer's request for more sensitive information will have a negative effect on trusting beliefs.

H7 A marketer's request for more sensitive information will have a positive effect on risk beliefs.

H8 A marketer's request for more sensitive information will have a negative effect on intention to reveal personal information.

For behavioral intention, Malhotra et al. (2004) focused on the extent to which the consumer would reveal information through the Internet. They defined trusting beliefs and risk beliefs concepts as follows:

Trusting beliefs - the degree to which people believe a firm is dependable in protecting consumers' personal information

Risk beliefs - the expectation that a high potential for loss is associated with the release of personal information to the firm
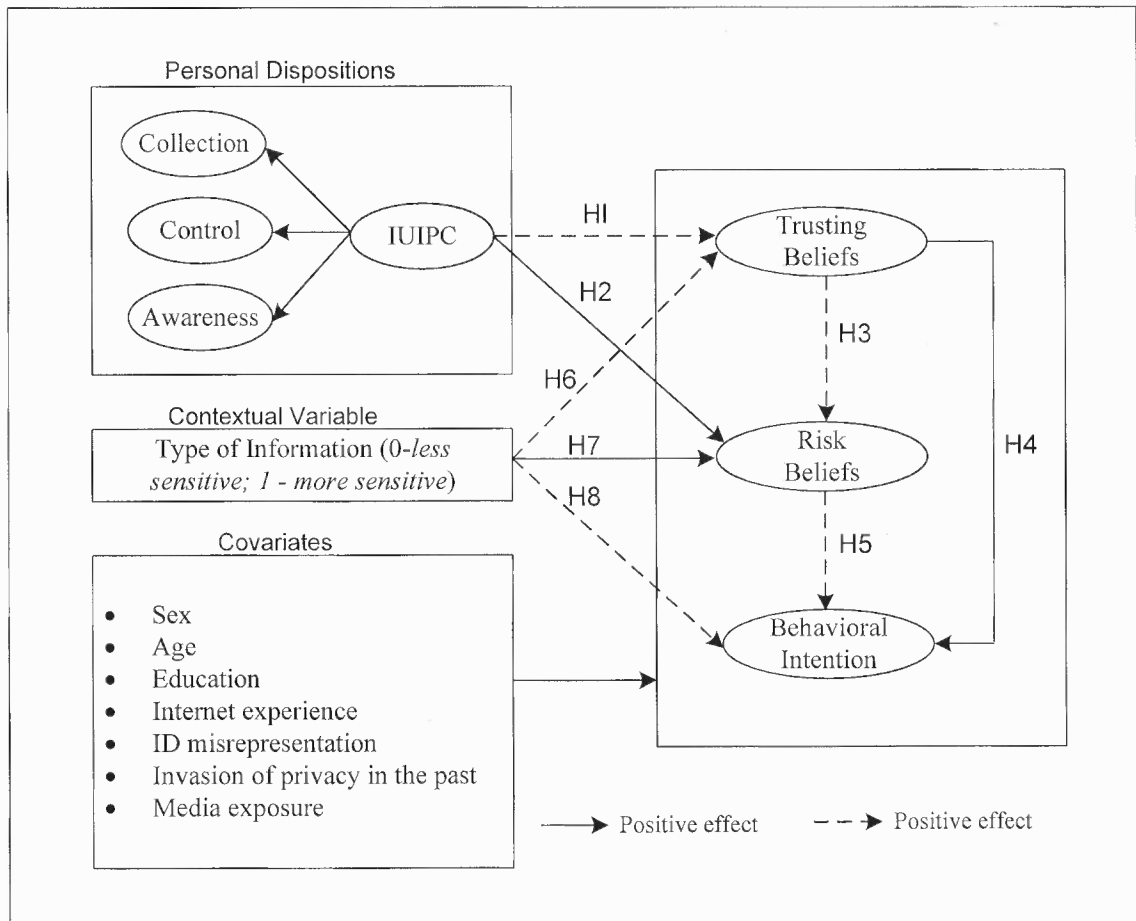
Figure 4.1 Causal model on relationship between IUIPC and behavioral intention (Source: Malhotra et al. 2004, p.341).

This conceptualization of IUIPC was shown to be useful in explaining Internet consumers' behavioral intentions towards releasing personal information at the request of a marketer. Moreover, on the basis of a number of comparative statistical tests, Malhotra et al. (2004) concluded that in an online context, their IUIPC construct included and extended the notion of information privacy concerns devised by Smith et al. (1996). This study is only concerned with Malhotra et al.'s (2004) collection dimension of IUIPC.

4.3.2 Trust-Risk Paradigm

Relatively early investigations of consumer trust in an Internet store were undertaken by

Jarvenpaa and Tractinsky (1999) and Jarvenpaa et al. (2000). The underlying model

tested in these investigations is shown in Figure 4.2. The variables relevant to this model

are conceptualized as follows:

Perceived size: consumer's perception of the store's size, rather than the store's actual size (for example, its sales volume or the number of products for sale).

Perceived reputation: the consumer's perception of a store's reputation, where "reputation" is defined as the extent to which buyers believe a selling organization is honest and concerned about its customers.

Trust: "a trustor's expectations about the motives and behaviors of a trustee" – adopted from Doney and Cannon (1997, p. 37)

Risk perception: the "trustor's belief about likelihoods of gains and losses outside of considerations that involve the relationships with the particular trustee" – adopted from Mayer et al. (1995)

Attitude: Favorable or unfavorable orientation towards the store

Willingness to buy: Likelihood of buying from the store or returning to the store's web site
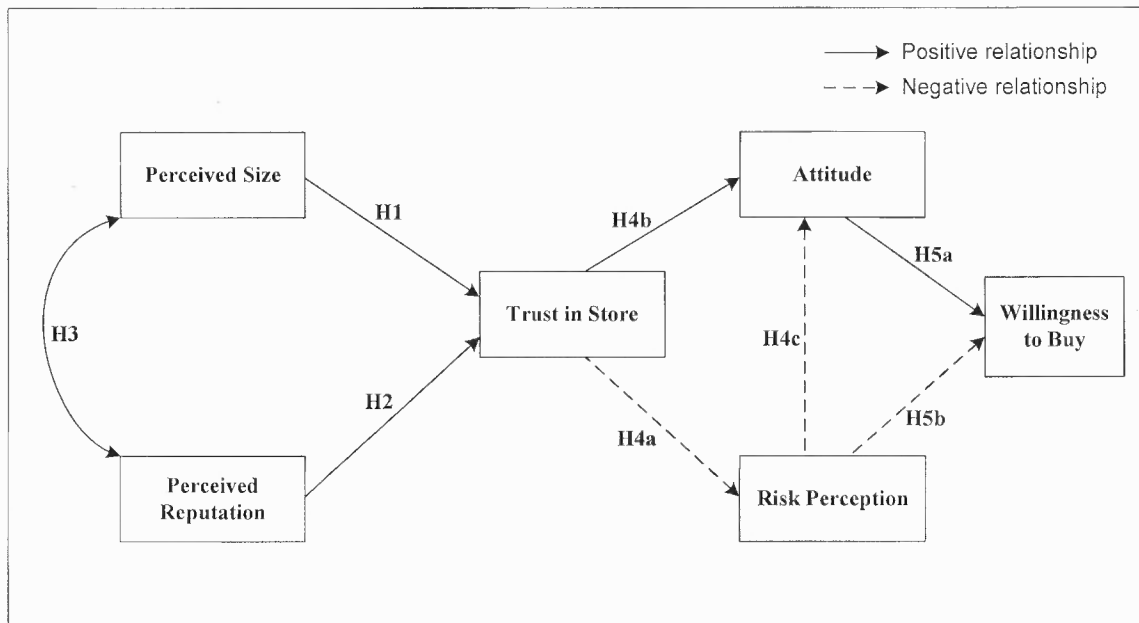
Figure 4.2 Research Model of Consumer Trust in an Internet Store (Source: Javenpaa et al. 2000, p. 47).

Jarvenpaa et al. (2000) tested the research model using an experimental survey approach with 184 student participants recruited from two Australian universities. Participants were asked to perform two activities (selecting and buying a book as a gift for a friend and buying a specified book for a course) on four online book stores that varied in size and reputation: Amazon.com, the UK-based Internet Bookshop, Glee Books in Sydney, and DA Information Services in Melbourne. They were also asked to perform two activities (plan a holiday trip to Helsinki, Finland and plan a work-related trip to Sydney Australia) on four travel sites: Finnair, the Australian airline Qantas, the well-known Australian travel agent Flight Centre, and the Internet-based travel service TravelWeb. The use of two different store types allowed the researchers to explore the effects of store type on the model variables. The specific hypotheses investigated were as follows:

H1:   A consumer's trust in an Internet store is positively related to the store's perceived size.

H2:   A consumer's trust in an Internet store is positively related to the store's perceived reputation.

H3:   An Internet store's perceived size is related to the store's perceived reputation.

H4a: Higher consumer trust towards an Internet store will reduce the perceived risks associated with buying from that store.

H4b: Higher consumer trust towards an Internet store will generate more favorable attitudes towards shopping at the store.

H4c: The lower the consumer's perceived risk associated with buying from an Internet store, the more favorable the consumer's attitudes towards shopping at that store.

H5a: Favorable attitudes towards an Internet store will increase the consumer's willingness to purchase from that Internet store.

H5b: Reduced perceived risks associated with buying from an Internet store will increase a consumer's willingness to purchase from that Internet store.

David Gefen and Paul A. Pavlou are two notable researchers who have conducted a number studies focusing on trust in various online contexts (Gefen, 2000; Gefen, 2002; Gefen et al. 2003; Pavlou, 2003; Pavlou and Gefen, 2004). This review focuses on (a) Gefen et al. (2003), in which trust is integrated with TAM in explaining intended use of a business- to- consumer (B2C) web site; and (b) Pavlou (2003), in which the concept of risk is considered along with trust and the determinants of TAM in predicting e-commerce acceptance.

Gefen et al. (2003) investigated the relationships between trust and the two beliefs of TAM shown in Figure 4.3. The antecedents of trust were also examined. Generic definitions, not specific to one's job performance in an organizational setting, were used

for perceived usefulness and ease of use. Thus, the specific definitions used for each construct in the model shown in Figure 4.3 are as follows:

Perceived usefulness (PU) is a measure of the individual's subjective assessment of the utility offered by the new IT in a specific task-related context.

Perceived ease of use (PEOU) is an indicator of the cognitive effort needed to learn and to utilize the new IT.

Knowledge based familiarity: familiarity with what is going on, with why it is happening and with parties involved.

Calculative-based: beliefs that the e-vendor has more to lose than to gain by cheating or has nothing to gain by betraying the customer's trust.

Institutional-based situation normality: an assessment that the transaction will be a success based on how normal or customary the situation appears to be.

Institutional-based structural normality: an assessment of success due to safety nets such as legal recourse, guarantees and regulations that exist in a specific context.
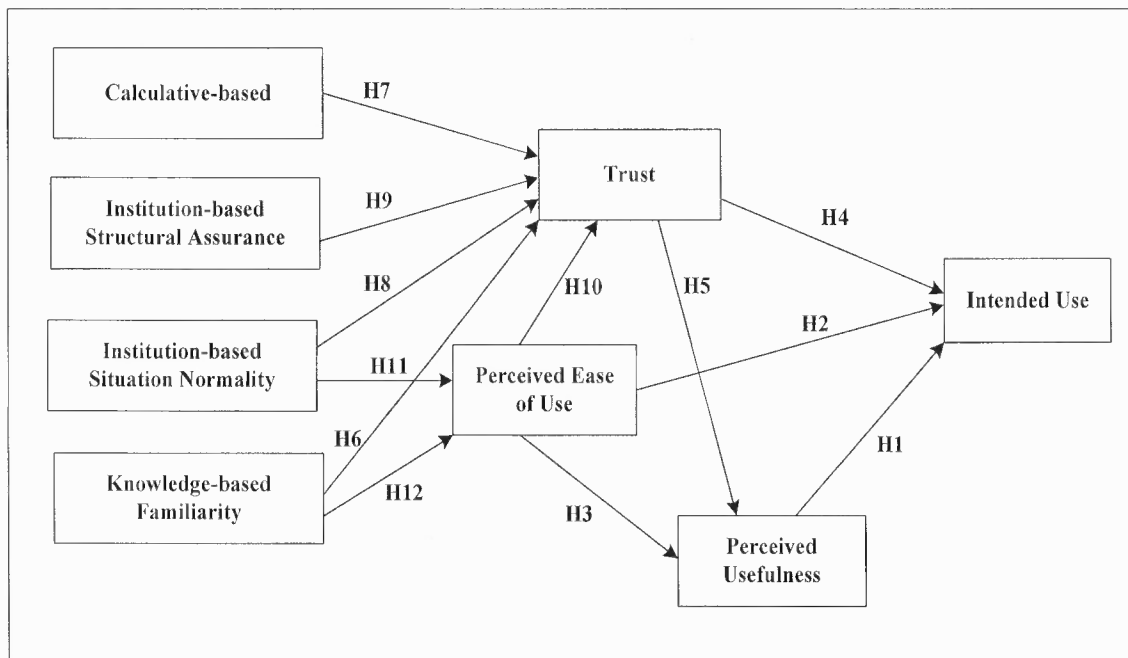
Figure 4.3 Trust and TAM in online shopping: An integrated model (Source: Gefen et al. 2003, p. 53).

The following hypotheses were assessed in Gefen et al. (2003):

H1: PU will positively affect intended use of a business-to-consumer (B2C) web site.

H2: PEOU will positively affect intended use of a business-to-consumer (B2C) web site.

H3: PEOU will positively affect PU of a business to-consumer (B2C) Web site.

H4: Trust in the e-vendor will positively affect intended use of a business-to-consumer (B2C) web site.

H5: Trust will positively affect PU.

H6: Familiarity with a trustworthy e-vendor will positively affect trust in that e-vendor

H7: Calculative-based beliefs will positively affect trust in an e-vendor

H8: Perceptions of situational normality will positively affect trust in an e-vendor.

H9: Perceptions of structural assurances built into a Web site will positively affect trust in an e-vendor.

H10: PEOU will positively affect trust in an e-vendor.

H11: Situational normality will positively affect PEOU.

H12: Familiarity with the e-vendor will positively affect PEOU.

In Pavlou (2003), an e-commerce acceptance model, shown in Figure 4.4, was developed and tested using two studies. This model considers intention to transact and actual transaction behavior as the primary determinants of consumer acceptance. It is posited that e-commerce is heavily technology driven and hence the variables "perceived ease of use" and "perceived usefulness" are identified as key drivers of e-commerce acceptance. Trust and risk are also included in the model as key driving factors of e-commerce acceptance because of the uncertainty inherent to the e-commerce environment.
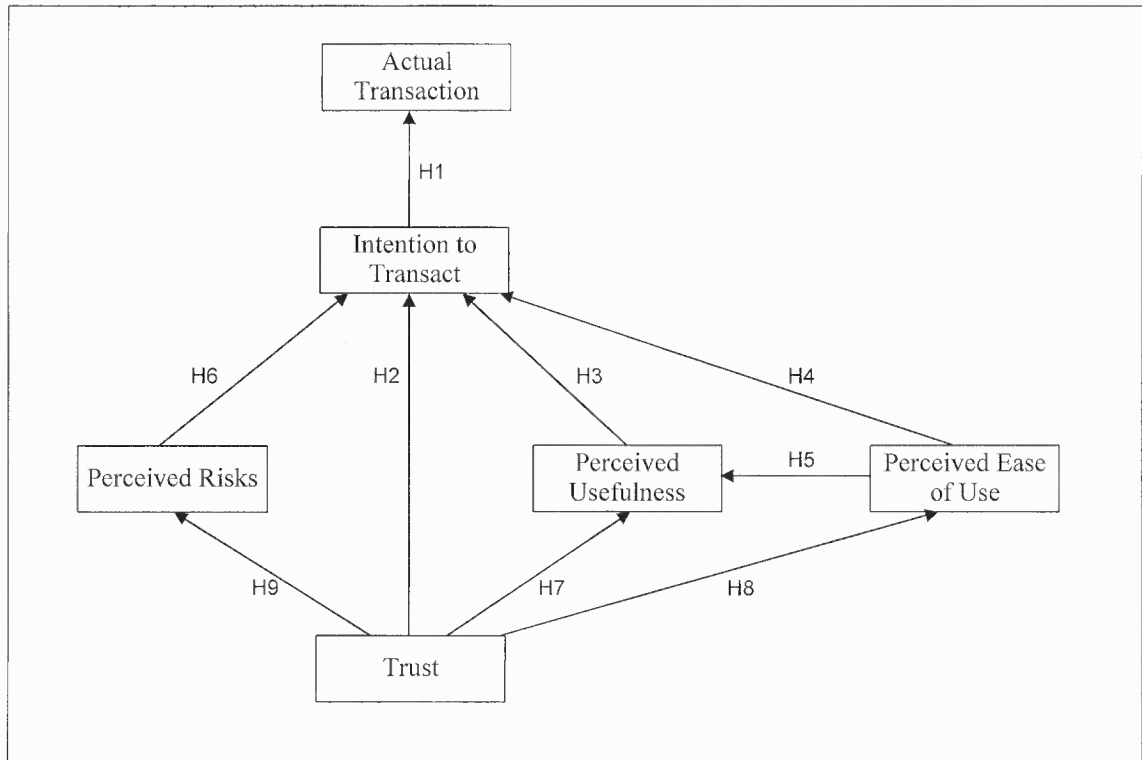
Figure 4.4 Consumer acceptance of e-commerce: Integrating trust and risk with TAM (Source: Pavlou 2003, p. 104).

The core constructs used in the Pavlou (2003) research model were defined as follows:

Intention to transact: The consumer's intention to engage in an online exchange relationship with a Web retailer such as sharing business information, maintaining business relationships, and conducting business transactions (adopted from Zwass, 1998).

Perceived Usefulness: The degree to which consumers believe that a particular technology will facilitate the transaction process (adapted from Davis, 1989).

Perceived Ease of Use: The degree to which a consumer believes that using a particular technology will be effortless (adapted from Davis, 1989).

Perceived Risk: The consumer's subjective belief of suffering a loss in pursuit of a desired outcome

Trust: In the context of B2C e-commerce, trust is defined as the belief that allows consumers to willingly become vulnerable to Web retailers after taking the retailer's characteristics into consideration.

Two studies were conducted by Pavlou (2003). In the first study, three laboratory experiments were conducted. In each experiment students were required to perform activities specific to the three main steps of the consumer online process described by Pavlou (2003): information retrieval; information transfer; and product purchase. The context or web site in which these activities were performed was different for each experiment. For the first experiment, the 36 undergraduate participants were required to use Amazon.com. For the second experiment, in which 41 students participated, the subjects chose a retailer with which they were familiar. In the third experiment, the 25 student participants were to consider web retailers in general. The specific hypotheses tested were:

HI: Consumer transaction intentions positively influence actual transaction behavior.

H2: Consumer intentions to transact on-line are positively related to trust in e-commerce.

H3: Consumer intention to transact is positively related to the perceived usefulness of the Web interface.

H4: Consumer intention to transact is positively related to the perceived ease of use of the Web interface.

H5: The perceived usefulness of a Web interface is positively related to its perceived ease of use.

H6: Consumer intentions to transact are negatively related to perceived risk

H7: Consumer trust is positively related to the perceived usefulness of a Web interface.

H8: Consumer trust is positively related to the perceived ease of use of a Web interface.

H9: Consumer perceived risk is negatively related to trust in e-commerce.

4.4 Application of UTAUT in Predicting Acceptance of Online and Mobile Services

In this study, the theoretical model developed to explicate job seekers' intention to use SNSs to apply for jobs is grounded on the unified theory of acceptance and use of technology (UTAUT) model. UTAUT was selected as the foundational theory because, as noted in the following two subsections, it (1) integrates the concepts of eight preceding technology adoption theories; (2) has greater explanatory power than its predecessors; and (3) has been demonstrated to be robust with respect to its applicability to the use of online technology.

4.4.1 Unified Theory of Acceptance and Use of Technology (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) is a theory rooted in the following eight theories that have been used extensively in prior literature on technology acceptance:

- TRA - the theory of reasoned action (Ajzen, 1975; Fishbein and Ajzen, 1975)

- TAM - the technology acceptance model (Davis, 1989; Davis et al. 1989)

- MM - the motivational model (Davis et al. 1992)

- TPB - the theory of planned behavior (Ajzen, 1991)

- C-TAM-TPB - a model combining the technology acceptance model and the theory of planned behavior (Taylor and Todd, 1995)

- MPCU - the model of PC utilization (Triandis, 1977;Thompson et al. 1991)

- IDT - the innovation diffusion theory (Moore and Benbasat, 1991)

- SCT - the social cognitive theory (Compeau and Higgins, 1995)

In UTAUT, as shown in Figure 4.5, the three direct predictors of behavioral intentions —performance expectancy (PE), effort expectancy (EE) and social influence (SI) — are moderated by individual or contextual variables, including gender, age, experience and voluntariness of use. Behavioral intentions and facilitating conditions are direct predictors of user behavior. However, age and experience are moderators of the relationship between facilitating conditions and user behavior. The following three variables hypothesized and demonstrated to have non-significant relationships with behavioral intention are not shown in the UTAUT model presented in Figure 4.5: computer self-efficacy; computer anxiety and attitude toward using technology.

User behavior is the actual use of the system measured as duration of use based on system logs. Behavioral intention is the intention to use the system within a specified period of time. The direct predictors of behavioral intention and user behavior are defined as follows:

Performance expectancy: the degree to which an individual believes that using the system will help him or her to attain gains in job performance

Effort expectancy: the degree of ease associated with the use of the system

Social influence: the degree to which an individual perceives that important others believe he or she should use the new system

Facilitating conditions: the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system
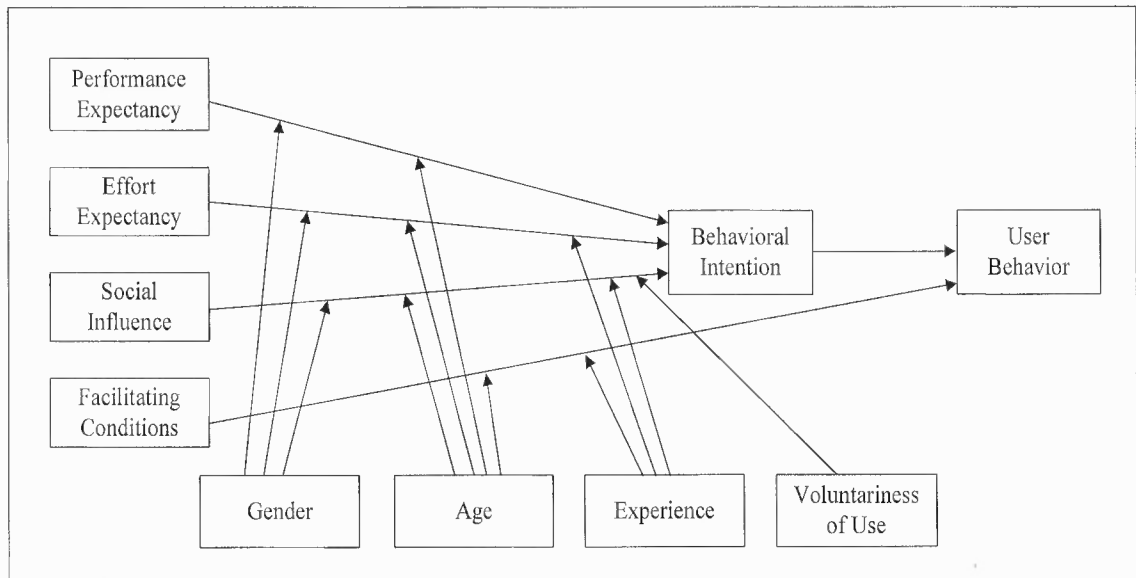
Figure 4.5 UTAUT Model (Source: Venkatesh et al. 2003, p. 447).

UTAUT was evaluated by first conducting longitudinal field studies involving four organizations in which individuals were being introduced to a new technology. The primary objectives of longitudinal studies were to (1) compare empirically the eight technology acceptance models from which UTAUT was derived; and (2) to perform a preliminary test of the measurement and structural models, which were later validated in a subsequent study involving two organizations. The four contexts in which these preliminary studies were conducted included:

1. An organization in the entertainment industry in which an online meeting management system was being implemented and available for voluntary use (sample size was 54)

2. An organization in telecom services in which a database application was being implemented and available for voluntary use (sample size was 65)

3. A bank in which the use of a portfolio analyzer was mandatory (sample size was 58)

4. A public administration organization in which the use of an accounting system for book keeping was mandatory (sample size was 38)

In the preliminary studies a pretested questionnaire containing items measuring constructs from all eight root models was used to capture users' perceptions as they gained experience with the technology at three different times: T1 – post training associated with the new technology introduction; T2 – one month after implementation; and T3 – three months after implementation. Actual usage behavior was measured using duration of use based on system logs over the 6 month post-training period.

UTAUT measurement and structural models were then validated using data collected from two additional organizations. One organization was from the financial services industry in which a software application for assisting analysts to conduct research on financial investment opportunities and initial public offerings (IPOs) was implemented. Use of this software application was voluntary (sample size – 80). The second organization was an electronic retail store in which customer service representatives were required to use an application in order to document and manage service contracts (sample size – 53). Data were collected at similar points in time relative to the training and implementation of the new technology, as was done in the preliminary studies.

In the preliminary studies, UTAUT outperformed the eight individual models with an adjusted R^2 of 69 percent. In the confirmatory study conducted with data from two new organizations, an adjusted R^2 of 70 percent was found. The hypotheses tested and supported in UTAUT were as follows:

H1: The influence of performance expectancy on behavioral intention will be moderated by gender and age, such that the effect will be stronger for men and particularly for younger men.

H2: The influence of effort expectancy on behavioral intention will be moderated by gender, age, and experience, such that the effect will be

stronger for women, particularly older women, and particularly at the early stages of experience.

H3: The influence of social influence on behavioral intention will be moderated by gender, age, voluntariness, and experience, such that the effect will be stronger for women, particularly older women, particularly in mandatory settings in the early stages of experience

H4a: Facilitating conditions will NOT have a significant influence on behavioral intention

H4b: The influence of facilitating conditions on usage will be moderated by age and experience such that the effect will be stronger for older workers, particularly with increased experience.

H5a: Computer self-efficacy will NOT have a significant influence on behavioral intention

H5b: Computer anxiety will NOT have a significant influence on behavioral intention

H5c: Attitude toward using technology will NOT have a significant influence on behavioral intention

H6: Behavioral intention will have a significant influence on usage

4.4.2 Prior Studies Utilizing UTAUT in the Context of Online and Mobile Services

UTAUT has been used as the foundational theory by a number of researchers in the study of acceptance of online and mobile technology. In this section, a few of these studies are outlined.

Carlsson et al. (2006) tested the applicability of UTAUT in explaining acceptance of mobile devices/services. One hundred and fifty seven Finnish consumers participated in this study. The results suggest that the UTAUT model can to some extent be applied in explaining acceptance of mobile devices/services. Performance expectancy and effort expectancy were found to be significant predictors of behavioral intention. However,

social influence was not. This study also supported the positive relationship between behavioral intention and actual usage.

Wang et al. (2007) examined the determinants of acceptance of mobile learning, and in particular age and gender. Data were collected from 333 subjects recruited from five Taiwanese organizations. The three determinants of behavioral intention from UTAUT as well as perceived playfulness and self-management of learning were considered. In Wang et al.'s (2007) study, the relationship between effort expectancy and behavioral intention was found to be moderated by age and gender. The relationship between social influence and behavioral intention was found to be moderated by age only. The relationship between performance expectancy and behavioral intention was significant but not moderated by age or gender.

Yeow et al. (2008) investigated the positive and negative factors influencing the acceptance of online banking services (OBS) in Australia. Many of the factors considered in this investigation were derived from the UTAUT model, including those found to have non-significant relationships with behavioral intention, that is, computer self-efficacy, computer anxiety and attitude towards using OBS. The factor "perceived credibility" was also considered. Survey responses from 190 OBS users were analyzed. Multiple linear regression analysis showed that performance expectancy, facilitating conditions and computer anxiety were the most important predictors of intention to use OBS. The results concerning the direct relationship between social influence and behavioral intention contradict UTAUT.

Wu et al. (2007) explored, using UTAUT as their underlying theory, the factors that can increase customers' willingness to adopt third generation (3G) mobile

telecommunication services. Data from 394 participants were used in this analysis. The Wu et al. (2007) study found that performance expectancy, social influence, and also facilitating conditions influenced behavioral intention. However, effort expectancy did not.

4.5 Chapter Summary

The primary objective of this chapter was to review prior studies that inform the development of the theoretical model presented in the next chapter. It is noted that an approach often used in predicting users' acceptance of an online service is the integration of classic technology theories that have been applied extensively in organizational settings with variables or concepts that are deemed to be important in the context being studied.

In the context of recruitment and job application using SNSs, factors such as personal information privacy concerns, perceived justice/ trusting beliefs in recruiters and potential employers and perceived risks are deemed to be important. Accordingly, seminal research on the investigation of these factors is reviewed in this chapter. Additionally, the foundational theory, UTAUT, used in this study is summarized and studies that applied this theory in the context of adoption of online and mobile services are outlined.

CHAPTER 5

RESEARCH QUESTIONS AND HYPOTHESES

5.1 Introduction

The primary focus of this chapter is the initial theoretical model tested in this research. This model identifies the salient factors that are likely to influence job seekers' behavioral intentions in regard to applying for jobs using SNSs. In the motivation for this research discussed in Chapter 1, the following were noted as reasons for undertaking research to understand job seekers' intended use of SNS in applying for jobs:

- Prior studies on job seekers' behavior with respect to online recruitment have focused on contexts such as organizational web sites. However, the findings of these studies cannot be directly applied to understanding behavior in SNS because there are unique advantages and disadvantages inherent to job seekers' use of SNSs for the purposes of securing an advertised job. Advantages include the ease of identifying online personal contacts who are directly or indirectly connected to potential employers, whereas disadvantages include the risk of personal information being easily accessed by potential employers.

- There is a need to depart from prior studies that have, in examining the effects of privacy concerns on Internet users' behaviors, bundled applying for a job with other activities such as online shopping. Applying for a job, in many respects, is different from other online activities such shopping.

- There is a significant research-practice gap with respect to online recruitment in SNSs.

This chapter also discusses briefly, the secondary research question explored in this research: the identification of factors that impact or predict preference for traditional job boards over SNSs. Factors being considered in this exploratory assessment include demographics, occupation and prior Internet experience.

5.2 Research Questions

The main thrust of this investigation, as noted in Chapter 1, is to understand the interplay between potential benefits and privacy concerns as well as perceived justice/trust in predicting intentions in the use of SNSs in applying for jobs. Also, this study explores factors that may determine preference for the use of traditional job boards over SNSs. The two main questions this research answers are:

RQ 1: What salient factors influence job seekers' behavioral intentions to use social networking sites to apply for jobs?

RQ 2: What factors explain preference for use of SNS over job boards (or vice versa) for job application purposes?

5.3 Theoretical Background

The design of the theoretical model tested in this research is based on three primary considerations: (1) the essential elements of classic technology adoption and utilization theories that are typically used in explaining intentions to use and actual use of online technologies; (2) a unique technical characteristic of some SNSs that can facilitate the establishment of connections between employers and job seekers; and (3) issues of privacy, trust and risks that stem from uncertainties about the behavior of decision makers who are evaluating the job seekers' applications.

The determinants of intentions to use and actual use of Internet applications have often been investigated by adapting or augmenting technology adoption/utilization theories that have been extensively tested and have demonstrated substantial predictive power in organizational settings. This approach is justifiable because, irrespective of the transaction, e.g. online banking (Yeow et al. 2008) or the purchase of a product (Pavlou, 2003), the user must be willing to use the Internet technology developed specifically for

performing that transaction. Based on a similar logic, this study utilizes Venkatesh et al.'s (2003) Unified Theory of Acceptance and Use of Technology (UTAUT) as one of the foundational theories for explaining job seekers' intentions to utilize SNSs to apply for jobs.

UTAUT (illustrated in Figure 4.5) synthesizes the key constructs from the following eight previously developed theories: Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), C-TAM-TPB, Model of PC utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). It posits that there are three principal direct determinants of intentions to use information technology: performance expectancy, effort expectancy, and social influence. Also, facilitating conditions and intentions are direct determinants of actual usage. Further, the direct relationships between those determinants and intentions or usage are moderated by up to four variables: gender, age, experience and voluntariness of use. UTAUT is selected for this study because it is comprehensive and has greater explanatory power than any of the models from which it was derived, accounting for up to 70% of the variance in intentions to use IT in the scenarios in which it was first tested (Venkatesh et al. 2003). Also, this theory is robust as it has been validated within various online settings e.g. Instant Messaging for online social support (Lin and Anol, 2008) and online banking (Yeow et al. 2008).

With regard to modifying and extending UTAUT to predict intention to use SNSs in applying for jobs, consideration is being given to a feature, referred to as "inside connections" by Linkedin.com. Inside connections to target employers are described as all first, second and third degree connections in the job seeker's social network who work

with that employer. In Linkedin.com and other web sites offering a similar feature (e.g. Xing.com and Jobster.com), a job seeker's inside connections are identified when he/she selects an advertized position of interest to him/her. It is important to ascertain whether or not the knowledge of the existence of such an "inside connections" feature has an impact on job seekers' decisions to use SNSs in applying for jobs.

The third major consideration in the research model relates to the tremendous uncertainties in the type and extent of personal information recruiters and potential employers are gathering from SNSs, as well as, the impact of such information on job candidate selection decisions. Prior studies on online consumer behavior have investigated the effects of similar uncertainties (e.g. Pavlou, 2003; Malhotra et al. 2004; Son and Kim, 2008). Drawing from the findings of these studies, three important drivers in determining job seekers' job application intentions in the context of SNSs are included in the research model: (i) information privacy concerns; (ii) trusting beliefs or perceptions of justice in the job candidate selection process; and (iii) perceived risks in terms of the uncertainty and adverse consequences of using SNSs to apply for a job.

5.4 Research Model and Hypotheses

The research model derived from the theoretical foundation explained earlier is displayed in Figure 5.1. Justification for the hypotheses included in this model is presented in the following subsections.

5.4.1 Intended Use of SNSs to Apply for Job

The behavioral intention, "likelihood of using SNSs to apply for jobs," and not the actual behavioral outcome of applying for a job using SNSs, is the dependent variable in the

theoretical model investigated in this study. Behavioral intention has been used as the dependent variable by researchers who have investigated the use of the Internet to conduct various transactions (e.g. Jarvenpaa and Tractinsky, 1999; Gefen et al. 2003; Dinev and Hart, 2006). These researchers assumed, based on the theory of planned behavior Ajzen (1991), that behavioral intention predicts actual behavior. Further, a number of prior IS studies (e.g. Davis et al. 1989; Venkatesh et al. 2003) have demonstrated the link between behavioral intention and actual use of technology in a variety of contexts.

Based on the previously noted studies, it is presumed that job seekers' intentions will be a good indicator of their actual use of SNSs to apply for jobs, which is the outcome of interest to the SNS offering the recruiting services and the recruiters using these services. The number of applications received from a recruitment source and the cost associated with using that source are two of the indicators or metrics typically used by recruiters to determine return on investment or ROI (Lee, 2007). If applicants are reluctant to use SNSs to apply for jobs or if they prefer to use other websites, then the ROI for SNS will be comparatively lower than that of other sources including other web sites. This might result in a reduction in the number of recruiters willing to use the recruiting services of SNSs, and ultimately to a negative impact on the revenue generated by these sites.

Drawing from the conceptualizing of the intended use of business-to-consumer (B2C) web sites by Gefen et al. (2003), two aspects of applying for job using SNSs are considered in this study: (1) the actual use of tools provided within SNSs in order to apply (e.g. an application form as done in Linkedin and email links as in the case of

Xing); and (2) the sharing personal information with recruiters and potential employers by establishing connections with them.
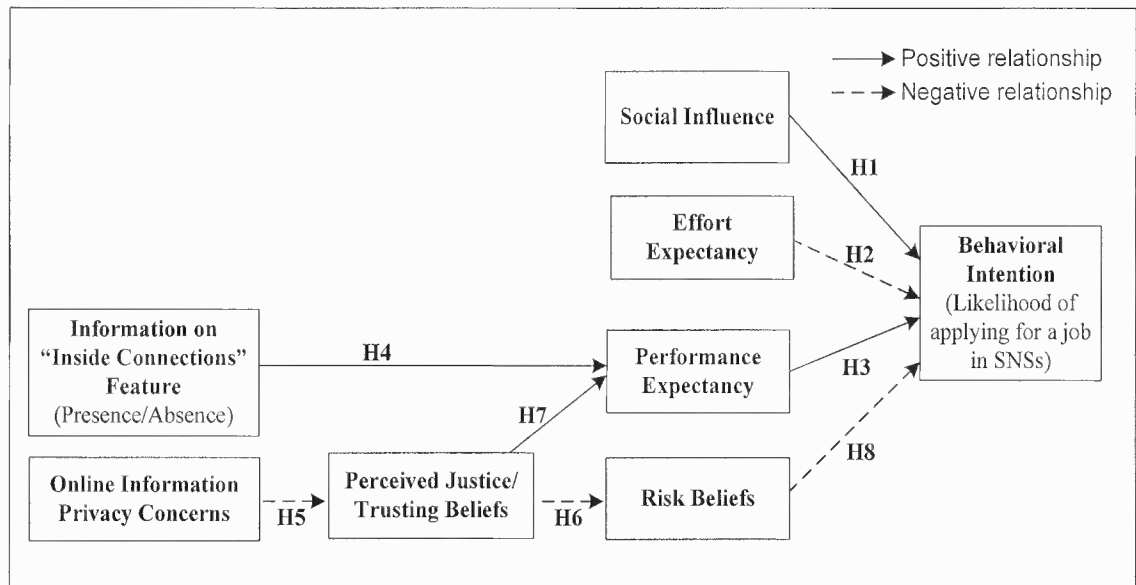
Figure 5.1 Theoretical model for predicting likelihood of applying for jobs in SNSs.

5.4.2 UTAUT Determinants

UTAUT, as explained in Chapter 4, identifies three primary direct predictors of intention to use IT: social influence, effort expectancy and performance expectancy. In social psychology, two types of social influences are identified: informational influence, which relates to the acceptance of information obtained from others as evidence about reality, and normative influence, which pertains to an individual's conformance to the expectations of others to obtain a reward or to avoid a punishment (Deutsch and Gerard, 1955). It is not unreasonable to expect that the current hype in the news about the benefits of SNSs and the many anecdotes of successes in finding jobs through online networks posted on the Web are likely to have both informational and normative influences on job seekers' decisions with respect to using SNSs.

The definition of effort expectancy in the context of this study extends beyond the one used in Venkatesh et al. (2003). It does not only refer to job seekers' perceptions of the degree of ease or difficulty associated with the use of the SNS technology. Job seekers are often advised to use strategies such as the following in increasing their marketability and visibility in SNSs: (1) include keywords that describe their expertise in their profiles, (2) join industry-specific groups, (3) contribute to discussion forums and blogs, and (4) make contacts judiciously (Goodman, 2008). Thus effort expectancy also takes into consideration job seekers' opinions of the time and mental capacity required, as well as, the ease or difficulty of executing these strategies.

In UTAUT, performance expectancy is defined as "the degree to which an individual believes that using the system will help him or her to attain gains in job performance" (Venkatesh et al. 2003, p. 447). In the context of the current study, as in UTAUT, performance expectancy is based on concepts such as perceived usefulness and outcome expectancy. However, these concepts are being examined using a lens similar to that used by studies conducted in online settings. For example, Gefen et al. (2003, p. 84) define perceived usefulness as "a measure of an individual's subjective assessment of the utility offered by the new IT in a specific task-related context." In the online recruitment context, Williamson et al. (2003) define outcome expectancy as an individual's judgment or belief that a desired outcome will result from a specific behavior, such as, applying for a job. Adapting the previously noted definitions of perceived usefulness and outcome expectancy to the context of this study, performance expectancy is defined as the subjective assessment of the utility of SNSs in helping the job seeker improve his/her chances of being selected to fill an advertized job vacancy or

as the job seeker's judgment or belief that using SNSs to apply for an advertized job will improve his/her chances of securing that job. Applying the arguments made in UTAUT and its informing theories (e.g. TAM and IDT), the following are hypothesized:

H1: Social influence is positively associated with the likelihood of using SNSs to apply for jobs.

H2: Effort expectancy is negatively associated with the likelihood of using SNSs to apply for jobs.

H3: Performance expectancy is positively associated with the likelihood of using SNSs to apply for jobs.

5.4.3 Information on "Inside Connections" Feature

The effects of providing information about the "inside connections" feature, described earlier, were tested in this study. A listing of "inside connections" to a target employer may assist job seekers in identifying suitable individuals who can serve as referees or can provide more specific unpublicized details about the advertised job. Unpublicized details may include information about the organization's culture; the attitude of employees including the supervisor of the vacant position; and, the attributes of job candidates that the potential employer values the most Granovetter (1995). Undoubtedly, job seekers who can access influential referees as well as information that may help them in preparing for the job screening process are likely to have or to perceive that they have an edge over competitors with similar credentials in securing an advertized job. It is reasonable to believe, therefore, that the provision of information about the "inside connections" capability will influence job seekers in developing a more positive assessment of the technology with such capability with respect to its utility in securing a job applied for using this technology. It is therefore hypothesized that:

H4: Job seekers who are provided with information about the "inside connections" feature are likely to have greater performance expectancies than those who are not provided with this information.

5.4.4 Information Privacy Concerns, Perceived Justice/Trusting Beliefs and Risk Beliefs

Information privacy concern is an important consideration in social networking sites because of the extensive amount of personal details that are posted by the individuals themselves or by third parties (Gross and Acquisti, 2005; Rosenblum, 2007; Dwyer, 2008). One can safely argue that recruiters who use SNSs to advertize job vacancies are likely to examine the content of SNS pages of the individuals who are being considered in the job candidate selection process. For instance, during the selection process, recruiters might review the details of applicants' profiles, peruse through their social networks and examine closely the groups that they choose to join.

There is uncertainty as to whether the information gathered by recruiters might add to or detract from an applicant's eligibility for the job for which he or she has applied. More specifically, information about the current employees within the employing organization who are in an applicant's social network might strengthen or weaken his/her chances at securing the job. Also, information about the values of the professional and social groups, with which the applicant is associated, may help recruiters in determining the potential fit or misfit between the applicant and the organization. Further, the number of connections the applicant has within a competing organization might be considered favorably or unfavorably in a selection process.

Unlike criteria such as academic qualifications and extent of experience in a particular field or position, it is unclear how information discovered online might affect a

candidate's chances of landing a job of interest to him/her. The likelihood that personal information about job candidates will be gathered from SNSs, coupled with the uncertainty of exactly which information will be used in the candidate selection decision making process, is likely to evoke varied levels of concern with regard to personal information privacy.

In recruitment literature, (e.g. Gilliland, 1993; Hausknecht et al. 2004), perceived justice/fairness in the job candidate selection process is typically described as the belief in the satisfaction or violation of rules that pertain to the following.

1. Distributive justice: whether the hiring decision made about applicants, favorable or not, is the one that they deserve or they perceive that they deserve.

2. Procedural justice: the formal characteristics of the selection procedure (e.g. face validity, which relates to applicants' perception of the relevance of the content of the selection procedure to the content of the job);

3. Interpersonal (interactional) justice: enactment of procedures (e.g. consistency as well as sensitivity and respect shown to individuals during evaluation);

4. Informational justice: this includes the offering of an explanation for the decision made.

In this study, the focus is specifically on procedural justice in the use of online information by potential employers/recruiters that advertise job vacancies on SNSs in the candidate selection decision-making process. It is presumed that individuals who believe that rules of the job candidate selection processes will not be violated are more likely to make themselves vulnerable to these processes and to the actions of decision-makers in these processes. Thus, it is argued that the concept of perceived justice is analogous to the notion of trust defined by Mayer et al. (1995, p. 712) as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will

perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party."

In the Hausknecht et al. (2004) model for explaining applicants' reactions to employment selection systems, it is suggested that perceived procedural characteristics can influence perceptions about justice of the candidate selection process. One of the procedural characteristics considered in Hausknecht et al. (2004) model is invasion of privacy, which is likely to arouse information privacy concerns. Bauer et al. (2006) found that information privacy concerns influenced job applicants' reactions to online screening procedures. More specifically, applicants with greater concerns for personal information privacy reported lower perceptions of procedural justice of the online screening than applicants with lesser concerns. The focus of Bauer et al.'s (2006) study, however, was on the aspect of privacy that pertained to perceived security of information provided during online testing and the perceptions of fairness of the testing procedure. Based on (a) the analogies between trusting beliefs and perceived justice in the job candidate selection process, (b) Hausknecht et al.'s (2004) theoretical framework, and (c) the findings of related studies conducted in an online context (Bauer et al. 2006), the following is hypothesized.

> **H5:** There is a negative relationship between information privacy concerns and trusting beliefs (or perceived justice of the candidate selection process employed by recruiters/potential employers using SNSs).

Consumer researchers often define risk in terms of "consumer's perception of the uncertainty and adverse consequences of buying a product or service" (Dowling and Staelin, 1994 p. 119). Adapting this definition to suit our context, "job seeker's risk beliefs" is conceptualized as their perceptions of the uncertainty and adverse consequences of utilizing the recruitment services offered by SNSs. Specifically

consideration is given to uncertainty about whether the information gathered by recruiters might add to or detract from an applicant's eligibility for the job for which he/she has applied, and the potential adverse consequences such as loss of job opportunities. It has been demonstrated in previous studies on Internet users' behavioral intentions (e.g. Jarvenpaa and Tractinsky, 1999 and Malhotra et al. 2004) that trusting beliefs have a negative effect on risk beliefs. Based on these findings and the parallels drawn earlier between perceived justice and trust, the following is posited:

> **H6:** There is a negative relationship between trusting beliefs/perceived justice and risk beliefs.

5.4.5 Trusting Beliefs, Effort Expectancy and Performance Expectancy

Trust in e-commerce is described by Gefen et al. (2003) as important because it helps to "reduce the social complexity a consumer faces in e-commerce by allowing the consumer to subjectively rule out undesirable, yet possible behavior of e-vendors" (p. 60). Social complexity relates to the difficulty in trying to understand "what, when, why and how others behave" (p. 55). It is generally expected that job seekers, like other e-commerce consumers, will attempt to reduce the social complexity inherent to their interaction with recruiters/potential employers using SNSs by dismissing the possibility that the rules of the candidate selection process will be violated and becoming more optimistic about the outcome expected from using these sites in applying for jobs. Hence, it is posited that:

> **H7:** There is a positive relationship between trusting beliefs and performance expectancies.

5.4.6 Risk Beliefs and Behavioral Intention

Risk beliefs have been found to have a negative effect on Internet users' behavioral intentions to reveal personal information (Jarvenpaa and Tractinsky, 1999; Malhotra et al., 2004). In the context of this study, another possible step that can be taken by job seekers in order to preserve their privacy is to avoid using the medium that might lead recruiters/ potential employers to the discovery of a significant amount of personal information. Therefore, it is proposed that:

> **H8:** There is a negative relationship between risk beliefs and the likelihood of using SNSs to apply for a job.

5.5 Secondary Research Question and Factors to be Explored

The second research question RQ2 investigated in this study is: What factors explain preference for use of SNSs over job boards (or vice versa) for job application purposes? An exploratory approach was used in investigating this research question and the following factors were considered:

- demographics: age, gender, and education

- occupation and employment status

- membership in and experience with SNSs

- past privacy invasion experience

- exposure to use/misuse of online information from the media

- beliefs about recruiters and employers online behavior

- past tendencies to falsify information requested online

- likelihood to change personal information on SNSs

5.6 Chapter Summary

The research model presented in this chapter takes into consideration salient factors that are likely to predict the dependent variable "intention to apply for jobs using SNSs." This model is anchored on the Unified Theory of Acceptance and Use of Technology (UTAUT), and thus includes variables such as performance expectancy, effort expectancy and social influence. Other factors hypothesized as having an influence on job seekers' behavioral intention to apply for jobs using SNSs include privacy concerns, trust, perceived risks, and the provision of information about the "inside connections" feature, which illustrates social network connections between job seekers and potential employers.

In addition to a description of the research model tested in this study, this chapter includes a list of variables that are explored in determining factors that affect preference for the use of job boards of SNSs (or vice versa) in applying for a job. The methodology used in answering the two research questions presented in this chapter is discussed in the next chapter.

CHAPTER 6

RESEARCH METHODOLOGY

6.1 Introduction

This chapter describes various aspects of the online survey methodology that was used to investigate the research questions presented in Chapter 5. An outline of the process of constructing and refining the survey questionnaire is presented followed by a description of the scales used to measure the variables relevant to this investigation and then by an account of the method used in selecting the survey sample. The techniques that were used to analyze the data collected are then discussed.

6.2 Overall Approach

The general approach used for this study was an online survey, which was approved by the NJIT Institutional Review Board (refer to Appendix B for the Notice of Approval). At the time of the Institutional Review Board's approval, the study was titled "Online Recruitment in Social Networking Sites: An Understanding of Job Seekers' Perspective." The survey questionnaire was administered using the online application SurveyMonkey™. The target population for the survey was job seekers who were actively searching for a job or passive candidates who would accept a job if a desirable one were offered to them.

This study incorporated a two condition between-subjects experiment in its design. Subjects were randomly directed to one of two survey questionnaires. One questionnaire included a description of the "inside connections feature" provided within

some SNSs (e.g. Linkedin.com and Xing.com) and the other questionnaire did not have this description.

6.3 Questionnaire Design

6.3.1 Process of Design and Refinement

The survey questionnaire for this study was developed through a process involving three main phases. In the first phase, the measures for the constructs in the research model and for other variables of interest such as past Internet experiences were developed from scratch or by adapting scales from prior studies. In this phase, the measures underwent several iterations of reviews and revisions with the assistance of experts in Information Systems research. The following issues were addressed in formulating the items (statements or questions) of the measures (described in Section 6.3.2) and in constructing the overall questionnaire.

- Face validity of items (verifying that items appear to measure what they are supposed to measure).

- Ordering of the various sections that constituted the questionnaire and the items within each section.

- Clarification of questions and instructions. This involved eliminating biases in questions, reducing the complexity and length of the questions and statements if necessary, and ensuring that there is a good mix of positive and negative items in some of the scales.

In the second phase in the survey questionnaire refinement process, a pilot study was conducted primarily to test the psychometric properties of the scales included in the survey questionnaire and to obtain feedback from some participants on the design of the study. More details on the specific objectives of this pilot study and the results obtained are discussed in Chapter 7.

The third phase involved the refinement and redesign of the survey questionnaire based on observations made in the pilot study as well as the result obtained from an analysis of the data collected. The decisions made during this phase are discussed in Section 7.8.

6.3.2 Measures

This sub-section describes the scales used to measure the variables relevant to the research questions. These scales were the end products of the questionnaire design and refinement process described in the previous sub-section. Refer to the questionnaire in Appendix C for the exact wording of the items in each instrument.

With the exception of the variable "presence/absence of information on the inside connections feature", the instrument for each construct in the research model comprised multiple items that were measured using seven-point semantic differential scales anchored mainly on 'strongly disagree' (represented by 1) and 'strongly agree' (represented by 7). For two of the items that assessed 'likelihood of using SNSs to apply for jobs,' the extreme points in the semantic differential scale were 'Very unlikely' (represented by 1) and 'Very likely' (represented by 7). The experimental condition to which the respondents were directed determined whether they were assigned a value of one or zero for the variable "information on the inside connections feature." A value of one meant that the respondent was directed to the questionnaire that included "information on the inside connections feature" and a zero meant that the respondent was directed to the questionnaire that excluded this information.

Variables Relevant to Research Model and Research Question RQ1

The scales for the UTAUT variables were developed by revisiting the original constructs from which they were derived and selecting the items used to measure these constructs that could be easily adapted to the context of this current study. Specifically, for social influence, items were selected from scales previously used to measure social norms (Ajzen, 1991; Davis et al. 1989); social factors (Thompson et al. 1991) and image (Moore and Benbasat, 1991). Included in the scale for effort expectancy, were adaptations of some items originally used to measure perceived ease of use (Davis et al. 1989). The effort and the time needed to improve the job seeker's marketability were also factored into the effort expectancy measure. For performance expectancy, four items were adapted from the UTAUT scale. The other items focused on respondents' perceptions of outcome expectancy in general, and also with respect to specific functions that SNS users would typically perform while using these sites. These functions include updating their profiles and status; blogging, instant messaging and contributing to discussion boards; connecting to other users; and sharing information and files.

The research model of this study focused specifically on the collection dimension of Smith et al.'s (1996) conceptualization of information privacy concerns. Consequently, Malhotra et al.'s (2004) version of the Smith et al.'s (1996) measure of privacy concerns relating to collection of personal information was further adapted to suit the context of this study. Essentially, the term 'online companies' in the items used by Malhotra et al. (2004) was replaced with 'recruiters and potential employers practicing online recruitment.'

The perceived justice/trusting beliefs and risk beliefs measures were also modifications of the ones used by Malhotra et al. (2004). For the perceived justice/trusting beliefs scale, three of the items from Malhotra et al.'s (2004) trusting beliefs scale were contextualized in order to be more relevant to the focus of this study. The following two of the items in Malhotra et al.'s (2004, p.352) scale were not adapted to this study: "online companies are in general predictable and consistent regarding the usage of (the information);" and "online companies are always honest with customers when it comes to using (the information) that I would provide." These items were not used because, in the early stages of the questionnaire design process, it was determined that: (a) the latter of the two items was very similar in meaning to another item in the scale that included the phrase 'tell the truth and fulfill promises,' and (b) being predictable and consistent does not necessarily imply trustworthiness. Four new items, besides those adapted from Malhotra et al. (2004), were incorporated into the perceived justice/trusting beliefs scale. One item to address the use of only job specific information in the candidate evaluation process and three items to assess perceptions of the fair evaluation of three specific types of information that can be collected from SNSs e.g. information included in profiles or posted by others; blogs and contributions to discussion forums; and connections and contacts. With regard to risk beliefs, the Malhotra et al. (2004) scale was modified in order to make very specific reference to the possible loss of job opportunities, uncertainty in the job candidate selection process, and unexpected problems that might be associated with providing recruiters and potential employers with access to information on SNSs.

The three item scale for measuring behavioral intention was based partially on the two-item scale for measuring intended use of a business-to-consumer (B2C) web site in Gefen et al. (2003). According to Gefen et al. (2003) purchasing from an e-vendor is not a monolithic concept. It involves different activities including providing the e-vendor with the information it needs to provide good service. Thus the items "I would use my credit card to purchase from the online vendor" and "1 am very likely to provide the online vendor with the information it needs to better serve my needs" were included in Gefen et al.'s (2003, p.84) scale for intended use. Using a similar rationale, the following comparable items, adapted to the context of this study, were used to measure intended use of SNSs to apply for job: "How likely are you to apply for a job through social networking sites?" and "How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates?" The third item asked respondents, in general terms, whether they thought it was a bad idea to apply for jobs using SNSs.

Variables specific to research question RQ2

A single seven point semantic differential scale anchored on 'strongly disagree' and 'strongly agree' measured subjects' preference for job boards such as Monster.com and CareerBuilder over SNSs in applying for a job (or vice versa). A revised version of the widely used "global information privacy concerns" scale, which was adopted from Malhotra et al. (2004), was included in the questionnaire in order to determine its effect on preference for job boards over SNSs (or vice versa). The measures of other possible predictors (e.g. demographics and personal experiences) of preference for job boards over SNSs (or vice versa) are discussed in the covariate subsection, which follows.

Covariates

Measures of the following factors that could affect job seekers' perceptions and behavior

in the context of SNSs were also included in the questionnaire.

- Demographic characteristics - age, gender, ethnicity, education, occupation and employment status

- Personal experiences (as suggested in Malhotra et al. 2004) – frequency with which requested information was falsified by the respondent; frequency with which respondent had been a victim of invasion of online privacy; and extent of exposure to media reports on Internet privacy issues

- Expertise with respect to Internet use

- Experience specific to use of SNS: this includes membership in SNSs, estimates of the number of individuals with whom they are connected, and frequency of use of these sites

- Recent job search behavior, which was adapted from (Blau, 1994). Questions specific to more recent online avenues and methods of job search and job application were considered (e.g. searching for job vacancies and entering résumés on job boards)

- Estimates of "inside connections" needed to boost chances of securing a job: Subjects assigned to the condition in which information on the "inside connections" feature is displayed, were asked to estimate the minimum number of friends (or direct connections) within a company of interest to them that they thought would boost their chances of getting a job. These subjects were also asked to provide a similar estimate for friends of friends (or second degree connections) as described in Chapter 2.

Manipulation Checks

Two items were included in the questionnaire design as manipulation checks. One item determined whether, for the two experimental conditions, there was a noticeable difference in the subjects' perceptions of the extent of information provided on the "inside connections" feature. The other item assessed the possible effect of the provision of that information on job seekers' understanding of how the "inside connections" could be used in a job search.

Marker-Variables

Finally, since only one method (an online survey administered to subjects at a single point in time) was employed in collecting the data for this study, the Marker-Variable Technique, as described in Lindell and Whitney (2001) and Malhotra et al. (2006), was used to assess common method variance (CMV). This technique requires that the questionnaire include a measure for a marker variable that is not theoretically related to any of the variables in the research model. If the variables in the model are not significantly correlated with this marker variable, then CMV is proven to be minimal. Two marker variables were included in the questionnaire: the frequency with which respondents read novels and the frequency with which they engage in physical fitness exercises.

6.4 Survey Sample Selection

6.4.1 Sampling Frame and Subject Recruitment

Survey participants were recruited with the assistance of the Division of Career Development Services (CDS) at the New Jersey Institute of Technology (NJIT) and the Career Services Division (CSD) at Rutgers University (both the New Brunswick and the Newark Campuses). These divisions manage separate databases comprising data on alumni and current students who have registered to utilize their online career services e.g. uploading of résumés for submission to interested employers; searching job listings; and receiving notification of on-campus recruitment and job fairs. The application used by the CSDs of both Rutgers campuses to help users of their career services manage their online accounts is called CareerKnight.

The sampling frame for this study consisted of: (a) all alumni registered with the NJIT career services database; (b) current students and alumni registered with Rutgers New Brunswick database; (c) 2009 graduates registered with the Rutgers Newark database. This was different from the initially envisioned sampling frame, which should have comprised only alumni registered with all three databases. This difference, explained in more detail later, resulted from the researcher having very little control over the individuals invited to participate in the study.

Individuals in the sampling frame were invited to participate in this study by sending to them email messages which included a hyperlink that directed them randomly to one of two online surveys: one survey included information on the "inside connections" feature and the other did not. In adherence to the information privacy policy of the universities, the email addresses of the individuals in the sampling frame

were not provided to the researcher. Rather, the email messages were sent out by employees of NJIT CDS and Rutgers CSD to the users of their respective online career services. The researcher was not directly responsible for the selection of the individuals to whom these messages were sent, and consequently, the following slightly different approaches were used:

- NJIT CDS emailed an initial invitation to participate in this study, followed by two reminders to approximately 1700 alumni who were registered users of its online career services.

- Rutgers New Brunswick CSD emailed an initial invitation and one reminder to an unknown number of 2009 graduates who were users of CareerKnight. In a final effort to recruit more subjects, Rutgers New Brunswick sent an email to all 8659 registered users of CareerKnight including current students. Due to constraints on the number of email messages soliciting assistance that are allowed to be sent to Rutgers' alumni, it was not possible to send further reminders to individuals who may have received an invitation for the first time through the final effort.

- Rutgers Newark CSD emailed the invitation only once to approximately 400 alumni from the graduated class of 2009. Twenty three (23) usable responses were obtained from this single attempt at recruiting survey participants by Rutgers. A decision was made to exclude these responses from the data analysis because they were too few in number to perform some of the analyses done individually for each institution e.g. exploratory factor analysis. Also, comparisons between these few responses and the considerably larger sets of responses obtained from the two other institutions would not have been meaningful.

6.4.2 Assignment to Experimental Conditions

The value of the variable "absence/presence of information on the inside connections feature" was experimentally manipulated, as noted earlier, by creating two separate online surveys. One survey represented the condition in which information on the inside connections feature was present and the other represented the condition in which such information was absent. The assignment of the survey participants to one of the two

conditions was done randomly. The invitations and reminders sent to potential respondents by the CDS departments of the participating universities included a hyperlink that automatically directed interested potential participants to one of the two surveys.

6.4.3 Anonymity and Incentives

Individuals invited to participate in this study were offered, as an incentive, an opportunity to win gift cards of various values through a raffle. These individuals also had the option of participating anonymously and not being included in the raffle. However, if they wished to be entered in the raffle, they were required to provide their email addresses at the end of the survey. The raffle prizes and the option of anonymity were explained in the consent form (shown in Appendix B), which the participants were required to read before completing the questionnaire.

A separate raffle was conducted for respondents recruited from the NJIT database and for those recruited from Rutgers New Brunswick and Newark CareerKnight database combined. The prizes offered in each raffle varied as shown in Table 6.1. Winners were granted their choice of gift cards from either Amazon.com or American Express.

Table 6.1 Raffle Prizes Awarded as Incentives for Participation in Study

Source of Participants	Rank	Number of winners	Prizes
NJIT's Online Recruitment Services Database	1st	1	$100.00 gift card
	2nd	2	$50.00 gift card each
	3rd	3	$25.00 gift card each
Rutgers's (New Brunswick and Newark) CareerKnight Database	1st	1	$100.00 gift card
	2nd	1	$50.00 gift card

6.5 Response Rates

The responses rates from the three sources (the online career services databases of NJIT, Rutgers New Brunswick and Rutgers Newark) in the sampling frame were very different, as expected, in the light of the dissimilar approaches used to recruit survey participants. One hundred and thirty one (131) usable responses were obtained from participants recruited from the NJIT online career services database. This represented an estimated response rate of 7.70%, (131 out of approximately 1700). Response rates of 5.75% (23 out of approximately 400) and 4.15% (359 out of 8659) were obtained for Rutgers Newark and Rutgers New Brunswick, respectively. These response rates were all lower than expected. However, the response rate being lower for both Rutgers campuses than for NJIT was not surprising because the majority of Rutgers affiliates were sent a single invitation with no reminder to participate in the study. Moreover, as explained in Pitkow and Kehoe (1996) and Pavlou (2003), solicitation emails are often ignored or erased by individuals, and many email filters often treat mass email as spam or as low priority mail. Thus, it is generally difficult to obtain high response rates when subjects are recruited using this method. In a comparative study of on-line versus mail surveys by Green et al. (2001), Internet methodology was found to produced a lower response rate than a postal methodology.

In view of the low response rate, non responses bias was assessed by comparing the gender composition of the sample with that of recent graduates from each institution. Also, occupational groupings of the sample were examined in order to determine whether they were comparable to those expected for graduates of the institutions.

New Jersey Commission on Higher Education (2008) reports on its web site (http://www.state.nj.us/highereducation/IP2008/) that, in the year 2007, 76.2% of the

graduates from NJIT were male and 23.8% were female. For Rutgers, however, 45.2% of the graduates to whom degrees were conferred were male and 54.8% were female. As indicated in Section 8.2 of Chapter 8, the respondents from NJIT were 61.8% male and 38.2% female; and those from Rutgers New Brunswick were 38.4% male and 61.6% female. Considering that "females are more likely than males to volunteer for research in general" (Rosenthal and Rosnow, 1991, p. 226), it is reasonable to conclude that the sample of respondents, in terms of gender, reflected the composition of recent graduates from the institutions.

With regard to occupation, Rutgers confers degrees in a broader range of fields than the technology-focused NJIT. Degrees in fields such as Education, Law, Visual and Performing Arts are conferred by Rutgers and not by NJIT. On the other hand, the proportion of students graduating from NJIT with degrees in Architecture, Computer Science and Engineering is considerably higher for NJIT (New Jersey Commission on Higher Education, 2008). As noted in Section 8.3 of Chapter 8, Architecture and Engineering (38.6%) followed by Computer and Mathematics (23.6%) were the most popular occupational groups for respondents recruited from the NJIT career services database. However, for Rutgers, the two most popular occupational groups were Business and Financial Operations (19.8%) and Education, Training, and Library (10.20%). Therefore, based on a cursory inspection, sample of respondents also appeared to reflect, in terms of field of occupation, the population of recent graduates from each institution.

6.6 Data Analysis

The analysis of data collected in this study was guided by literature on quantitative methods in social sciences research (e.g. Carmines and Zeller, 1979; Rosenthal and Rosnow, 1991; Hair et al. 2006; Field, 2009; Garson, 2009) and by prior survey-based research on users' attitudes and behavior in SNSs (e.g. Dwyer, 2008). The following software applications were employed in this data analysis: MS Excel, SAS (Statistical Analysis System), SPSS 16.0 (Statistical Package for the Social Sciences), and SmartPLS™ 2.0 (Ringle et al. 2005). This analysis involved a set of procedures (described below), which started with the screening of raw data downloaded from Survey Monkey™ —the online tool used to administer the survey. As noted earlier, the responses collected from Rutgers Newark were not used in the data analysis because they were too few in number.

6.6.1 Initial Screening of Data

Raw data from SurveyMonkey™ were downloaded into an MS Excel spreadsheet. These data were scrutinized with the objective of determining whether the same individual completed the survey multiple times. The possibility of individuals completing the survey questionnaire multiple times was first investigated by examining duplicates in IP (Internet Protocol) addresses corresponding to the location from which the survey was completed. SurveyMonkey provides IP address information for each respondent.

Individuals on the same network with shared Internet access could have the same IP address recorded in their responses. Thus responses were not automatically deleted because they were from the same IP addresses. Rather, these responses were inspected

closely for degree of similarity. However, no response was deleted based on this inspection because the responses appeared to be sufficiently differently.

Email addresses provided for the purposes of being entered in the raffle were also checked for duplication. Respondents would have had to complete the survey before entering their email addresses for the raffle. Thus, duplication of an email address was likely to imply multiple responses from the participant who provided that email address. The IP address and time of completion of information needed for the raffle for all duplicated email addresses were crossed checked against the IP address and time of completion for all responses to the actual survey in order to determine which responses corresponded with the duplicate email addresses. Based on this cross checking six (6) responses were deleted from the NJIT dataset and four (4) from the Rutgers NB dataset.

6.6.2 Missing Data

The survey questionnaire, as indicated in the consent form, required approximately 20-25 minutes for completion. It was therefore not surprising that a relatively large proportion of initial volunteers chose to exit the survey after reading the consent form. For the most part, however, missing data from most of the participants who chose to continue beyond the consent form were considered to be ignorable. For instance, if a respondent indicated that he/she was not a member of a SNS and chose to exit the survey at that point, then that type of missing data was considered ignorable. Also, if after answering the question on employment status positioned near the start of the questionnaire, respondents exited, missing data from these respondents may also be treated as ignorable. It was assumed that respondents decided that they may not been active job seekers and therefore good

candidates for the survey. Finally, with respect to ignorable missing data, the following rule of thumb provided in Hair et al. (2006) was applied: participants who omitted less than 10% of the questions were included in most of the analyses. In the end, approximately, 58.2% (131 out of 225) of the initial volunteers from the NJIT career services database and 61.2% (359 out of 587) from the Rutgers New Brunswick database provided usable data responses. However, except for the possibility of volunteers not completing the survey for the reasons noted earlier, there was no other noticeable pattern in missing data (e.g. omission of a specific set of questions). Appendix D presents the output from a missing data analysis performed using SPSS.

6.6.3 Univariate Analyses

Univariate analyses were performed to understand the nature of each measured variable. Frequency distributions were examined for all variables. The mean, standard deviation, skewness and kurtosis were computed for variables measured using semantic differential scales. These analyses were used to describe the survey sample based on their responses to the measured variables and to determine, based on the characteristics of responses, the appropriate statistical test that should be applied in future analyses. The main characteristic of interest was the shape of the distribution of responses for the variables measured using semantic differential scales and how significantly it deviated from the normal curve. As noted by Hair et al. (2006), normality of distribution is the most important assumption to be established for multivariate analyses such as factor analysis, which was used to assess the reliability and validity of the measurement scales. The main

technique used in determining normality of distributions was the computation of z values for skewness and kurtosis. These values are shown in Appendix E.

Other factors of interest, determined through the univariate analyses performed, included the possible differences between the characteristics of participants recruited from the NJIT career services database and the Rutgers NB database. The significant differences realized (refer to Chapter 8) suggested that university affiliation had to be taken into consideration in subsequent analyses.

6.6.4 Assessment of Reliability and Validity

In the assessment of the validity and reliability of the scales measuring the constructs in the research model, an approach often used by researchers was adopted. As explained in Hair et al. (2006, p. 796), exploratory factor analysis (EFA) is typically conducted on more than one sample in order to derive a measurement model to confirm using confirmatory factor analysis. In this study, EFA was performed with the subsample recruited from each of the career services databases managed by the two institutions included in the data analysis: NJIT and Rutgers NB. Measures for the independent variables and those for the dependent variable were examined separately with the exploratory factor analysis. When a measurement model that demonstrated consistency for both subsamples was derived, confirmatory factor analysis using partial least squares (PLS) was conducted to confirm this model. PLS makes no assumption about the distribution of measured variables (Chin, 1998). Since many of the measured variables in this study had distributions that showed significant departure from the normal curve, PLS was selected to assess the measurement and the structural components of the research

model. The PLS algorithm was performed on the pooled dataset comprising responses from both subsamples.

It was necessary to run several iterations of the PLS algorithm because, as explained in Chapter 8, the measurement model derived based on EFA did not adequately fit the data. A number of problematic measured variables (items) had to be excluded from the scales of some constructs in order to establish a final measurement model that satisfied all aspects of construct validity. This final measurement model was closely evaluated. As detailed in Chapter 8, an alternative research model was devised for testing based on this evaluation.

6.6.5 Bivariate and Multivariate Analyses

The structural component of the alternative research model noted in the previous section was assessed using PLS to obtain path coefficients and the Bootstrap technique to determine the significance of these coefficients. The Bootstrap technique is typically used with PLS to determine significance of path coefficients because PLS makes no assumption about the distribution of measured variables. Thus, conclusions should not be drawn about the significance of path confidents derived from the PLS algorithm simply based on their values. The Bootstrap method used in this study tested the alternative model using 500 samples of size 100 selected from the entire dataset. The mean of the 500 coefficients for each path obtained from these iterations of the model testing and the t-value corresponding with this mean were generated. Based on these t-values, the significance of each path in the alternative research model was determined. Also,

conclusions were drawn regarding whether or not the hypothesis corresponding to each path was supported.

Bivariate analyses used in this study were performed in order to explore the secondary research of this study: What factors explain preference for use of SNSs over job boards (or vice versa) for job application purposes? Also, potential predictors of the variable "likelihood to use SNSs to apply for jobs" were also investigated using bivariate analyses. The variable "likelihood to use SNSs to apply for jobs" was an integral part of the initial research model. However, as explained in Chapter 8, it was excluded from the alternative model. Thus, bivariate analyses were used to explore possible predictors of this variable without taking into consideration the structure of relationships among these predictors.

The variables "likelihood to use SNSs to apply for jobs" and "preference for use of SNSs over job boards" did not have normal distributions. Hence, non-parametric tests (e.g. Mann Whitney U and Kruskal Wallis one way analysis of variance by ranks) were used, when appropriate, to determine associations between these variables and factors such as gender; age; employment status; occupation; membership and experience with SNSs; past privacy invasion experience; media exposure to use/misuse of online information; beliefs about recruiters and employers online behavior; past tendencies to falsify information requested online; and, likelihood to change personal information on SNSs. If any of the previously mentioned factors were measured with at least an ordinal scale, Spearman's correlations coefficient was used to investigate the possibility of a linear relationship.

6.7 Chapter Summary

The discussion in this chapter described, in detail, the methodology used in this investigation. The overall approach used was an online survey administered using the application SurveyMonkey™. The survey questionnaire was developed and refined using a series of steps including a pilot study, which is discussed in Chapter 7. Some of the scales used to measure the variables relevant to this study were adapted from previously used scales e.g. Malhotra et al.'s (2004) scales for trust and risk. Other scales were newly developed.

Subjects for this study were recruited from three career services databases managed individually by the Division of Career Development Services (CDS) at NJIT, and the Career Services Division (CSDs) from Rutgers New Brunswick and Newark Campuses. Responses from Rutgers Newark were excluded from the analyses because they were too few in number to perform some of the analyses done individually for each institution, e.g. exploratory factor analysis. Slightly different approaches were used in recruiting subjects and thus the disparity in response rates was not surprising. The response rates were generally low. However, a comparison of gender and occupation characteristics of the subsamples with those of recent graduates from each intuition suggests that the subsamples were representative of the population of recent graduates, who are the major constituents of the career services databases.

The analysis of the data collected in this study was performed using MS Excel, SPSS 16.0 and SmartPLS™ 2.0 (Ringle et al. 2005). The data were first scrutinized for the possibility of multiple responses from the same individual and to determine whether there was a non-ignorable pattern in missing data. Further examination of the data using univariate analysis was done primarily to (a) describe responses; (b) determine whether

there were significant differences between responses from the subsamples recruited from each of the two main sources; and (c) assess the closeness to normality of the distribution of values for each variable in the research model that was measured using a semantic differential scale..

Partial least squares (PLS) was used to assess the measurement model of the initial research model as well as that of the alternative research model, which had a better fit to the data collected. The PLS and Bootstrap algorithms were both used to assess the structural component of the alternative research model. Non-parametric bivariate analyses (e.g. Mann Whitney U, Kruskal Wallis one way analysis of variance by ranks and Spearman's rank correlation) were used to explore potential predictors of the variables: "likelihood to use SNSs to apply for jobs" and "preference for use of SNSs over job boards." A report on the pilot study conducted as part of the questionnaire refinement process is presented in Chapter 7. The results of the analyses performed in the main study are provided in Chapters 8 and 9.

CHAPTER 7

PILOT STUDY

7.1 Introduction

This chapter describes the methodology and results of a pilot study that was conducted

with the aim of achieving the following objectives:

- to determine the approximate length of time it would take respondents to complete the survey questionnaire;

- to identify ambiguous questions and instructions;

- to obtain suggestions for the omission of some of the questions in the pretest questionnaire and for the inclusion of new questions;

- to do a preliminary test of the validity and reliability of the scales designed to measure some of the constructs in the model; and

- to perform preliminary tests of hypotheses illustrated in the research model.

7.2 Pilot Study Sampling Technique and Participants

A convenience sampling technique was used to recruit subjects for the pilot study. An

announcement requesting the names and email addresses of volunteers who wished to

participate in the pilot study was made at three undergraduate NJIT classes (Women and

Technology, Computers and Society, and Information Technology Policy and Strategy),

and one graduate course (Information Systems Principles). Also, seven individuals from

the researcher's social network who were also NJIT students volunteered to participate.

Email messages were sent to a total of 65 volunteers. Thirty three of these

volunteers were directed to the online survey in which information about the "inside

connections" feature was given, and the other 32 were directed to the survey in which this

information was absent. Usable responses were obtained from 44 subjects: 25 of those assigned to the condition in which information on the "inside connections" feature was provided, and 19 of those assigned to the condition in which such information was absent. Frequency statistics from some of the demographical, employment status and SNS membership data collected from respondents are presented in Tables 7.1 to 7.4.

Most of the pilot study participants (over 63%) were male, which reflected the general student population of NJIT. A large majority (72.7%) were within the age group 21-30, as expected. Over 59% were employed or unemployed but actively seeking a job. Hence, the pilot study sample was a reasonable representation of active job seekers, the primary target population in the main study. With regard to experience with SNSs, over 77% of respondents were members of at least one SNS.

Table 7.1 Frequency Distribution of Pretest Sample by Gender

Gender/Condition	No Inside Connection Information		Inside Connection Information		Totals	
	Count	%	Count	%	Count	%
Female	9	47.4%	7	28.0%	16	36.4%
Male	10	52.6%	18	72.0%	28	63.6%
Total	19	100.0%	25	100.0%	44	100.0%

Table 7.2: Frequency Distribution of Pretest Sample by Age

Age/Condition	No Inside Connection Information		Inside Connection Information		Totals	
	Count	%	Count	%	Count	%
20 and Under	1	5.3%	4	16.0%	5	11.4%
21-30	15	78.9%	17	68.0%	32	72.7%
31-40	1	5.3%	1	4.0%	2	4.5%
41-50	1	5.3%	2	8.0%	3	6.8%
51-60	1	5.3%	1	4.0%	2	4.5%
Total	19	100.0%	25	100.0%	44	100.0%

Table 7.3 Frequency Distribution of Pretest Sample by Employment Status

Employment Status/Condition	No Inside Connection Information		Inside Connection Information		Totals	
	Count	%	Count	%	Count	%
Employed full-time or part-time and not actively seeking a new job	6	31.6%	4	16.0%	10	22.7%
Employed full-time or part-time and actively seeking a new job	3	15.8%	6	24.0%	9	20.5%
Unemployed and not actively seeking a new job	4	21.1%	4	16.0%	8	18.2%
Unemployed and actively seeking a new job	6	31.6%	11	44.0%	17	38.6%
Total	19	100.0%	25	100.0%	44	100.0%

Table 7.4 Frequency Distribution of Pretest Sample by SNS Membership

SNS Membership /Condition	No Inside Connection Information		Inside Connection Information		Totals	
	Count	%	Count	%	Count	%
Members	15	78.9%	19	76.0%	34	77.3%
Non-members	4	21.1%	6	24.0%	10	22.7%
Total	19	100.0%	25	100.0%	44	100.0%

7.3 Feedback from Pilot Study Participants

Five of the pilot study participants (one female and four male) agreed to be monitored individually by the researcher while completing the questionnaire. Three of these participants completed the questionnaire in which information about the "inside connections" feature was included, and two of them completed the questionnaire without this information. These volunteers were encouraged to give verbal feedback while completing their assigned questionnaire. They were also asked to give their overall impression of the study design. The monitoring of the five participants and the modification of the original questionnaire based on the suggestions made by them were done before email messages with a link to the revised questionnaires were sent to the remainder of the volunteers.

The length of time taken by respondents (excluding the five who were monitored and outliers who took over 40 minutes) ranged from 13 to 28 minutes, with a mean time of 18.61 minutes. Participants who were monitored occasionally interrupted their completion of the survey in order to point out questions and instructions that were not clear. It was presumed that participants who took over 40 minutes were distracted while responding to the survey.

In general, most of the pilot study participants thought that the questions were clear and understandable. No one complained about the questionnaire being too lengthy. However, some of them noted that there seemed to be repetition and redundancy in the questioning. At least one participant noted that the mix of positively and negatively worded questions was confusing. He remarked, "I thought it was very confusing using contradictory questions right after one another... you asked the same questions but just reworded it." Also, some respondents felt that for some questions they were not given appropriate options from which to choose their response. For instance, students who were pursuing a Bachelor's degree did not want to be classified as having "some college" education. Finally, one participant suggested that the researcher should ascertain why some individuals do not use blogs and social networks sites.

In the revised questionnaire used in the main study (refer to Appendix C), many of the suggestions by the pilot study participants were incorporated. For instance, the specific questions identified as repetitive were examined, and in some cases, the redundancy was eliminated by deleting one of the questions. Also, some of the negatively worded questions were changed to positive. The decision to change the wording of these

questions was also supported by the results of exploratory factor analyses (discussed in the following subsection) that were done on the scales for some of the constructs.

7.4 Preliminary Test for Construct Validity

Exploratory factor analysis was used to assess some aspects of the validity of the constructs measured with scales comprising more than one variable or item. It is important to note that, in consideration of the small sample size, factor analysis was done on each scale individually and not on all the multivariate scales at once. The results of Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) were first examined in order to determine whether the items of each scale could be grouped into a small set of underlying factors (preferably one or two factors). The results of Barlett's test of sphericity for each scale, shown in Table 7.5, suggest that significant correlation exists among their respective items. The overall MSA value for each scale, also shown in Table 7.5, is greater than the acceptable value of 0.5 specified in Hair, et al. (2006), and therefore, supports the grouping of items in each scale. Collectively, the results of Bartlett's test and the MSA values obtained for each scale met the fundamental requirements, specified in Hair, et al. (2006), for proceeding with the use of factor analysis to assist in determining how the items in each scale should be grouped in future statistical tests.

Table 7.5 Results of Bartlett's Test of Sphericity and Overall MSA on Scales

Constructs	Number of Items	MSA	Bartlett's Test – Approx χ^2 Df Sig.
PE - Performance Expectancy	9	0.846	299.515 36 .000
PC – Information Privacy Concerns – Collection	4	0.802	107.628 6 .000
JT - Perceived Justice/ Trust	8	0.713	172.540 28 .000
Risk - Risk Beliefs	5	0.709	54.794 10 .000
BI - Behavioral Intentions – Willingness to apply for a job using SNSs	3	0.668	34.263 3 .000

The results of factor analyses done on each multivariate scale individually suggested that, for each construct listed below, the items in their respective scales can be grouped into a single factor.

- Performance Expectancy

- Perceived Usefulness of Job Boards

- Information Privacy Concerns – Collection

- Behavioral Intentions – Willingness to apply for a job using SNSs

For the scales designed to assess "perceived justice/trusting beliefs" and "risk beliefs," the results of the factor analysis, done on each scale individually, suggested that more than one factor be retained. The criterion used for extracting factors is eigenvalues greater than one. The six positively worded items of the "perceived justice/trusting beliefs" scale loaded onto the first factor as shown in Table 7.6. However, the two negatively worded items, JT2 and JT5 in Table 7.6, loaded significantly onto the second factor. These two items do not appear to be conceptually distinct from the others. It is

therefore believed that in order to achieve uni-dimensionality in the main study, these items should be rephrased and worded positively.

For the purposes of further exploratory analyses in the pilot study, a decision was made to delete the two negatively worded items, JT2 and JT5, in computing a single composite index score for the perceived justice/trusting beliefs construct. A second exploratory factor analysis without these two items suggested the reduced "perceived justice/trusting beliefs" scale measured a uni-dimensional construct.

Table 7.6 Perceived Justice/Trust Oblique Quartimax Rotated Factor Pattern

Item		Factor1	Factor2	Communality
JT1	I believe that the information I reveal in SNSs will be used fairly by job candidate selectors.	**0.54**	-0.36	0.489
JT2	I believe that of the information about me on SNSs, some information that is <u>not</u> relevant to the prospective job will be used by job candidate selectors.	0.07	**0.91**	0.810
JT3	I trust that job candidate selectors will evaluate fairly information that others post about me on SNSs	**0.78**	-0.06	0.629
JT4	I believe that job candidate selectors will evaluate fairly my activities (e.g. blogging, my contributions to discussion boards, my membership in certain groups) in SNSs	**0.84**	-0.06	0.726
JT5	I believe that the information about my connections and contacts in SNSs will be used against me by job candidate selectors	-0.02	**0.90**	0.820
JT6	I believe that recruiters and potential employers would be trustworthy in handling information about me that can be obtained from SNSs	**0.82**	-0.02	0.688
JT7	I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about me that can be obtained from SNSs.	**0.86**	0.16	0.729
JT8	I believe that recruiters and potential employers are always honest with job candidates when it comes to using information about job candidates that can be obtained from SNSs	**0.80**	0.13	0.620
Eigenvalue		3.78	1.73	
Variance explained (%)		46.39	22.48	

For the risk beliefs scale, the factor analysis procedure was also performed twice. The results of the first analysis indicated that the measure of sampling adequacy (MSA) value for the only positively worded item (I would feel safe giving recruiters and potential employers access to information about me on SNSs) in the scale was 0.319. This MSA value is less than 0.5, which suggests, according to Hair, et al. (2006), that this item should be omitted and that the analysis should be repeated with the remaining items. The second factor analysis performed with the remaining four (4) items produced a one factor solution. For the purposes of further analyses in the pilot, the composite score for the risk beliefs scale was derived from the four items used in the second factor analysis. For the main study, however, the fifth item in the original scale was reworded negatively in order to be consistent with the other items.

7.5 Preliminary Test for Reliability

The widely used Cronbach's alpha coefficient was calculated for each multi-item scale in order to assess internal consistency reliability. The computed coefficients are shown in Table 7.7. These values suggest that the scales for all the constructs relevant to the research model exhibit good internal consistency. A minimum value of 0.7 for Cronbach's alpha is generally considered to be acceptable reliability (Robinson, et al. 1991).

Table 7.7 Cronbach's Alpha of Scales Used for Correlation Analysis

Scale	Number of Items	Cronbach's Alpha
Performance Expectancy	9	0.938
Information Privacy Concerns – Collection	4	0.895
Perceived Justice/Trusting Beliefs[++]	6	0.872
Risk Beliefs[++]	4	0.797
Behavioral Intentions – Willingness to apply for a job using SNSs	3	0.773

++ -The reduced scales for Perceived Justice/Trusting Beliefs and for risk beliefs were used here.

7.6 Preliminary Test of Hypotheses

Bivariate correlation analyses between pairs of variables of the research model were performed in order to determine the hypotheses that are supported by the pilot study data and are therefore likely to be supported in the larger survey. However, first, composite or summation scores for each variable had to be computed. With the exception of "perceived justice/trusting beliefs" and "risk beliefs", summation or composite scores were calculated by averaging the values in the original items in each variable's respective scales. For "perceived justice/trusting beliefs" and "risk beliefs", the averages of the items in the reduced scales (described in the previous section) were used as composite scores.

As described in Field (2009), Kolomogorov-Smirnov test for normality of distribution was used to determine if the sample data were parametric, and consequently, whether Pearson's or Kendall's Tau-b correlation coefficient would be more appropriate for the interpretation of the results. The Kolomogorov–Smirov (K-S Z) scores, shown in Table 7.8, suggested that for each of the variables measured using semantic differential scales, the distribution of the sample data is not significantly different from the normal distribution. Therefore, Pearson's correlation coefficients were computed.

Table 7.8 Descriptive Statistics and Results of Kolomogrov-Smirnov Test

Variables	Mean	Std. Dev.	Kolmogorov-Smirnov	
			K-S Z	Sig.
Performance Expectancy	3.97	1.27	0.605	0.857
Information Privacy Concerns – Collection	4.44	1.53	0.808	0.513
Perceived Justice/ Trusting Beliefs	3.70	1.07	0.775	0.585
Risk Beliefs	3.78	1.14	0.694	0.721
Behavioral Intentions – Willingness to apply for a job using SNSs	3.89	1.53	0.787	0.565

The correlation results, shown in Table 7.9, suggest that the hypotheses H3, H4, and H7 in the research model were supported. The variables social influence and effort expectancy were not measured in the pilot study and so H1 and H2 could not be tested. Statistically significant positive correlations between the following pairs of variables were found but not predicted in the initial research model: display of information on the "inside connections" feature and behavioral intentions to use SNSs to apply for a job; information privacy concerns (collection dimension) and risks beliefs; and, perceived justice/trusting beliefs and behavioral intention to use SNSs to apply for a job.

The discrepancies between predicted hypotheses and supported ones suggest the following: (a) there is a need to modify scales that demonstrated some weakness in construct validity; and (b) alternative research models that incorporate theoretical considerations that explain the significant relationships that were not originally hypothesized should be tested.

Table 7.9 Correlation Matrix for Variables in Research Model

		ICInfo	PE	PC	JT	Risk	BI
ICInfo	Information on the inside connection feature	----					
PE	Performance expectancy	.369*	.938				
PC	Information privacy concerns (Collection)	-.286	-.001	.895			
JT	Perceived Justice/Trusting beliefs	.221	.714**	-.096	.872		
Risks	Risk beliefs	-.233	-.032	.374*	.232	.797	
BI	Intentions to use SNSs in applying for jobs	.411**	.736**	-.231	.556**	-.090	.773

*.- Significant at the 0.05 level (2-tailed); **- Significant at the 0.01 level (2-tailed)
Cronbach's alpha reliability coefficients are shown along the diagonal

7.7 Control Variables

Bivariate analyses were performed between the control variables and each of the model variables in order to determine whether any of the control variables explained some of the variance in the data. Kendall Tau-b correlation coefficients were calculated in the analyses that included the following: (a) variables measured with non-interval scales such as those for gender, age, education, employment status, occupation and tendency to falsify information requested online, and (b) variables for which the Kolomogrov-Smirnov test suggested the distribution of the sample data was not normal such as "expertise in the use of the Internet" and "frequency of experience with invasion of privacy." The results of these correlations are shown in Table 7.10. Pearson's correlation coefficients, presented in Table 7.11, were calculated in the analyses that included the variable "exposure to use/misuse of information collected from the Internet," because the data for this variable met all the criteria necessary to be considered parametric (Hair et al. 2006).

Table 7.10 Results of Correlation Analysis with Control Variables (Kendall's Tau b)

Control Variables	Performance Expectancy	Information Privacy Concerns	Perceived Justice/ Trust	Risks	Behavioral Intention
Gender	0.188	-0.069	-0.030	-0.002	0.035
Age	0.052	-0.067	0.079	0.108	0.027
Education	0.353**	0.047	0.300**	-0.066	0.242*
Occupation	-0.131	-0.098	-0.018	-0.099	-0.132
Employment Status	0.287*	0.103	0.257*	-0.025	0.173
Internet use Expertise	-0.203	-0.099	-0.163	-0.038	-0.203
Invasion of Privacy Frequency	-0.077	0.174	-0.023	0.115	-0.194
Tendency to Falsify Information Requested Online	0.004	0.091	0.157	0.070	-0.141

*Significant at $\alpha < 0.05$; ** Significant at $\alpha < 0.01$

Table 7.11 Results of Correlation Analysis with Control Variables (Pearson's r)

Control Variables	Performance Expectancy	Information Privacy Concerns	Perceived Justice/ Trust	Risks	Behavioral Intention
Media Exposure: to use/misuse of information collected from the Internet	-0.140	-0.153	-0.235	0.017	-0.272

The results from the correlation analyses (shown in Tables 7.10 and 7.11) suggested that gender, age, occupation, Internet expertise, frequency of experience with invasion of privacy, tendency to falsify information requested online and media exposure to use/misuse of information collected from the Internet did not impact performance expectancy, information privacy concerns, perceived justice/trusting beliefs, risk beliefs and behavioral intentions. However, education and employment status affected performance expectancy and perceptions of justice or trust in the candidate selection process. Education also influenced behavioral intention to use social networking sites to apply for a job. The significant correlations observed further emphasized the need to take into consideration the effects of education, employment status and other exogenous variables in testing the research model in the main study.

7.8 Changes to Research Design Based on Pilot Study

The preliminary results and feedback from the participants of the pilot study, as noted earlier, were used to inform changes in the research design. The survey questionnaire was modified with the aim of reducing its length, improving the validity and reliability of the measurement scales, and enhancing its clarity of questions and instructions. These major changes made to the survey questionnaire used in the pilot study are outlined below and the revised questionnaire is presented in Appendix C.

- The perceived justice/trusting beliefs and the risk beliefs scales were revised so that there would be consistency in the wording of their items. For the main study, the perceived justice/trusting beliefs scale comprised only positively worded items, and the risks beliefs scale, only negatively phrased items. Further, some of the items in the perceived risks scales were modified to make them more specific to the context of recruiting in SNSs.

- The primary behavioral intention variable being investigated is "likelihood to use social networking sites to apply for a job." The word "willing" was therefore replaced with the word "likely" in one of the items.

- More appropriate options were provided to assess level of education.

- The number of web pages in the questionnaire was reduced by including, on average, more questions per page. Also, the page number and total number of pages were shown on each page in order to provide respondents with an indication of their progress while they were responding to questions.

- Respondents interested in being entered in the raffle were asked to provide their email address after they completed the questionnaire. A separate survey with a different color scheme was used for that purpose. The consent form was modified in order to inform participants that they could complete the questionnaire anonymously and not enter the raffle if they so desired. The revised consent form is presented in Appendix B.

7.9 Chapter Summary

The pilot detailed in this chapter was conducted with the primary aim of improving the research design for the main study. Forty four (44) NJIT students, 59% of whom were active job seekers, provided usable data in this pilot study. This sample of respondents was considered to be appropriate for the pilot study because of the relatively large percentage of active job seekers.

The revision of the survey questionnaire was informed by the feedback given by the pilot study participants. In particular, an effort was made to reduce redundancy and lessen confusion resulting from the mix of positively and negatively worded questions in the same scale. Exploratory factor analysis, performed on each scale separately, supported the participants' suggestions with regard to maintaining consistency (either all positive or all negative) in the wording of items measuring the same construct.

Preliminary correlation analysis suggested that the data from the pilot study supported some of the hypotheses in the proposed research model. In particular the following were supported: (H3) a positive relationship between performance expectancy and behavioral intentions; (H4) an association between the provision of information on the "inside connections" feature and performance expectancy; and, (H7) a positive relationship between perceived justice/trusting beliefs and performance expectancy. The constructs "social influence" and "effort expectancy" were not measured in the pilot study. It was therefore not possible to test hypotheses H1 (the positive association between social influence and behavioral intentions) and H2 (the negative relationship between effort expectancy and behavioral intentions.

The hypotheses that were not supported in the pilot study involved the constructs "perceived justice/trusting beliefs" and "risk beliefs", which were conceptualized as uni-

dimensional, yet a factor analysis on their measures suggested that they were not. These hypotheses were H5 (a negative relationship between information privacy concerns and perceived justice/trusting beliefs); H6 (a negative relationship between perceived justice/trusting beliefs and risk beliefs); and H8 (a negative relationship between risk beliefs and behavioral intentions). These hypotheses were tested with enhanced measures in the main study. The results from the main study are presented in the next two chapters.

CHAPTER 8

SURVEY SAMPLE, PSYCHOMETRIC PROPERTIES OF MEASURES AND DESCRIPTIVE STATISTICS

8.1 Introduction

This chapter first describes the sample of participants who provide usable responses for the data analysis in this study. It also details a comparison of the subsamples from the two main sources of survey respondents: the career services databases from NJIT and Rutgers New Brunswick (NB). The purpose of this comparison was to determine whether the two subsamples were sufficiently different to warrant the consideration of the variable "affiliation" in analyses that involved the combined dataset from both samples. The variable "affiliation" indicates the source from which the respondent was recruited, and as such, the institution with which the respondent is associated.

It was important to verify that assumptions such as normality of distribution were satisfied in order to perform some of the planned statistical analyses. Normality of distribution is the most important assumption to be established for multivariate analyses, e.g. factor analysis (Hair et al. 2006). In this chapter, statistical tests for normality of distribution of measured variables for each dataset are presented.

Discussions on (a) the testing of psychometric properties of scales designed to measure the variables in the research model, and (b) the refinement of these scales are included in this chapter. Additionally, descriptive statistics (mean and standard deviation) on summary scores based on the final measure for each construct as well as an overview of these statistics are presented. In the case of behavioral intentions, the main dependent variable, responses to the individual items in its original scales are discussed. Finally,

respondents' preference for job boards over SNSs or vice versa in applying for jobs is described.

8.2 Demographics

The distributions of the survey respondents in terms of gender, age and education are presented in Tables 8.1 to 8.3. For each demographic characteristic, Chi-square test of independence was used in order to determine whether there was an association between demographic characteristics of participants and affiliation.

Table 8.1 Sample Description by Gender and Affiliation

Gender	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Female	50	38.2%	221	61.6%	271	55.3%
Male	81	61.8%	138	38.4%	219	44.7%
Total	131	100%	359	100%	490	100.0%

Note: Chi-squared statistic (χ^2) = 21.246; df = 1; Sig. = .000*

Overall, there were more female participants (55.3%) than male participants (44.7%) in the study. However, the significant chi-squared value suggests that affiliation and gender are statistically dependent. The percentage of males in the NJIT sample is substantially greater than that in the Rutgers NB sample. However, for females, the reverse is true.

Table 8.2 Sample Description by Age and Affiliation

Age	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
20 and Under	2	1.5%	65	18.1%	67	13.7%
21-30	94	71.8%	275	76.6%	369	75.3%
31-40	16	12.2%	10	2.8%	26	5.3%
41-50	12	9.2%	6	1.7%	18	3.7%
Over 50	7	5.3%	3	.8%	10	2.0%
Total	131	100%	359	100%	490	100.0%

Note: Chi-squared statistic (χ^2) = 59.882; df = 4; Sig. = .000[*]

A vast majority of the respondents were under the age of 30 (89%). For NJIT, the age distribution reflected that of the population sampled. However, in the case of Rutgers (NB), the disproportionately high percentage of participants under 30 was due to the method used in recruiting subjects for the study. A letter of invitation to participate in the study, and then a reminder, were sent only to graduates of the class of 2009. In a third attempt at recruiting subjects affiliated with this university, the initial letter of invitation was sent to all users registered with the university's recruitment database, which included current students. The difference in the subject recruitment methods used for the two universities could be a possible explanation for the significant difference in the age distribution of participants affiliated with each university.

Table 8.3 Sample Description by Education and Affiliation

Highest Level of Education	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Pursuing Bachelor's Degree	2	1.5%	138	39.8%	140	29.3%
Bachelor's Degree	58	44.3%	128	36.9%	186	38.9%
Pursuing Master's Degree	11	8.4%	35	10.1%	46	9.6%
Master's Degree	54	41.2%	29	8.4%	83	17.4%
Pursuing or has Doctoral Degree	6	4.6%	17	4.9%	23	4.8%
Total	131	100.0%	347	100.0%	478	100.0%

Note: Chi-squared statistic (χ^2) = 108.274; df = 4; Sig. = .000[*]

With respect to highest level of education the majority of respondents (70.7%) had completed at least a Bachelor's degree. The significant chi-squared statistic derived from the frequency distributions in Table 8.3 suggests that level of education and affiliation are statistically dependent. There are some obvious differences in the distribution for each university. The percentage of participants pursuing a bachelor's degree is considerably higher for the Rutgers NB sample because invitations to participate in the study were sent to alumni as well as current students. However, in the case of NJIT, invitations were not sent to individuals listed as current students in the career services database. The two (2) NJIT affiliated respondents who indicated that they were pursuing a bachelor's degree could have answered the question erroneously or could have been inaccurately listed as graduates or alumni in the database. The disparity in the percentage of respondents with Master's degree from each university was primarily due to the differences in the technique used in recruiting the subjects from each source noted earlier. Whereas all individuals in NJIT's sampling frame received an invitation and two

reminders, those in the Rutgers (NB) sampling frame who were not 2009 graduates received an initial invitation and no reminder.

8.3 Employment Status and Occupation

Survey participants were asked to indicate their employment status by selecting one of the four options shown in Table 8.4. For each affiliation, the number and proportion of participants who selected each choice are also shown in Table 8.4. The majority of respondents (62.5%) were actively seeking a job.

As was done for demographic characteristics, the Chi-square test of independence was performed in order to determine whether there was an association between employment status and affiliation. The computed Chi-squared statistics indicated that at the 0.05 level of significance, employment status and affiliation are independent (refer to Table 8.4). For both institutions, over half (56.6%) of the respondents were employed and either actively or not actively seeking a new job. Over sixty two (62.5%) were either employed or unemployed and actively seeking a job. However, the single largest category to which over one-third of the respondents affiliated with each institution belonged was "unemployed and actively seeking a new job." This is important for the validity for this study. The 10% of Rutgers-NB affiliated respondents who indicated that they were unemployed and not seeking a new job was higher than expected. However, in a closer examination of employment status alongside highest level of education, it was noted that respondents with employment status "unemployed and not actively seeking a new job" were primarily current students pursuing a Bachelor's degree. Many of them may have been planning to pursue a graduate degree after graduation. This explained the considerable difference in percentage of "unemployed and not actively seeking a new

job" for the two institutions because current students affiliated with NJIT were not sampled.

Table 8.4 Sample Description by Employment Status and Affiliation

Employment Status	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Employed full-time or part-time and not actively seeking a new job	41	31.3%	101	28.1%	142	29.0%
Employed full-time or part-time and actively seeking a new job	41	31.3%	94	26.2%	135	27.6%
Unemployed and not actively seeking a new job	4	3.1%	38	10.6%	42	8.6%
Unemployed and actively seeking a new job	45	34.4%	126	35.1%	171	34.9%
Total	131	100.0%	359	100.0%	490	100.0%

Note: Chi-squared statistic (χ^2) = 7.609; df = 3; Sig. = .055

Participants were presented with a list of occupational groups based on the US Bureau of Labor 2000 Statistics Standard Occupational Classification (http://www.bls.gov/soc/soc_majo.htm) and were asked select from this list the one occupational group in which their ideal job fitted best. Table 8.5 show frequencies and percentages based on occupational group selected. Only occupational groups with greater than ten (10) respondents are shown. The group "other" includes construction and extraction; farming, fishing, and forestry; food preparation and serving related; healthcare support; installation, maintenance and repairs; production (manufacturing, assembling and food processing; and protective services (firefighting and law enforcement).

The occupational group with the most respondents was Architecture and Engineering, followed by Business and Financial Operations, and then Computer and Mathematical Sciences. As was expected, there was a significant difference in

distribution by occupational group for the two universities. For NJIT, the more technology focused university, the largest proportion of respondents selected "Architecture and Engineering" (38.6%) followed by "Computer and Mathematics" (23.6%). However, for Rutgers, the two most predominant groups, Business and Financial Operations (19.8%) and Education, Training, and Library (10.20%), were not as technology-focused and were not as large (in terms of percentages) as those for NJIT.

Table 8.5 Sample Description by Occupation and Affiliation

Occupational Group Under which Ideal Job Fits Best	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Architecture and Engineering	49	38.60%	32	9.30%	81	17.20%
Arts, Design, Entertainment, Sports, and Media	1	0.80%	29	8.40%	30	6.40%
Business and Financial Operations	9	7.10%	68	19.80%	77	16.30%
Community and Social Services	1	0.80%	25	7.30%	26	5.50%
Computer and Mathematical	30	23.60%	25	7.30%	55	11.70%
Education, Training, and Library	3	2.40%	35	10.20%	38	8.10%
Healthcare Practitioners and Technicians	5	3.90%	29	8.40%	34	7.20%
Legal	1	0.80%	11	3.20%	12	2.50%
Life, Physical, and Social Science	3	2.40%	24	7.00%	27	5.70%
Management	6	4.70%	13	3.80%	19	4.00%
Office and Administrative Support	0	0.00%	10	2.90%	10	2.10%
Sales, Marketing and Related	5	3.90%	26	7.60%	31	6.60%
Other	14	11.00%	17	4.90%	31	6.60%
Total	127	100.0%	344	100.0%	471	100.0%

Chi-squared statistic (χ^2) = 118.3; df = 12; Sig. = .000

8.4 Membership in and Experience with Social Networking Sites

It was important to determine respondents' background in terms of their membership in SNSs, the number of years of experience with these sites and the extent or frequency of use because these factors were presumed to have a possible effect on perceptions and attitudes toward the use of these sites to apply for jobs. For both institutions, a small minority of individuals indicated that they did not belong to at least one SNS. The differences in proportions were significantly different for the two institutions with 6.7% of respondents affiliated with Rutgers and 15.3% affiliated with NJIT not being members of SNSs (refer to Table 8.6).

Table 8.6 Sample Description by Membership in SNSs and Affiliation

Member of at least one SNS	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Yes	111	84.7%	335	93.3%	446	91.0%
No	20	15.3%	24	6.7%	44	9.0%
Total	131	100.0%	359	100.0%	490	100.0%

Note: Chi-squared statistic (χ^2) = 8.649; df = 1; Sig. = .003[*]

With respect to number of years of experience using SNS, there were also significant differences between the two universities. Respondents associated with Rutgers(NB), in general, were users of SNSs for longer periods than those associated with NJIT. Over 76% of Rutgers NB affiliates compared with over 54% NJIT affiliates used SNSs for more than three (3) years.

Table 8.7 Sample Description by SNS Experience and Affiliation

Length of time since start of use of SNSs	Affiliation				Total	
	NJIT		Rutgers (NB)			
	Count	%	Count	%	Count	%
Less than 1 year	15	13.5%	13	3.9%	28	6.3%
> 1 year and < 2 years	13	11.7%	19	5.7%	32	7.2%
> 2 years and < 3 years	22	19.8%	46	13.7%	68	15.2%
> 3 years and < 4 years	15	13.5%	68	20.3%	83	18.6%
> 4 years and < 5 years	21	18.9%	98	29.3%	119	26.7%
> 5 years	25	22.5%	91	27.2%	116	26.0%
Total	111	100.0%	335	100.0%	446	100.0%

Note: Chi-squared statistic (χ^2) = 24.680; df = 5; Sig. = .000*

8.5 Distinguishing Affiliation in Subsequent Analyses

The analyses in Sections 8.2 to 8.4 suggest that, in general, the group of participants affiliated with NJIT were significantly different from the group affiliated with Rutgers NB in several respects: age, education, employment status, occupation, membership in and experience with SNSs. Hence, the following decisions were made with regard to distinguishing participants from each group or affiliation in subsequent analyses:

- Individual tests were done on the dataset from each group or affiliation in order to determine whether the assumption of normality of the distribution of measured variables was satisfied. As indicated in the next point, as exploratory factor analyses would be done for each group individually, it was therefore necessary to check for normality separately.

- For exploratory factor analysis, the dataset from each affiliation was considered separately. This provided the opportunity to compare the results across the two separate samples and determine the robustness of the factor solution.

- Data from the two groups were considered separately in describing responses to dependent variables such as, intention to share personal information with recruiters and potential employers using SNSs to recruit employees; likelihood of using SNSs to apply for jobs; and preference for the use of job boards over SNSs.

8.6 Tests for Normality

Normality of distribution of the measured variables is the most fundamental assumption in many of the statistical methods (e.g. t-test, analysis of variance, factor analysis) that are used to analyze the data collected. Both statistical tests (e.g. Skewness and Kurtosis values and Shapiro-Wilks test) and graphical analyses (e.g. normal probability plots) are recommended to assess the extent of correspondence between the distributions of individual variables and the normal distribution (Hair et al. 2006). In this study, the primary statistical tests used in diagnosing whether the distribution of data for each item conformed to the normal distribution are skewness and kurtosis. Skewness describes the tilt of the distribution and kurtosis describes the width of the peak of the distribution. For variables with skewness and kurtosis values that suggested that their distribution departed from normality, normal probability plots were generated and examined.

The results of skewness and kurtosis tests are shown in Tables E.3 and E.4 in Appendix E. If the z values for skewness and kurtosis exceed the critical values of ± 2.58 (0.01 significance level) or ± 1.96 (0.05 significance level), then the distribution is non-normal. For the NJIT dataset, the distribution of all measured variables, except SI4, SI5 and BI1, had similar characteristics as the normal distribution in terms of skewness and kurtosis. A close examination of the probability plots of these three variables also suggests that their distributions deviated from the normal. The results were very different for the Rutgers NB dataset because, for many of the measured variables, there was substantial departure from the characteristics of skewness and kurtosis of the normal distribution. This departure was also evident in normal probability plots.

Hair et al. (2006) note that in assessing the impact of violating the normality assumption, two factors are to be taken into consideration: (1) the shape of the

distribution, which is usually characterized by its skewness and kurtosis; and (2) the sample size involved. As a guideline, Hair et al. (2006, pp. 80-81) suggest that if the sample has fewer than 50 cases, then significant departure from normality has substantial detrimental effects on results of multivariate analyses. However, for sample sizes greater than 200, the effects may be negligible.

Based on Hair et al.'s (2006) guidelines on the sample size that might make the use of non-normal distributions acceptable in multivariate analysis, the decision was made to use the measured variables in the Rutgers NB dataset without transformation. In the Rutgers NB dataset, the number of valid responses for variables relevant to the research model ranged from 354 to 359.

With regard to the NJIT dataset, SI4 and SI5 were transformed in order to satisfy the assumption of normality. The two new variables SI4_T and SI5_T were derived as follows: $SI4\_T = \sqrt{(SI4 + 4)}$ and $SI5\_T = \sqrt{(SI5 + 0.25)}$. The absolute values of z scores for skewness and kurtosis (refer to Table 8.8) computed for the transformed variables were less than 2.58, which suggested that their distributions did not deviate significantly from the normal distribution at the 0.01 level of significance.

Table 8.8 Skewness and Kurtosis of Transformed Variables

Transformed Variables	N	Mean	Std. Dev	Skewness			Kurtosis		
				Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
SI4_T	131	2.58	.311	.452	.212	2.132	-.852	.420	-2.029
SI5_T	129	1.58	.460	.540	.213	2.535	-.861	.423	-2.035

Also for the NJIT dataset, a decision was made to use the variable BI1 in its original form in future analysis because, as recommended by Hair et al. (2006, p.88), transformation should be applied to independent variables (and not dependent ones) except in cases where the assumption of homoscedasticity is violated. Homoscedasticity exists between an independent variable (usually ordinal or nominal) and a dependent variable (measured with at least an interval scale) when the dependent variable exhibits equal level of variance for each value of the independent variable. Levene's test of equal variance was used to determine whether the relationship between BI and each of the demographic variables measured in this study (e.g. gender, age, education and employment status) demonstrated homoscedasticity. In the results of these tests, shown in Table 8.9, the significance levels of the Levene statistics are all greater than 0.05. These results suggest that in general BI1 did not violate the assumption of homoscedasticity and provide justification for not attempting to transform BI1.

Table 8.9 Results from Levene's Test of Homoscedasticity —BI1

	Gender		Age		Education		Employment Status	
	Levene Statistic	Sig.	Levene Statistic	Sig.	Levene Statistic	Sig.	Levene Statistic	Sig.
BI1	1.938	.166	1.621	.173	1.740	.145	1.234	.300

8.7 Assessment of Common Method Variance

The use of a single method, an online survey administered at a single point in time, to measure all the constructs of interest in this study could lead to bias in results due to common method variance (CMV), which is described by Malhotra et al. (2006, p. 1865) as "the amount of spurious covariance shared among variables because of the common

method used in collecting data." The Marker-Variable Technique described in Lindell and Whitney (2001) and Malhotra et al.(2006) and Harman's one factor test, explained in Podsakoff and Organ (1986), were used to assess CMV.

In order to employ the Marker-Variable Technique, two questions which were not related to any of the constructs in the theoretical model, were included in the survey: (1) how often do you read novels? and (2) how often do you engage in physical fitness exercises? The latter question was inadvertently excluded from the questionnaire in the early stages of its administration. Therefore, 131 NJIT affiliates and 30 Rutgers affiliates were not asked this question. The results of a correlation analysis between the constructs in the research model and the marker variables (shown in Table G.5 in Appendix G) suggests that frequency of engaging in physical exercises was not correlated with any of the constructs in the research model. Also, frequency of reading novels was not correlated constructs in the research model except for risk beliefs (that is, perceptions of the uncertainty and adverse consequences of utilizing the recruitment services offered by SNSs). In hindsight, the variable "frequency of reading novels" may not have been a good choice for a marker variable because individuals who read novels are more exposed to hypothetical high risk situations and are therefore more sensitive to the possibility of adverse consequences resulting from utilizing the recruitment services offered by SNSs.

The averages of the absolute values of the coefficient, Spearman's rho, for the correlations between (a) the model constructs and "frequency of reading novel" and (b) the model constructs and frequency of engaging in physical fitness exercises are 0.057 and 0.049, respectively. These values are very close to zero. Taking into consideration the non-significant correlations between the marker variables and the research model

constructs, as well as the possibility of "frequency of reading novel" being associated with risk beliefs, it is reasonable to argue that bias due to common method variance is negligible, if any exists.

In order to assess CMV using Harman's one factor test, the unrotated factor solution from the exploratory factor analysis on all the independent variables relevant to the initial research model was examined. For the first exploratory factor analysis performed, the total variance explained by the factors with Eigenvalue greater than one in the unrotated factor solution is shown in Table G.6 (Appendix G).

With Harman single factor test, it is assumed that common method variance is present if either (a) a single factor emerges from the factor analysis; and (b) there is one general factor that accounts for the majority of the covariance (say, over 50%) in the independent variables (Podsakoff and Organ, 1986). The results in Table G.2 show that six factors accounting for 70% of the variance emerged. The factor that accounted for the greatest variance only accounted for 29.12%. It can therefore be concluded that bias due to common method variance is not present in this study.

8.8 Exploratory Factor Analysis

Exploratory factor analysis (EFA) was performed with the primary objective of identifying factors among the measured variables relevant to the research model. This analysis was performed on the dataset from each institution separately but in parallel. Conducting EFA on more than one sample in order to derive a measurement model to confirm using confirmatory factor analysis is an approach used by many researchers (Hair et al. 2006, p. 796). The method of extraction used in the EFA was principle components and the initial factor solution was rotated using the Varimax method. The

criterion used for extraction of components was Eigenvalues greater than one. In identifying statistically significant factor loadings, the guidelines provided in Hair et al. (2006, p. 128) were used. The minimum factor loading values considered to be significant for the NJIT and Rutgers NB datasets were 0.50 (recommended for sample sizes between 120 and 150) and 0.30 (recommended for sample sizes over 350) respectively.

For both datasets, the factor analyses were initially done on predicting and dependent variables jointly. However, since the variables measuring performance expectancy were strongly related to the ones measuring behavioral intentions, they loaded on the same factor. Also, some of the behavioral intentions variables loaded strongly on more than one factor, which further complicated the interpretation of the factor solution obtained when the predicting variables were combined with the dependent ones. Thus, a decision was made to consider predicting and dependent variables separately in the exploratory factor analyses. This decision is acceptable based on the discussion in Rosenthal and Rosnow (1991, p. 546).

8.8.1 Predicting Variables

For the NJIT dataset, the solutions from a few iterations of exploratory factor analysis on predicting variables suggested that three of the variables measuring social influence (SI1, SI2 and SI3) should be dropped. As explained in Table 8.10, these variables loaded strongly on factor 1, which seemed to have been more closely associated with the performance expectancy variables. SI3 also loaded on a second factor (Factor 6). Moreover, the results of factor analysis on the Rutgers NB dataset also suggested that

these variables were problematic because they loaded significantly on multiple factors as indicated in Table 8.12.

Table 8.10 Exploratory Factor Analysis Rotated Component Matrix —NJIT

Variable	Factor	Loading
SI1* - People who influence my behavior think that a good way to find a job is by applying through SNSs	Dropped	---
SI2* - People who are important to me view applying for jobs on SNSs positively	Dropped	---
SI3* - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose	Dropped	---
SI4 – In general, people who apply for jobs on SNSs have more prestige than those who do not. SI4_T = $\sqrt{(SI4 + 4)}$	6	.844
SI5 – Securing a job through SNSs is like a status symbol. SI5_T = $\sqrt{(SI5 + 0.25)}$	6	.854
EE1 – It would be difficult for me to become skillful at applying for jobs on SNSs	5	.660
EE2 – Doing what is necessary to secure a job using SNSs would require too much time	5	.870
EE3 – Doing what is necessary to secure a job using SNSs would require too much effort	5	.853
EE4 – It would be complicated to apply for jobs on SNSs	5	.829
PE1 – I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	1	.794
PE2 – I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	1	.810
PE3 – I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	1	.804
PE4 – I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	1	.800
PE5 – I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	1	.835
PE6 – In general, using SNSs would enable job seekers to find a job more quickly	1	.820
PE7 – It is not a waste of time using SNSs to find a job	1	.773
PE8 – Overall, I think SNSs would be useful in job seeking activities	1	.822

Table 8.10 Exploratory Factor Analysis Rotated Component Matrix —NJIT (Continued)

Variable	Factor	Loading
PC1- It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information	4	.767
PC2 – If recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it	4	.740
PC3 – It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment	4	.877
PC4 – I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me	4	.759
JT1 – I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs	2	.707
JT2 – I believe that only job specific information discovered from SNSs will be used by recruiters and potential employers	2	.703
JT3 – I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs	2	.830
JT4 - I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs	2	.772
JT5 – I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs	2	.818
JT6 – I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs	2	.812
JT7 – I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs	2	.824
Risk1 – There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs	3	.695
Risk2 – There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs	3	.862
Risk3 – Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs	3	.840
Risk4 – I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job	3	.854

* - SI1 and SI2 loaded 0.694 and 0.682, respectively, on same factor as PE variables; this was inconsistent with the conceptualization of the variables SI and PE. SI3's loadings on factors 1 and 6 were 0.632 and 0.504 respectively.

The final solution obtained for the NJIT dataset comprised six factors. The loading of each variable for the factor on which it had the highest loading is shown in Table 8.10. The six resulting factors, with Eigenvalue greater than one (1), explained 73.257% of the variance in the variables as indicated in Table 8.11. With the exception of social influence, all variables initially used to measure the independent constructs in the research model were retained. SI4 and SI5 had to be transformed in order to order to satisfy the assumption of normality required for factor analysis and these were the only two social influence variables retained.

Table 8.11 Eigenvalues and Variance Explained by Factors —NJIT Dataset

Factor	Factor Label	Eigenvalues	% of Variance	Cumulative %
1	Performance Expectancy	8.368	20.160	20.160
2	Perceived Justice/ Trusting Beliefs	4.095	15.805	35.965
3	Risk Beliefs	3.531	10.669	46.634
4	Privacy Concerns	2.179	10.460	57.095
5	Effort Expectancy	1.996	9.900	66.994
6	Social Influence	1.076	6.263	73.257

For the Rutgers NB dataset, the results of preliminary factor analysis iterations before arriving at the final solution were somewhat comparable to those found for the NJIT dataset. Variables SI1, SI2, and SI3 did not only load significantly on Factor 1, they also cross loaded on a second factor, Factor 3, during that iteration of the analysis. Consequently, those variables were dropped as indicated in Table 8.12. As noted earlier, variables SI1, SI2, and SI3 were also problematic in the analyses for the NJIT dataset. Thus, there was sufficient justification for excluding them from future analyses. The final loadings of variables on their corresponding factors for the Rutgers NB dataset are shown

in Table 8.12. The Eigenvalues and the variance explained by the six factors in the final

solution obtained for the Rutgers NB dataset are shown in Table 8.13.

Table 8.12 Exploratory Factor Analysis Rotated Component Matrix —Rutgers NB

Variable	Factor	Loading
SI1* - People who influence my behavior think that a good way to find a job is by applying through SNSs	Dropped	---
SI2* - People who are important to me view applying for jobs on SNSs positively	Dropped	---
SI3* - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose	Dropped	---
SI4 - In general, people who apply for jobs on SNSs have more prestige than those who do not. SI4_T = $\sqrt{(SI4 + 4)}$	6	.821
SI5 - Securing a job through SNSs is like a status symbol. SI5_T = $\sqrt{(SI5 + 0.25)}$	6	.835
EE1 - It would be difficult for me to become skillful at applying for jobs on SNSs	5	.722
EE2 - Doing what is necessary to secure a job using SNSs would require too much time	5	.896
EE3 - Doing what is necessary to secure a job using SNSs would require too much effort	5	.892
EE4 - It would be complicated to apply for jobs on SNSs	5	.833
PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	1	.833
PE2 - I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	1	.845
PE3 - I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	1	.746
PE4 - I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	1	.771
PE5 - I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	1	.792
PE6 - In general, using SNSs would enable job seekers to find a job more quickly	1	.854
PE7 - It is not a waste of time using SNSs to find a job	1	.824
PE8 - Overall, I think SNSs would be useful in job seeking activities	1	.875

Table 8.12 Exploratory Factor Analysis Rotated Component Matrix —Rutgers NB (Continued)

Variable	Factor	Loading
PC1- It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information	3	.858
PC2 - If recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it	3	.843
PC3 - It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment	3	.888
PC4 - I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me	3	.870
JT1 - I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs	2	.664
JT2 - I believe that only job specific information discovered from SNSs will be used by recruiters and potential employers	2	.637
JT3 - I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs	2	.835
JT4 - I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs	2	.765
JT5 - I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs	2	.743
JT6 - I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs	2	.835
JT7 - I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs	2	.829
Risk1 - There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs	4	.789
Risk2 - There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs	4	.851
Risk3 - Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs	4	.831
Risk4 - I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job	4	.783

* - SI1 loadings on factors 1 and 3 were 0.454 and 0.724 respectively; SI2 loadings on factors 1 and 3 were 0.463 and 0.719 respectively; SI3 loadings on factors 1 and 3 were 0.380 and 0.736 respectively

Table 8.13 Eigenvalues and Variance Explained by Factors —Rutgers NB Dataset

Factor	Factor Label	Eigenvalues	% of Variance	Cumulative %
1	Performance Expectancy	7.957	20.427	20.427
2	Perceived Justice/ Trusting Beliefs	3.968	15.221	35.648
3	Risk Beliefs	3.245	10.748	46.396
4	Privacy Concerns	2.342	10.198	56.594
5	Effort Expectancy	2.000	9.675	66.268
6	Social Influence	1.301	5.498	71.767

The factor solutions for the two datasets were very similar. The items that were expected to group together did. Thus, as shown in Tables 8.11 and 8.13, it was possible to assign to the factors labels corresponding to the independent constructs in the research model.

8.8.2   Dependent Variable – Behavioral Intentions

Intentions to use SNSs to apply for jobs were measured using participants' responses to the three questions (items) on seven point semantic differential scales described in Table 8.14. Exploratory factor analysis was performed on the three items, with each dataset (NJIT and Rutgers NB), in order to determine whether they were unidimensional. The significantly high loadings of each item on a single factor, shown in Table 8.14, suggest that the measure used for behavioral intentions to use SNSs to apply for jobs was unidimensional. Thus, the mean of the responses to the three questions can be used as a composite score to describe behavioral intentions to use SNSs to apply for jobs as a whole.

Table 8.14 Results of Factor Analysis of Behavioral Intentions Variables

Behavioral Intentions Scale	Single Factor Loadings	
	NJIT	Rutgers
BI1 - How likely are you to apply for a job through social networking sites? (1=Very unlikely; 7=Very likely)	0.885	0.901
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates? (1=Very unlikely; 7=Very likely)	0.860	0.863
BI3 - I think it is a bad idea to apply for jobs through social networking sites (1=Very unlikely; 7=Very likely), Actual responses were subtracted from 8.	0.822	0.823
Eigenvalue	2.199	2.234
Variance explained	73.29%	74.46%

8.8.3 Changes in Measurement Model based on Results of Exploratory Factor Analysis

The final factor structures obtained from EFA on both the NJIT and the Rutgers datasets were very similar, as noted earlier. Consequently, the decision to combine the two datasets in order to test the measurement model for this study was made. The results of the EFA also suggested that the initially proposed measurement model, in particular, the measure for social influence, needed to be re-examined.

The social influence measure, as noted in Chapter 6, was developed by selecting items from Venkatesh et al.'s (2003) initial social influence scale that could be adapted to the use of social media technology not within the context of an organization. Venkatesh et al.'s (2003) initial scale comprised items that were previously used to measure the three constructs from which the concept social influence was derived: subjective norm (Ajzen 1991; Davis et al. 1989; Fishbein and Ajzen 1975); social factors (Thompson et al. 1991); and image (Moore and Benbasat, 1991). The items selected from Venkatesh et al.'s (2003) initial scale were those that could easily be adapted to suit the context of this

study. The original constructs associated with each of the items used to measure social influence are shown in Table 8.15.

Table 8.15 Social Influence Scale Items and Associated Original Construct

Original Construct	Derived Scale Item
Subjective Norm	SI1 - People who influence my behavior think that a good way to find a job is by applying through SNSs
Subjective Norm	SI2 - People who are important to me view applying for jobs on SNSs positively
Social Factors	SI3 - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose
Image	SI4 - In general, people who apply for jobs on SNSs have more prestige than those who do not
Image	SI5 - Securing a job through SNSs is like a status symbol

Of the five social influence variables listed in Table 8.15, the ones that did not present problems with cross loadings in the EFA were SI4 and SI5, which were the only two associated with the original construct, image. Venkatesh et al. (2003, p. 452) noted that while the original constructs from which the concept social influence was derived have different labels, each of these constructs contained, either explicitly or implicitly, the notion that the individual's behavior was influenced by the way in which they believed others would view them as a result of having used the technology. However, the data in this study seemed to suggest differently. Given that the use of SNSs for obtaining jobs is fairly new, it may be that this has never been discussed with friends. Thus, the respondents simply did not know how people who are important to them felt about apply for jobs through SNSs.

The variables associated with the original construct "image" loaded significantly on a single factor, which in general was different from the factors on which SI1, SI2 and

SI3 loaded. Consequently, subsequent to this point, only the variables SI4 and SI5 were used in analyses involving social influence. Also, interpretation of the results of these analyses took into consideration that these variables represented the image aspect of social influence.

8.9 Construct Validity and Partial Least Squares

Construct validity refers to the extent to which a scale measures the theoretical concept or variable that it was designed to measure (Cronbach and Meehl, 1955). Typically, in assessing the construct validity of a scale, five characteristics are examined: (1) convergent validity; (2) internal consistency reliability, which is also an indicator of convergent validity; (3) discriminant validity; (4) nomological validity; and (5) face or content validity. Definitions of these characteristics as well as the details on how the proposed measurement model is evaluated with respect to them are presented later in this section. However, the technique, partial least squares, used to produce the model fit coefficients (labeled Model Quality in SmartPLS) needed to assess these characteristics is first briefly described.

Partial least squares (PLS) modeling is an approach to structural equation modeling, first formalized and presented by Herman Wold (Wold, 1966; Wold, 1982). PLS was proposed by Wold (1982) as a "soft modeling" approach that made few assumptions about the distribution of variables included in the algorithm and that did not require an extremely large number of cases to ensure validity of results (Tenenhaus et al. 2005). For these reasons and other reasons such as its support for both formative and reflective constructs, PLS has been used extensively in prior Information Systems research (Chin, 1998; Goodhue et al. 2006). In a recent MIS Quarterly Special Issue on

Partial Least Squares, it was noted that the use of PLS to test path models was more prevalent in Information Systems than in other disciplines (Marcoulides et al. 2009).

In this study, the PLS modeling approach was used primarily because it makes no assumptions about the distribution of variables. As noted earlier, based on the results of EFA, it was decided that the NJIT and the Rutgers dataset should be pooled in testing of the measurement model. In the pooled dataset, however, there was evidence of departure from normality in the distribution of some variables. With PLS, variables are not assumed to be normally distributed.

The software used for the PLS analysis was SmartPLS™ 2.0 (Ringle et al. 2005). The initial measurement theory specified in SmartPLS is shown in Figure 8.1. Appropriate paths were drawn from the seven latent variables to their respective indicators, as well as among the latent variables, based on theory discussed in Chapter 4. This model did not include the measured variables SI1, SI2 and S3. Also, in this model, the original and not the transformed data for SI4 and SI5 were used because normality in distribution did not have to be satisfied for PLS.

The PLS algorithm was first executed with the initial measurement model (Figure 8.1). The cross loadings output, shown in Table 8.16, was examined (significant loadings are bolded). Using the general rule of thumb of greater than 0.5 (>0.5) as a significant loading, it was determined that indicators BI1, BI2, BI3_R, PE1, PE2, PE3, PE5, PE6, PE7, PE8 could possibly present problems in attaining a simple factor structure. In order to achieve a simple factor structure, some of these variables were eliminated one at a time based on the size of their cross loadings on variables with which they were not hypothesized to be strongly correlated. The PLS algorithm was executed after each

elimination and the cross loading output re-examined. It is important to note that loading values changed after the elimination of each variable and the reiteration of the PLS algorithm. Thus, after removing variables BI1, BI3_R, PE8, PE7, and PE1, a simple factor structure solution was attained.

The cross loading output for the final measurement model confirmed with PLS is shown in Table 8.17. The significant loadings are bolded. The measures in the final model are discussed in the following subsections with specific reference to the PLS output statistics that support each of the five aspects of construct validity: (1) convergent validity; (2) reliability; (3) discriminant validity; (4) nomological validity; and (5) face or content validity.
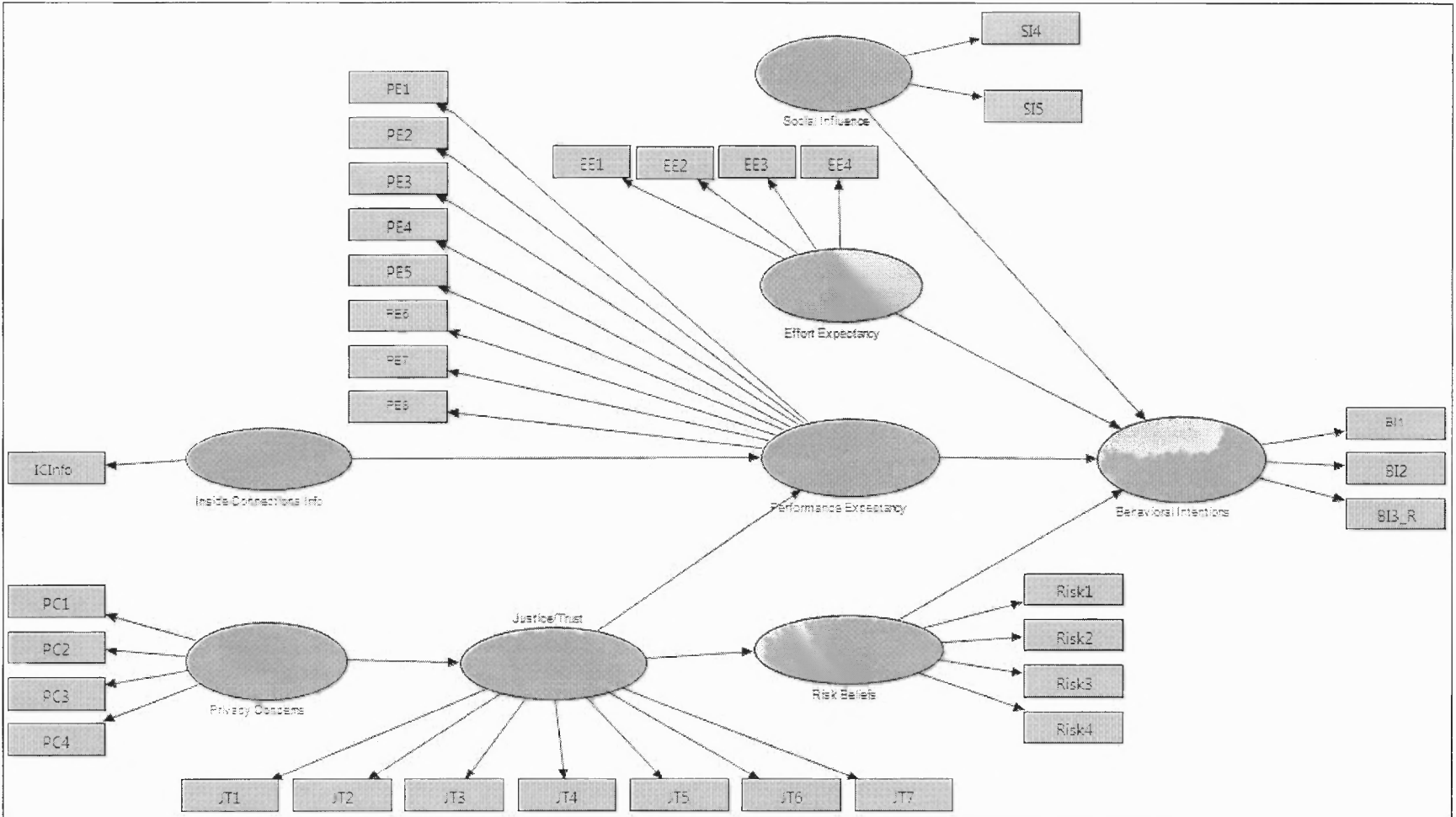
Figure 8.1 Initial measurement theory tested.

Table 8.16 SmartPLS Cross Loadings Output for Initial Measurement Model

	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI1	**0.905**	-0.188	-0.064	0.339	-0.198	**0.701**	-0.289	0.395
BI2	**0.843**	-0.141	-0.027	0.369	-0.422	**0.529**	-0.254	0.323
BI3_R	**0.825**	-0.307	-0.023	0.289	-0.295	**0.500**	**-0.508**	0.155
EE1	-0.135	**0.710**	-0.019	0.104	0.082	-0.061	0.187	0.187
EE2	-0.209	**0.906**	0.050	0.046	0.139	-0.131	0.281	0.132
EE3	-0.197	**0.898**	0.043	0.060	0.166	-0.110	0.269	0.149
EE4	-0.269	**0.889**	0.069	0.004	0.161	-0.157	0.257	0.105
ICInfo	-0.046	0.050	**1.000**	-0.080	-0.045	-0.004	0.049	-0.049
JT1	0.289	-0.026	-0.043	**0.689**	-0.201	0.258	-0.163	0.091
JT2	0.307	0.107	-0.058	**0.709**	-0.079	0.332	-0.200	0.267
JT3	0.341	0.026	-0.050	**0.861**	-0.138	0.352	-0.243	0.226
JT4	0.245	0.031	-0.117	**0.758**	-0.127	0.304	-0.123	0.260
JT5	0.305	0.069	-0.099	**0.786**	-0.142	0.290	-0.197	0.312
JT6	0.300	0.029	-0.015	**0.840**	-0.244	0.299	-0.179	0.213
JT7	0.329	0.050	-0.070	**0.853**	-0.218	0.354	-0.173	0.246
PC1	-0.289	0.100	-0.044	-0.119	**0.794**	-0.165	0.151	-0.079
PC2	-0.301	0.159	-0.048	-0.188	**0.845**	-0.137	0.185	-0.023
PC3	-0.327	0.145	-0.023	-0.222	**0.922**	-0.165	0.241	-0.110
PC4	-0.251	0.152	-0.047	-0.163	**0.846**	-0.082	0.221	0.006
PE1	**0.604**	-0.134	0.014	0.372	-0.154	**0.857**	-0.214	0.340
PE2	**0.561**	-0.097	-0.006	0.316	-0.130	**0.843**	-0.217	0.341
PE3	**0.500**	-0.068	0.001	0.306	-0.127	**0.787**	-0.176	0.399
PE4	0.464	-0.087	0.033	0.295	-0.049	**0.785**	-0.123	0.289
PE5	**0.532**	-0.057	-0.010	0.355	-0.100	**0.830**	-0.221	0.393
PE6	**0.586**	-0.128	-0.019	0.328	-0.132	**0.870**	-0.220	0.398
PE7	**0.614**	-0.181	-0.025	0.316	-0.182	**0.829**	-0.254	0.291
PE8	**0.660**	-0.178	-0.011	0.374	-0.177	**0.895**	-0.280	0.341
Risk1	-0.210	0.210	0.059	-0.163	0.131	-0.089	**0.741**	-0.013
Risk2	-0.339	0.248	0.045	-0.222	0.210	-0.224	**0.882**	-0.081
Risk3	-0.415	0.290	0.045	-0.226	0.256	-0.276	**0.900**	-0.152
Risk4	-0.362	0.234	0.022	-0.169	0.182	-0.236	**0.840**	-0.026
SI4	0.327	0.157	-0.039	0.304	-0.057	0.399	-0.101	**0.938**
SI5	0.317	0.138	-0.054	0.244	-0.060	0.378	-0.068	**0.934**

Table 8.17 SmartPLS Cross Loadings Output for Final Measurement Model

	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI2	**1.000**	-0.142	-0.027	0.369	-0.421	0.487	-0.259	0.323
EE1	-0.075	**0.706**	-0.019	0.105	0.083	-0.030	0.187	0.187
EE2	-0.114	**0.905**	0.050	0.046	0.136	-0.106	0.282	0.133
EE3	-0.121	**0.902**	0.043	0.061	0.164	-0.077	0.270	0.149
EE4	-0.154	**0.888**	0.069	0.004	0.159	-0.116	0.259	0.105
ICInfo	-0.027	0.050	**1.000**	-0.080	-0.046	-0.002	0.048	-0.049
JT1	0.289	-0.026	-0.043	**0.688**	-0.196	0.241	-0.165	0.091
JT2	0.234	0.107	-0.058	**0.713**	-0.076	0.335	-0.199	0.268
JT3	0.323	0.026	-0.050	**0.862**	-0.137	0.335	-0.244	0.227
JT4	0.267	0.031	-0.117	**0.758**	-0.125	0.292	-0.123	0.260
JT5	0.293	0.069	-0.099	**0.786**	-0.139	0.278	-0.197	0.312
JT6	0.324	0.028	-0.015	**0.838**	-0.241	0.272	-0.180	0.213
JT7	0.299	0.050	-0.070	**0.851**	-0.214	0.328	-0.175	0.246
PC1	-0.344	0.100	-0.044	-0.118	**0.819**	-0.140	0.153	-0.079
PC2	-0.350	0.160	-0.048	-0.187	**0.835**	-0.109	0.187	-0.023
PC3	-0.416	0.146	-0.023	-0.222	**0.915**	-0.141	0.243	-0.110
PC4	-0.320	0.153	-0.047	-0.162	**0.847**	-0.054	0.222	0.006
PE2	0.436	-0.096	-0.006	0.316	-0.131	**0.854**	-0.219	0.341
PE3	0.396	-0.068	0.001	0.307	-0.129	**0.836**	-0.181	0.399
PE4	0.346	-0.086	0.033	0.295	-0.050	**0.807**	-0.125	0.289
PE5	0.394	-0.057	-0.010	0.356	-0.102	**0.880**	-0.223	0.393
PE6	0.477	-0.128	-0.019	0.329	-0.132	**0.858**	-0.223	0.398
Risk1	-0.077	0.210	0.059	-0.163	0.129	-0.075	**0.727**	-0.013
Risk2	-0.193	0.248	0.045	-0.222	0.208	-0.200	**0.881**	-0.081
Risk3	-0.299	0.290	0.045	-0.226	0.253	-0.244	**0.910**	-0.152
Risk4	-0.235	0.234	0.022	-0.169	0.181	-0.212	**0.838**	-0.026
SI4	0.300	0.157	-0.039	0.304	-0.058	0.414	-0.105	**0.939**
SI5	0.304	0.138	-0.054	0.245	-0.062	0.395	-0.071	**0.933**

8.9.1 Convergent Validity

Convergent validity refers to the degree to which multiple measures of a construct agree with one another (Campbell and Fiske, 1959). The size of the factor loadings of each item on the factor or latent variable it is hypothesized to measure, the average variance extracted (AVE), and the reliability coefficients are three considerations in determining convergent validity of the items of a measure. Reliability is discussed in the following subsection.

Generally, a model is considered to be adequate in terms of convergent validity if the AVE for all its constructs are greater than 0.5 (Chin, 1998). The AVE values for all constructs, shown in Table 8.18, exceed 0.5 with the lowest value being 0.621 for perceived justice/trusting beliefs. Convergent validity is also established if all item loadings on corresponding latent variables are greater than the recommended lower limit of 0.60 (Chin et al. 1997). The minimum item loading in Table 8.17 is 0.688 for item JT1 on the latent variable perceived justice/trusting beliefs. All other loadings are greater than 0.70. Thus, in summary, all AVE and items loadings values satisfy the criteria for establishing convergent validity.

Table 8.18 Average Variance Extracted

Latent Variables	AVE
BI - Behavioral Intentions	1.000
EE - Effort Expectancy	0.730
IC_Info - Inside Connections Information	1.000
JT - Justice/Trust	0.621
PC - Privacy Concerns	0.728
PE - Performance Expectancy	0.718
Risk – Risk Beliefs	0.708
SI - Social Influence	0.877

8.9.2 Reliability

Reliability refers to the "extent to which a variable or a set of variables is consistent in what it is intended to measure" (Hair et al. 2006, p. 103). The statistics used to assess the reliability or degree of consistency of the scale items for each construct were Cronbach's alpha coefficient and the composite reliability scores computed using PLS (refer to Table 8.19). The generally accepted lower limit for Cronbach's alpha coefficient is 0.7 (Robinson et al. 1991). Cronbach's alpha coefficient under-estimates or over-estimates reliability depending on how small or how large the number of items there are in the scale. For this reason, composite reliability is often preferred by researchers and a value of 0.7 or higher is considered good reliability (Hair et al. 2006; Garson, 2009). The Cronbach's alpha coefficient and the composite reliability coefficient for each construct measured using multiple items were well above 0.7. Therefore, based on the statistics shown in Table 8.19, the scales for all constructs (including behavioral intentions) exhibit good internal consistency reliability.

Table 8.19 Reliability Statistics —Cronbach's Alpha and Composite Reliability

Latent Variables	Cronbach's Alpha	Composite Reliability
BI - Behavioral Intentions	1.000	1.000
EE - Effort Expectancy	0.876	0.915
IC_Info - Inside Connections Information	1.000	1.000
JT - Justice/Trust	0.897	0.919
PC - Privacy Concerns	0.877	0.914
PE - Performance Expectancy	0.902	0.927
Risk – Risk Beliefs	0.865	0.906
SI - Social Influence	0.859	0.934

8.9.3 Discriminant Validity

Discriminant validity refers to the extent to which measures of different constructs are truly distinct (Campbell and Fiske, 1959). One way of assessing discriminant validity is by comparing the square root of the average variance extracted (AVE) for a construct with the correlation between that construct and each of the other constructs. The square root of the AVE and the correlation coefficients between pairs of constructs are shown in Table 8.20 (the square roots of AVE values are displayed in the cells along the diagonal). Discriminant validity is established because, for each construct, the AVE value is considerably higher than the square of its correlation with any of the other factors.

Table 8.20 Latent Variable Correlations and Square Roots of AVE

Latent Variables	BI	EE	IC info	JT	PC	PE	RB	SI
BI- Behavioral Intentions	1.000							
EE- Effort Expectancy	-0.142	0.854						
IC Info – Inside Connections Info	-0.027	0.050	1.000					
JT - Justice/Trust	0.369	0.052	-0.080	0.788				
PC-Privacy Concerns	-0.422	0.166	-0.045	-0.210	0.853			
PE-Performance Expectancy	0.487	-0.104	-0.002	0.379	-0.129	0.848		
RB-Risk Beliefs	-0.259	0.295	0.048	-0.235	0.241	-0.232	0.842	
SI-Social Influence	0.323	0.157	-0.050	0.293	-0.063	0.431	-0.094	0.936

Square roots of AVE are displayed in the cells along the diagonal

8.9.4 Nomological Validity

Nomological validity refers to the extent to which measures of a construct predict measures of other constructs, all embedded in a theoretical network of relationships (Cronbach and Meehl, 1955). Details of the analysis of relationships among constructs are discussed in the next chapter.

8.9.5 Face Validity

Face validity was established prior to conducting the main study. The items of each measure were evaluated by expert judges on how well they matched the definition for their corresponding construct. Also, feedback from some participants in the pilot study was used in ensuring that redundancy was eliminated and that the scale items were

adequate in content. For the most part, the empirical analyses corresponded with the decisions of the expert judges with the exception of performance expectancy, social influence and behavioral intentions. Although some items were removed from the measures for performance expectancy, the items that remained still reflected the original definition of these constructs. For social influence and behavioral intentions, however, there was a need to revisit the definitions of the constructs and apply new labels that were more accurately reflected by the item or items that remained in the final valid measurement model.

In the case of social influence, the items selected and adapted from instruments previously used to measure the constructs social norms and social factors did not produce results consistent with those adapted from original measures of image. The items for image were retained as they did not present problems with cross loading in the exploratory factor analysis. In order to maintain face validity, it would therefore be more appropriate to refer to the construct social influence as "social influence/image" in the interpretation of results. In redefining this construct, reference was made to Moore and Benbasat's (1991, p.195) original definition of image: "the degree to which use of an innovation is perceived to enhance one's image or status in one's social system." In the context of this study, this definition is adapted as follows: the degree to which the use of SNSs in applying for jobs is perceived to enhance one's image or status in one's social system.

With regard to the construct "behavioral intentions", three items were initially used in its measure. In order to achieve discriminant validity, it was necessary to drop, from the measurement model, the items: BI1 — "How likely are you to apply for a job

through social networking sites?" and BI3_R —"I think it is a bad idea to apply for jobs through social networking sites." The following item remained as a measure of behavioral intention:

> BI2 How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates?

On closely examining item BI2, it was noted that it more accurately reflected intention to share personal information with recruiters and potential employers who use SNSs in their recruitment efforts. Thus, a decision was made to refer to this variable as "intention to share personal information with recruiters and potential employers."

8.10 Exploring an Alternative Research Model

In consideration of the changes to the measurement model described in Sections 8.8.3 and 8.9.5, an alternative research model was devised. In this alternative model, illustrated in Figure 8.3, the definition of the construct "performance expectancy" from the original research model remained unchanged despite slight modifications to its measure. The constructs social influence specific to image and behavioral intention to share personal information are defined as follows:

> **Social Influence/Image** is the degree to which the use of SNSs in applying for jobs is perceived to enhance one's image or status in one's social system.

> **Behavioral Intention to Share Personal Information** is the likelihood of providing personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates.

In the alternative research model, similar to the original model, effort expectancy, performance expectancy and perceived risk are posited to be direct predictors of behavioral intention to share personal information with recruiters and potential employers using SNSs to recruit job candidates. Also, presence/absence of information on the "inside connections" feature is hypothesized to have an impact on performance expectancy. Further, it is predicted that online information privacy concerns influence perceived justice/trusting beliefs, which in turn influence risk beliefs. Finally, as in the original model, a positive relationship between perceived justice/trusting beliefs and performance expectancy is hypothesized to exist.

One of the differences between the alternative model and the original one is that social influence is posited to be a direct predictor of performance expectancy and not of behavioral intention. The technology adoption models that focus on image and on which UTAUT is rooted were considered in formulating this hypothesis. In TAM2 (Venkatesh and Davis, 2000), image was demonstrated to be a significant predictor of perceived usefulness —the primary concept on which the construct performance expectancy is based. Using a similar line of reasoning as Venkatesh and Davis (2000), individuals tend to establish or maintain image by identification with a reference group (e.g. individuals who have higher status or more prestige). If individuals of that reference group are using a system, then others who are concerned about image within that group may perceive the system to be more useful in enhancing their job performance over and beyond any direct benefits that can actually be derived from using the system. Thus, individuals who believe that people who apply for jobs on SNSs have more prestige than those who do not

and that securing a job through SNSs is like a status symbol are more likely to find these sites useful in applying for jobs.

Another difference between the alternative model and the original one is that information privacy concerns are predicted to have a direct positive relationship with risk beliefs and a direct negative relationship with behavioral intention to share information with recruiters and potential employers in SNSs. These direct relationships are supported by the findings of Dinev and Hart (2006) and Son and Kim (2008). The hypotheses in the alternative model are formally stated as follows:

H1.1: Effort expectancy is negatively associated with intention to share information with recruiters and potential employers who use SNSs to recruit employees.

H1.2: Performance expectancy is positively associated with intention to share information with recruiters and potential employers who use SNSs to recruit employees.

H1.3: Social influence/Image is positively associated with performance expectancy.

H1.4: Job seekers who are provided with information about the "inside connections" feature are likely to have greater performance expectancies than those who are not provided with this information.

H1.5: There is a negative association between risk beliefs and intention to share information with recruiters and potential employers who use SNSs to recruit employees.

H1.6: There is a negative relationship between perceived justice/trusting beliefs and risk beliefs.

H1.7: There is a positive relationship between perceived justice/trusting beliefs and performance expectancies.

H1.8: There is a negative relationship between information privacy concerns and beliefs/perceived justice.

H1.9: There is a direct positive relationship between information privacy concerns and risk beliefs.

H1.10: There is a direct positive relationship between information privacy concerns and intention to share information with recruiters and potential employers who use SNSs to recruit employees.
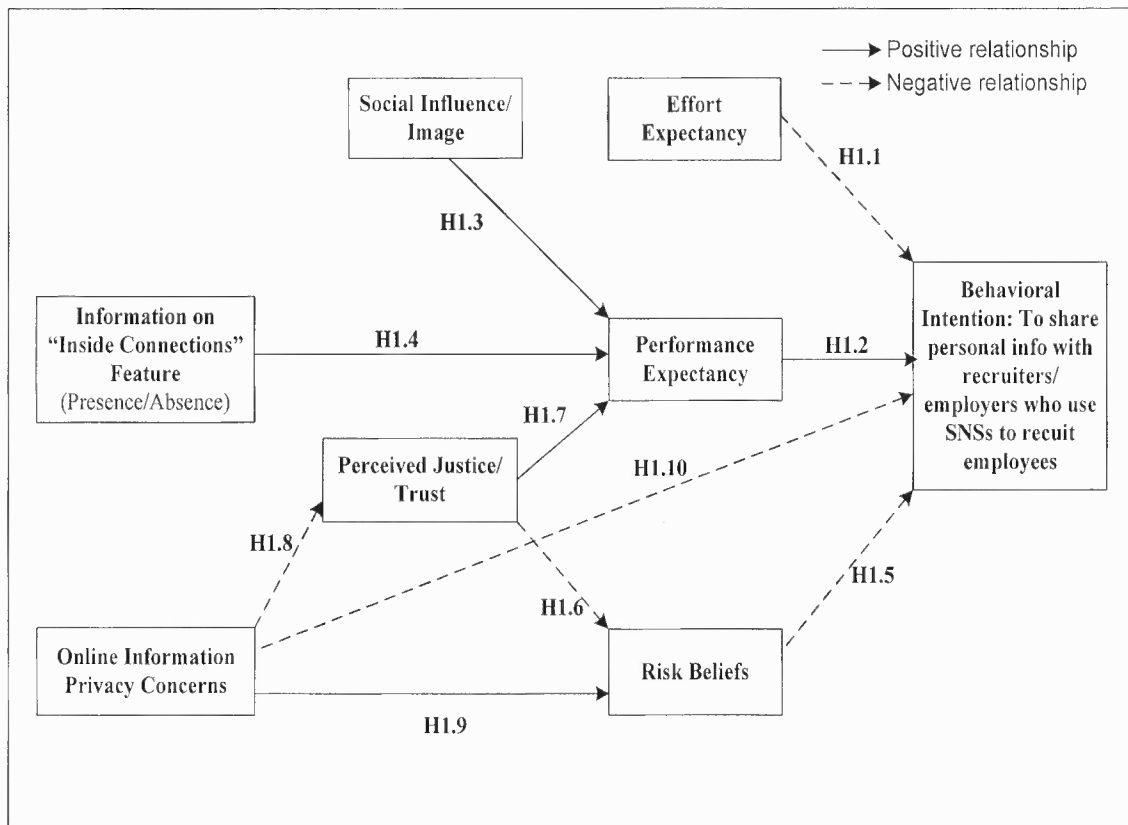
Figure 8.2 Alternative research model.

8.11 Descriptive Statistics

8.11.1 Predicting Variables

The descriptive statistics discussed in this section are based on the latent variable (construct) scores computed in PLS from the variables retained in the final measurement model. The means and standard deviations of these scores are shown in Table 8.21 for each institution and for the pooled dataset. In PLS, the missing values were replaced with series means. Hence, the Ns for NJIT and Rutgers were 131 and 358, respectively for all latent variables. For summary statistics on each measured item, refer to Appendix E.

Table 8.21 Descriptive Statistics —Predicting Variables

Variables	NJIT (N=131)		Rutgers New Brunswick (N=359)		NJIT_Rutgers Pooled (N=490)	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
EE - Effort Expectancy	3.41	1.541	3.27	1.395	3.31	1.435
JT - Perceived Justice/Trusting Beliefs	3.66	1.457	3.36	1.194	3.44	1.259
PE - Performance Expectancy [†]	4.07	1.320	3.64	1.384	3.76	1.380
PC - Privacy Concerns (Collection of Personal Information)	4.34	1.436	4.39	1.484	4.38	1.470
Risk - Risk Beliefs	4.06	1.375	4.43	1.284	4.33	1.318
SI - Social Influence [†]	2.59	1.496	2.32	1.384	2.39	1.419

† – Reduced scales; Inside connections information measured using 0 and 1 is not included in this table

An empirical comparison of means of latent variable (construct) scores for the two institutions (refer to Table 8.21) was performed using the t-test. The results, shown in Table 8.22, suggested that there was no significant difference in means for the constructs social influence, effort expectancy and privacy concerns. However, for performance expectancy and risk beliefs, the differences were significant at the 0.01 level. For perceived justice/trusting beliefs, the difference was significant at the 0.01 level. On average, respondents associated with NJIT seemed to have expected better results from using SNSs to secure jobs. They also did not believe that applying for jobs using SNSs was as risky as the Rutgers NB affiliates believed it was. Finally, on average, they were more inclined to trust recruiters and potential employers with the use of information discovered in SNSs in the job candidate selection process.

Table 8.22 Comparison of Affiliation Means for Predicting Variables

Null Hypotheses (H_0)	t- value	Sig	Comments
Mean of EE (NJIT) = Mean of EE (Rutgers NB)	0.921	.358	Do not reject null hypothesis
Mean of JT (NJIT) = Mean of JT (Rutgers NB)	2.277*	.023	Reject null hypothesis
Mean of PE [†] (NJIT) = Mean of PE [†] (Rutgers NB)	3.098**	.002	Reject null hypothesis
Mean of PC (NJIT) = Mean of PC (Rutgers NB)	-0.293	.769	Do not reject null hypothesis
Mean of Risk [†] (NJIT) = Mean of Risk [†] (Rutgers-NB)	-2.746**	.006	Reject null hypothesis
Mean of SI [†] (NJIT) = Mean of SI [†] (Rutgers NB)	1.842	.066	Do not reject null hypothesis

*- Significant at the 0.05 level (2-tailed); **- Significant at the 0.01 level (2-tailed)

† – Reduced scales; Inside connections information measured using 0 and 1 is not included in this table

8.11.2 Behavioral Intention to Share Personal Information

For each institution, the mean, standard deviation and frequency distribution for the variable "intention to share personal information with recruiters and potential employers using SNSs to recruit job candidates" (BI2) are shown in Table 8.23. For each item, the mean of responses from NJIT was compared with that of responses from Rutgers NB. The results of these t-test comparisons are shown in Table 8.24. Also, the frequency distributions of responses from the two institutions were compared, using chi-squared (χ^2), in order to determine whether responses and affiliation were statistically independent. The computed chi-squared statistics are shown in Table 8.25.

Table 8.23 Descriptive Statistics —Intention to Share Personal information

Intention to Share Personal Information	Affiliation	Total	1	2	3	4	5	6	7
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates? (1=Very unlikely; 7=Very likely)	NJIT Mean = 3.63 S. D. = 1.726	130	24	12	15	40	21	12	6
		100.0%	18.5%	9.2%	11.5%	30.8%	16.2%	9.2%	4.6%
	Rutgers NB Mean = 3.56 S. D. = 1.720	356	54	57	57	78	64	26	20
		100.0%	15.2%	16.0%	16.0%	21.9%	18.0%	7.3%	5.6%
	Total Mean = 3.58 S. D. = 1.720	486	78	69	72	118	85	38	26
		100.0%	16.0%	14.2%	14.8%	24.3%	17.5%	7.8%	5.3%

Table 8.24 Comparison of Affiliation Means —Intention to Share Personal Information

Null Hypotheses (H_0)	t-Statistic	Sig	Comments
Mean of BI2 (NJIT) = Mean of BI2 (Rutgers-NB)	0.407	0.684	Do not reject null hypothesis

Table 8.25 Test of Independence between Affiliation and Behavioral Intention to Share Personal Information

Null Hypotheses (H_0)	χ^2-Statistic	Sig	Comments
Affiliation and responses to BI2 are statistically independent	8.904	0.179	Do not reject null hypothesis

The descriptive statistics and results shown in tables 8.23 to 8.25 suggest the following: in regard to intention to share personal information.

- Respondents were generally more inclined to not share personal information with recruiters and potential employers using SNSs to recruit job candidates. Forty five percent (45%) selected values less than 4 on the scale, while 30.6% selected values greater than 4. The modal response for each institution and in general, however, was undecided (4). This suggested that almost 25% of respondents were

uncertain about whether they would share personal information with recruiters and potential employers using SNSs to recruit job candidates.

- On average, there was no significant difference in the intention to share information with recruiters and potential employers using SNSs to recruit job candidates for NJIT affiliates and for Rutgers NB affiliates.

- Affiliation and intention to share information with recruiters and potential employers using SNSs to recruit job candidates (BI2) are statistically independent. The distributions of their responses for BI2 were similar.

8.11.3 Behavioral Intention - Likelihood of Using SNSs to Apply for Jobs

For each institution, the mean, standard deviation and frequency distribution for the responses to the item measuring behavioral intention to apply for a job using SNSs are shown in Table 8.26. The mean of responses from NJIT was compared with that of responses from Rutgers NB. The results of these t-test comparisons are shown in Table 8.27. Also, the frequency distributions of responses from the two institutions were compared, using chi-squared (χ^2), in order to determine whether responses and affiliation were statistically independent. The computed chi-squared statistics are shown in Table 8.28.

Table 8.26 Descriptive Statistics —Intention to Use SNSs to Apply for Jobs

Behavioral Intentions	Affiliation	Total	1	2	3	4	5	6	7
BI - How likely are you to apply for a job through social networking sites? (1=Very unlikely; 7=Very likely)	NJIT Mean = 3.90 S. D. = 1.988	130	22	18	13	23	21	18	15
		100.0%	16.9%	13.8%	10.0%	17.7%	16.2%	13.8%	11.5%
	Rutgers NB Mean = 3.42 S. D. = 1.872	357	70	75	40	57	58	35	22
		100.0%	19.6%	21.0%	11.2%	16.0%	16.2%	9.8%	6.2%
	Total Mean = 3.55 S. D. = 1.913	487	92	93	53	80	79	53	37
		100.0%	18.9%	19.1%	10.9%	16.4%	16.2%	10.9%	7.6%

Table 8.27 Comparison of Affiliation Means —Intention to Use SNSs to Apply for Jobs

Null Hypotheses (H$_0$)	t-Statistic	Sig	Comments
Mean of BI1 (NJIT) = Mean of BI1 (Rutgers-NB)	2.447	0.015*	Reject null hypothesis

*. Significant at the 0.05 level (2-tailed); **. Significant at the 0.01 level (2-tailed)

Table 8.28 Test of Independence between Affiliation and Intention to Use SNSs to Apply for Jobs

Null Hypotheses (H$_0$)	χ^2-Statistic	Sig	Comments
Affiliation and responses to BI1 are statistically independent	8.280	0.218	Do not reject null hypothesis

The statistics on behavioral intention to apply for jobs using SNSs provided in Tables 8.26 to 8.28 suggest the following:

- On average, respondents affiliated with both NJIT and Rutgers NB seemed to be leaning away from being likely to apply for a job through SNSs. The averages of responses from both institutions were less than four (4) and 48.9% of them selected values less than 4 as opposed to 34.7% who selected values greater than 4.

- On average, respondents affiliated with Rutgers seemed to be even less inclined to do so than those from NJIT as there were significant differences in means.

- There was no significant difference in the distributions of responses from NJIT and from Rutgers NB.

8.11.4 Preference for the Use of Job Boards over Social Networking Sites

A single-item seven-point semantic differential scale was used to determine preference for the use of traditional job boards over SNSs in applying for jobs. As shown in Table 8.29, participants were asked to indicate their agreement or disagreement with the

following statement: "I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job." For each affiliation and in general, the means and standard deviations of the measured variable "preference for job boards over SNS in applying for a job" are presented in Table 8.29. The obtained means, which were greater than the mid-point of four (4), suggest that generally respondents had a preference for the use traditional job boards over SNSs. The results of a comparison of means for the institutions, shown in Table 8.30, also suggest Rutgers (NB) affiliates had a significantly greater preference for job boards than NJIT affiliates.

Table 8.29 Descriptive Statistics —Preference for Job Boards over SNSs to Apply for Jobs

Preference for Job Boards	Affiliation	Total	1	2	3	4	5	6	7
Prefer JB - I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job (1=Strongly disagree; 7= Strongly agree)	NJIT Mean = 4.95 S. D. = 1.738	128	6	7	13	22	25	23	32
		100.0%	4.7%	5.5%	10.2%	17.2%	19.5%	18.0%	25.0%
	Rutgers NB Mean = 5.45 S. D. = 1.634	356	11	12	27	42	52	87	125
		100.0%	3.1%	3.4%	7.6%	11.8%	14.6%	24.4%	35.1%
	Total Mean = 5.32 S. D. = 1.675	484	17	19	40	64	77	110	157
		100.0%	3.5%	3.9%	8.3%	13.2%	15.9%	22.7%	32.4%

Table 8.30 Comparison of Means —Preference for Job Boards over SNSs to Apply for Jobs

Null Hypotheses (H_0)	t- Statistic	Sig	Comments
Mean of Prefer JB (NJIT) = Mean of Prefer JB (Rutgers-NB)	-2.913	.004**	Reject null hypothesis

** $p < 0.01$

In general, 71% of respondents preferred to various extents the use of traditional job boards over SNSs in applying for jobs (refer to Table 8.29); that is, they selected values 5 and above. A comparison of frequency distributions (results shown in Table

8.31) suggested that although the percentage of respondents from Rutgers NB (74.1%) who preferred traditional job board was greater than that of NJIT (62.5%), affiliation and preference for job boards over SNSs in applying for a job were statistically independent. In general, respondents from both institutions were leaning towards a preference for job boards. This negative skewness in the distribution is reflected in the computed $Z_{(skewness)}$ statistic of -7.721 for preference for job boards over SNSs (Pref_JB) shown in Table E.5 in Appendix E. A $Z_{(skewness)}$ statistic of -7.721, which is less than -2.58 suggest that the distribution for preference for job boards over SNSs departs significantly from the normal distribution.

Table 8.31 Test of Independence between Affiliation and Preference for Job Boards over SNSs to Apply for

Null Hypotheses (H_0)	χ^2- Statistic	Sig	Comments
Affiliation and responses to Prefer JB are statistically independent	10.70	0. 098	Do not reject null hypothesis

8.12   Chapter Summary

The five primary objectives of this chapter were: (1) to provide a statistical overview of respondents, in terms of demographics, employment status, occupation, and membership and experience with SNSs; (2) to compare the subsample of respondents from the two main sources of subjects included in the sampling frame; (3) to assess whether the measured variables met some key assumptions (e.g. normality of distribution) in order to determine the appropriate transformations and statistical techniques to be performed in interpreting the data; (4) to assess the psychometric properties of the proposed

measurement model and to refine measures relevant to the research model in order to achieve construct validity; and (5) to describe briefly the key variables in this investigation based on summary statistics.

The sample of 490 from whom usable responses were obtained was diverse. However, it comprised more women than men and a vast majority of individuals under the age of 30 years. Over 70% of this sample had at least a Bachelor's degree, and over 62% were actively seeking a job. The occupational groups most represented were Architecture and Engineering; Business and Financial Operations; and, Computer and Mathematical Sciences. Over 90% of the respondents were members of at least one SNS; and of these members, over 93% had at least one year of experience in using SNSs.

Comparisons, in terms of characteristics such as demographics and employment status, were made between the respondents affiliated with the two institutions that participated in this study. The results of these comparisons suggested that the subsamples from the two sources of respondents were sufficiently different to justify the use of a variable that identifies the source (or affiliated institution) of survey respondents in analyses involving data pooled together from both sources (affiliated institutions).

Skewness and Kurtosis statistics computed for the dataset from each institution indicated that the distribution of a number of the variables, particularly in the case of the Rutgers NB dataset, deviated from the normal distribution. It was decided that two of the measured variables (items) for social influence (SI4 and SI5) be transformed before performing exploratory factor analysis on all items measuring the independent variables in the research model. Only those two items had distributions that departed significantly from normal in the NJIT dataset. The large size of the Rutgers NB sample (N=359) and

the guidelines in Hair et al. (2006) provided justification for not transforming any measured variable (item) besides SI4 and SI5 before performing exploratory factor analysis on the Rutgers NB dataset. For consistency, SI4 and SI5 were also transformed before performing exploratory analysis with the Rutgers NB dataset.

Exploratory factor analysis followed by confirmatory factor analysis suggested that the psychometric properties of the initially proposed measurement model were not adequate. Hence, this model was iteratively revised in order to attain a simple factor structure in which all aspects of construct validity were established, that is, (1) convergent validity; (2) internal consistency reliability, which is also an indicator of convergent validity; (3) discriminant validity; (4) nomological validity; and (5) face or content validity. The final measurement model that produced a simple factor structure excluded some items from the initial scales proposed for measuring social influence, performance expectancy and behavioral intention. Consequently, the construct "social influence" was redefined because its final measure reflected more accurately the degree to which the use of SNSs in applying for jobs is perceived to enhance one's image or status in one's social system. Also, the focus of the variable "behavioral intention" changed to refer specifically to the likelihood of sharing personal information with recruiters/potential employers who use SNSs to recruit employees. An alternative model, based on prior theory, which better captures the relationships among the newly defined constructs, was proposed.

Based on summary statistics (means, standard deviations and frequencies) and empirical comparisons, some conclusions were drawn with respect to key variables in this investigation. On average, there are significant differences between respondents from

NJIT and those from Rutgers NB in terms of their performance expectancy, perceived justice/trusting beliefs and risk beliefs. NJIT respondents had greater expectations with respect to the utility of SNSs in helping them secure a job. They were more trusting of how information about them, discovered on SNSs, would be used in the candidate selection process, and they did not feel that using SNSs to apply for jobs was as risky as the Rutgers NB respondents thought it was.

Almost one out of four respondents (24.3%) was uncertain about whether they would share personal information with recruiters/potential employers who use SNSs to recruit employees. However, overall, respondents were less likely to do so. On average, NJIT respondents were more inclined to apply for jobs using SNSs to apply for a job than those affiliated with Rutgers. Although both NJIT and Rutgers NB respondents seemed to prefer traditional job boards over SNSs in applying for jobs, the average preference was significantly greater for Rutgers NB respondents.

CHAPTER 9

TEST OF HYPOTHESES AND RESEARCH MODEL

9.1 Introduction

In the previous chapter, the initially proposed measurement model was evaluated using partial least squares (PLS). This model did not have a good fit with the data. Accordingly, it was revised by dropping a few measured variables (items) that seemed to be problematic in establishing construct validity. Some of the modifications made to the initial measurement model were radical enough to necessitate the investigation of an alternative research model.

Four notable differences between the original research model and the alternative one are: (1) the construct "Social Influence" in the original model is referred to as "social influence/image" in the alternative one; (2) the dependent variable "behavioral intentions" focuses specifically on likelihood to share personal information with recruiters/potential employers using SNSs to recruit employees; (3) social influence is hypothesized to predict performance expectancy; and (4) the variable "information privacy concerns" is posited to be a direct predictor of risk beliefs and behavioral intention. The investigation of this alternative research model ensures that face validity is more precisely established and that reference is made to accurately labeled constructs in the interpretation of results. In this chapter, the results from testing the structural component of the alternative research model are examined in order to determine whether or not hypothesized relationships among the constructs are supported by the data collected.

The measured variable "How likely are you to apply for a job through social networking sites?" is excluded from the alternative research model as explained in Chapter 8. However, this variable is paramount in this investigation. Thus, exploratory analyses on potential predictors of behavioral intention to use SNSs to apply for jobs are presented. Results on exploratory analyses examining potential predictors of preference for job boards over SNSs and vice versa are also reported in this chapter.

9.2 Results on Testing of Alternative Research Model and Associated Hypotheses

SmartPLS™ 2.0 (Ringle et al. 2005), as noted in Chapter 8, was used to run the partial least squares algorithm for testing the alternative research model. Figure 9.1 illustrates the path coefficients for each hypothesized relationship and the variance explained in dependent constructs. The PLS algorithm makes no assumption about the distribution of variables, and thus, the significance of path coefficients can only be assessed with the Bootstrap method. The results from the Bootstrap computation (using 500 iterations of the model testing with subsamples of size 100) are shown in Table 9.1.

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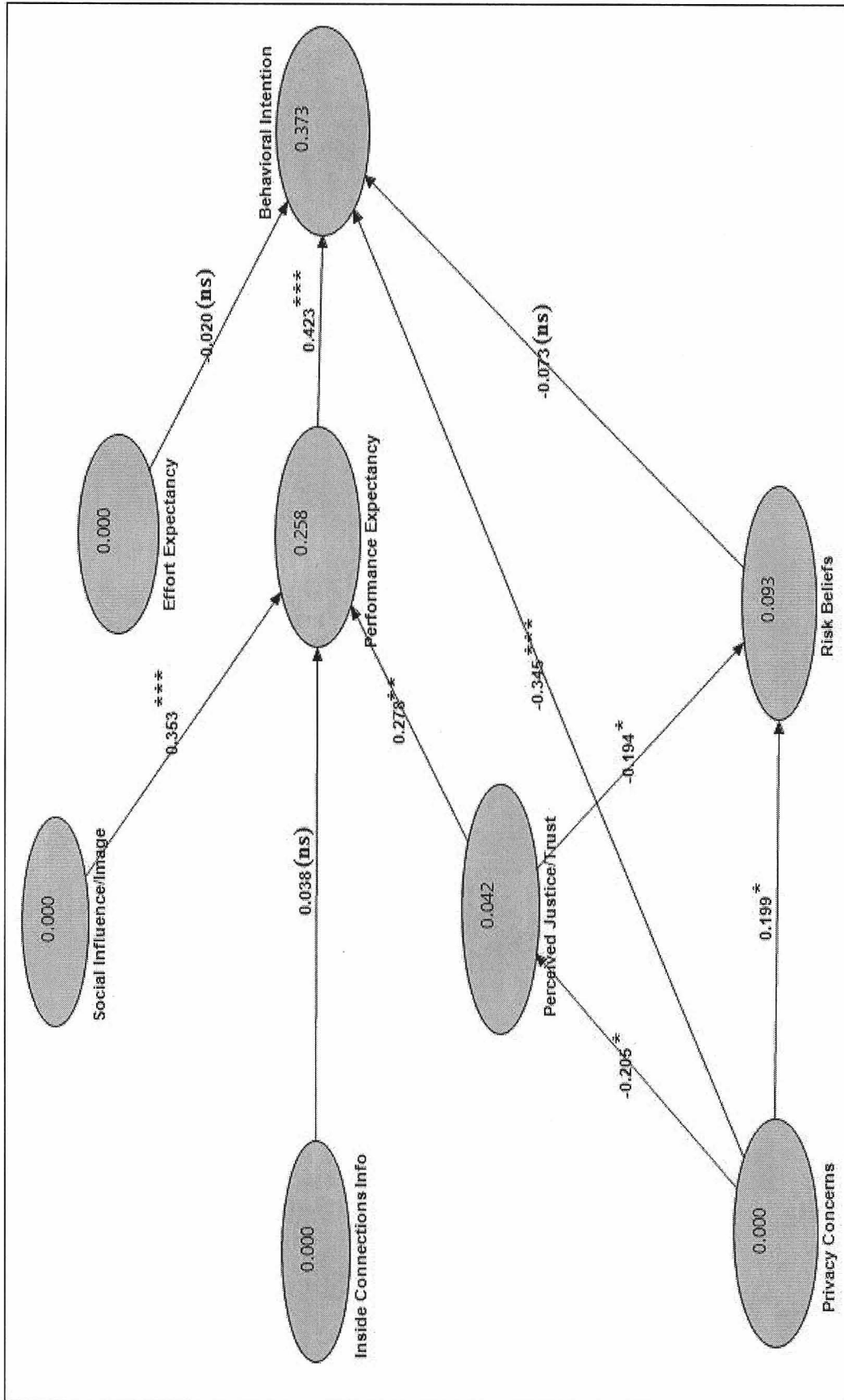
Figure 9.1 Results of PLS test of alternative research model: Path coefficients and levels of significance.

The results illustrated in Figure 9.1 suggest that 37.3% of the variance in attitudes towards the use of SNSs to apply for jobs is explained by the research model. According to Chin (1998, p.323) R-square results above the cutoff values of 0.67, 0.33 and 0.19 can be described as "substantial"; "moderate" and "weak", respectively. Based on this guideline, the alternative model investigated has moderate explanatory power of intention to share personal information with recruiters/potential employers using SNSs to recruit employees.

Performance expectancy is the most significant direct predictor of attitudes towards the use of SNSs to apply for a job, followed by privacy concerns (refer to Table 9.1 and Figure 9.1). Hypotheses about relationships between the following pairs of variables were not supported: absence/presence of inside connections information and performance expectancy; effort expectancy and behavioral intention; and risk perceptions and behavioral intention. A summary of the results of the hypotheses testing is provided in Table 9.2.

Table 9.1 Alternative Model Path Coefficients (T Statistics and Significance)

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Behavioral Intention (H1.1)	-0.020	0.207	0.418
Performance Expectancy -> Behavioral Intention (H1.2)	0.423***	4.525	0.000
Social Influence/Image -> Performance Expectancy (H1. 3)	0.353***	3.399	0.000
Inside Connections Info -> Performance Expectancy (H1.4)	0.038	0.436	0.331
Risk Beliefs -> Behavioral Intention (H1.5)	-0.073	0.737	0.231
Perceived Justice/Trust -> Risk Beliefs (H1.6)	-0.194*	1.652	0.050
Perceived Justice/Trust -> Performance Expectancy (H1.7)	0.278**	2.595	0.005
Privacy Concerns -> Perceived Justice/Trust (H1.8)	-0.205*	1.791	0.037
Privacy Concerns -> Behavioral Intention (H1.9)	-0.345**	3.830	0.000
Privacy Concerns -> Risk Beliefs (H1.10)	0.199*	1.734	0.042

$* - p < 0.05; ** - p < 0.01; *** - p < 0.001$

Table 9.2 Summary of Results on Alternative Research Model Hypotheses Testing

Hypotheses	Results
H1.1: Effort expectancy is negatively associated with intention to share information with recruiters and potential employers who use SNSs to recruit employees.	Not supported
H1.2: Performance expectancy is positively associated with intention to share information with recruiters and potential employers who use SNSs to recruit employees.	Supported
H1.3: Social influence/Image is positively associated with performance expectancy.	Supported
H1.4: Job seekers who are provided with information about the "inside connections" feature are likely to have greater performance expectancies than those who are not provided with this information.	Not supported
H1.5: There is a negative association between risk beliefs and intention to share information with recruiters and potential employers who use SNSs to recruit employees.	Not supported
H1.6: There is a negative relationship between perceived justice/trusting beliefs and risk beliefs.	Supported
H1.7: There is a positive relationship between perceived justice/trusting beliefs and performance expectancies.	Supported
H1.8: There is a negative relationship between information privacy concerns and beliefs/perceived justice.	Supported
H1.9: There is a direct positive relationship between information privacy concerns and risk beliefs.	Supported
H1.10: There is a direct positive relationship between information privacy concerns and intention to share information with recruiters and potential employers who use SNSs to recruit employees.	Supported

In view of the characteristic differences, discussed in Sections 8.2 to 8.4, between the samples from the two sources of respondents (NJIT and Rutgers New Brunswick), assessments of the initial measurement model and the structural model for the alternative research model were done individually for each sample. Also, similar model assessments were done separately for respondents who indicated that they were active job seekers and those who indicated that, to some extent, they had used SNSs to apply for jobs in the six-month period preceding the study. The results of these individual tests, which are slightly different from those obtained for the entire sample, are presented in Appendix F.

9.3 Exploratory Analysis on Factors Influencing Job Boards/SNSs Preference and Intentions to Use SNSs to Apply for Jobs

A secondary objective of this study, as noted in Chapter 5, was to explore the factors that may impact preference for traditional job boards over SNSs or vice versa. Also, as noted in Chapter 8 and in the introduction to this chapter, possible predictors of behavioral intentions to use SNSs to apply for a job would be investigated but not as part of a theoretical framework that takes into consideration the relationships among those predictors.

This section presents the results of tests that compared the means of the measured variables "preference for job boards over SNSs" (Prefer JB) and "intentions to use SNSs to apply for a job" (BI1) for various groups (e.g. groups based on demographics). This section also includes results of analyses that examined associations between variables that measured individual experiences (e.g. exposure to the use and misuse of information collected from the Internet) and (a) intentions to SNSs to apply for a job, and (b) preference for job boards over SNSs. As noted in Section 8.11, the distributions of

responses on "preference for job boards over SNSs" and "intentions to use SNSs to apply for a job" departed significantly from the normal distribution. Accordingly, appropriate non-parametric tests were used.

9.3.1 Effects of Demographics

The non-parametric Mann-Whitney U test was used to compare the median for males with that for females for the variables "preference for job boards over SNSs" and "intentions to use SNSs to apply for jobs." The results of this test are shown in Tables 9.3 and 9.4. The medians of responses for males and females on preference for job boards over SNSs were the same, as shown in Table 9.3. Thus it was not surprising that the Mann-Whitney test proved a non significant difference. With regard to responses to intentions to use SNSs to apply for jobs, although the median was higher for males than for females, the Mann-Whitney U statistic, shown in Table 9.4, suggests that the difference was not significant.

Table 9.3 Gender and Preference for Job Boards over SNSs

Gender	Preference for Job Boards over SNSs				Mann-Whitney U	Sig. (2-tailed)
	N	Mean	Std. Dev	Median		
Female	268	5.38	1.643	6.00	27720	0.410
Male	216	5.25	1.715	6.00		
Total	484	5.32	1.675	6.00		

Table 9.4 Gender and Behavior Intentions to Use SNSs to apply for jobs

Gender	Intentions to Use SNSs to apply for jobs				Mann-Whitney U	Sig. (2-tailed)
	N	Mean	Std. Dev	Median		
Female	268	3.41	1.855	3.00	26640	0.077
Male	219	3.73	1.972	4.00		
Total	487	3.55	1.913	4.00		

Kruskal-Wallis one way analysis of variance by ranks test was used to determine if the respondents in various age groups were different with respect to their preference for job boards over SNSs and their intentions to use SNSs to apply for jobs. The results of this analysis, shown in Tables 9.5 and 9.6, suggest that there were significant differences among the age groups with regard to preference for job boards over SNSs and intentions to use SNSs to apply for jobs.

Age group is an ordinal variable. Therefore, Spearman's rho non-parametric correlation coefficients were computed in order to determine whether there were linear relationships between age and preference for job boards over SNSs and between age and intentions to use SNS to apply for a job. The computed Spearman's rho coefficients, shown in Tables 9.5 and 9.6, suggest that (a) the negative relationship between age group and preference for job boards over SNSs is marginally significant at the 0.05 level, and (b) the positive relationship between age and intentions to use SNSs to apply for jobs is significant at the 0.01 level.

Table 9.5 Age and Preference for Job Boards over SNSs

Age Group	Preference for Job Boards over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
20 and Under	67	5.49	1.521	6.00	K-W (χ^2) = 9.532*	.049
21-30	365	5.36	1.677	6.00		
31-40	25	5.00	1.658	5.00	Spearman's rho = -.089*	.050
41-50	18	5.06	1.955	6.00		
Over 50	9	3.78	1.563	4.00		
Total	484	5.32	1.675	6.00		

K-W Kruskal-Wallis Test; * p < 0.05

Table 9.6 Age and Intentions to Use SNSs to Apply for Jobs

Age Group	Intentions to Use SNSs to Apply for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
20 and Under	66	3.08	1.676	3.00	K-W (χ^2) = 19.075**	.001
21-30	367	3.52	1.893	3.00		
31-40	26	4.08	1.958	4.00	Spearman's rho = .155**	.001
41-50	18	3.67	2.249	4.00		
Over 50	10	6.20	1.033	6.50		
Total	487	3.55	1.913	4.00		

K-W Kruskal-Wallis Test; ** p < 0.01

Kruskal-Wallis (K-W) one way analysis of variance by ranks test was used to determine if the participants at various levels of education were different with respect to their preference for job boards over SNSs and their intentions to use SNSs to apply for jobs. The results of this analysis suggest that there was no significant difference in preference for job boards over SNSs among groups of respondents based on level of education (refer to Table 9.7). However, based on the K-W (χ^2) statistic shown in Table 9.8, groups of respondents at various levels of education were significantly different with regard to intentions to use SNSs to apply for jobs.

Spearman's rho non-parametric correlation coefficient was computed in order to determine whether there was a linear relationship between level of education and intentions to use SNS to apply for a job. The computed Spearman's rho coefficient, shown in Table 9.8, suggests that the positive relationship between level of education and intentions to use SNSs to apply for jobs is significant at the 0.01 level. However, the highest level of intention to use occurs at the Masters' level rather the PhD level. It was apparent, based on the means and medians in Table 9.7, that a linear relationship did not exist between level of education and preference for job boards over SNSs and Spearman's correlation test of this relationship did not prove otherwise.

Table 9.7 Education and Preference for Job Boards over SNSs

Education Level	Preference for Job Boards over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Pursuing Bachelor's Degree	140	5.49	1.611	6.00	K-W (χ^2) = .670	.955
Bachelor's Degree	182	5.27	1.666	6.00		
Pursuing Master's Degree	46	5.61	1.483	6.00	Spearman's rho = -.062	.176
Master's Degree	82	4.93	1.871	5.00		
Pursuing or has Doctoral Degree	22	5.55	1.503	6.00		
Total	472	5.32	1.671	6.00		

K-W Kruskal-Wallis Test

Table 9.8 Education and Intentions to Use SNSs to Apply for Jobs

Education Level	Intentions to Use SNSs to Apply for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Pursuing Bachelor's Degree	139	3.12	1.839	2.00	K-W (χ2) = 13.608**	.009
Bachelor's Degree	185	3.72	1.946	4.00		
Pursuing Master's Degree	46	3.48	1.859	3.50	Spearman's rho = .142**	.002
Master's Degree	82	4.06	1.940	4.00		
Pursuing or has Doctoral Degree	23	3.61	1.828	4.00		
Total	475	3.55	1.913	4.00		

K-W Kruskal-Wallis Test; ** $p < 0.01$

9.3.2 Effects of Occupation

Kruskal-Wallis (K-W) one way analysis of variance by ranks test was used to determine if the respondents in various occupational groups were different with respect to their preference for job boards over SNSs and their intentions to use SNSs to apply for jobs. The results of this analysis suggest that there was no significant difference in preference for job boards over SNSs among occupational groups (refer to Table 9.9). Also, occupational groups were not significantly different with regard to intentions to use SNSs to apply for jobs (refer to Table 9.10).

Table 9.9 Occupation and Preference for Job Boards Over SNSs

Occupation	Preference for Job Boards Over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Architecture and Engineering	80	5.64	1.52	6.00	K-W (χ2) = 18.141	.111
Arts, Design, Entertainment, Sports, and Media	29	5.34	1.758	6.00		
Business and Financial Operations	76	5.68	1.481	6.00		
Community and Social Services	26	5.65	1.384	6.00		
Computer and Mathematical	55	5.02	1.831	5.00		
Education, Training, and Library	37	4.97	1.951	5.00		
Healthcare Practitioners and Technicians	34	5.44	1.58	6.00		
Legal	12	4.58	1.621	4.50		
Life, Physical, and Social Science	27	5.48	1.528	6.00		
Management	18	5.00	1.283	5.00		
Office and Administrative Support	10	4.30	2.058	4.50		
Sales, Marketing and Related	31	5.32	1.904	6.00		
Other	30	5.00	1.781	5.00		
Total	465	5.34	1.668	6.00		

K-W Kruskal-Wallis Test

Table 9.10 Occupation and Intentions to Use SNSs to Apply for Jobs

Occupation	Intentions to Use SNSs to Apply for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Architecture and Engineering	81	3.51	1.995	4.00	K-W (χ2) = 18.927	.090
Arts, Design, Entertainment, Sports, and Media	30	4.13	1.925	5.00		
Business and Financial Operations	77	3.61	1.893	3.00		
Community and Social Services	26	3.46	1.964	3.00		
Computer and Mathematical	55	3.56	1.864	4.00		
Education, Training, and Library	38	3.39	1.966	4.00		
Healthcare Practitioners and Technicians	34	2.74	1.639	2.00		
Legal	12	2.92	1.564	4.00		
Life, Physical, and Social Science	27	2.96	1.675	2.00		
Management	18	4.00	1.879	4.00		
Office and Administrative Support	10	4.40	1.713	5.00		
Sales, Marketing and Related	31	3.84	2.223	4.00		
Other	29	4.03	1.842	4.00		
Total	468	3.55	1.915	4.00		

K-W Kruskal-Wallis Test

9.3.3 Effects of Employment Status

Possible disparities among groups of respondents of different employment status with regard to preference for job boards over SNSs and intentions to use SNSs to apply for jobs were assessed using Kruskal-Wallis (K-W) one way analysis of variance by ranks. The results of this analysis suggests that respondents of various employment status were very similar with regard to their preference for job boards over SNSs in applying for jobs (refer to Table 9.11) and that they were somewhat similar with regard to their likelihood of using SNSs to apply for jobs (refer to Table 9.12). As would be expected, those who were unemployed and seeking a new job were most likely to use an SNS to apply for job.

Table 9.11 Employment Status and Preference for Job Boards over SNSs

Employment Status	Preference for Job Boards over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Employed full-time or part-time and not actively seeking a new job	139	5.39	1.755	6.00	K-W (χ2) = 1.562	.668
Employed full-time or part-time and actively seeking a new job	134	5.26	1.681	6.00		
Unemployed and not actively seeking a new job	42	5.52	1.469	6.00		
Unemployed and actively seeking a new job	169	5.26	1.659	6.00		
Total	484	5.32	1.675	6.00		

K-W Kruskal-Wallis Test

Table 9.12 Employment Status and Intentions to Use SNSs to Apply for Jobs

Employment Status	Intentions to Use SNSs to Apply for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Employed full-time or part-time and not actively seeking a new job	141	3.44	1.987	3.00	K-W (χ2) = 7.462	.059
Employed full-time or part-time and actively seeking a new job	134	3.46	1.862	4.00		
Unemployed and not actively seeking a new job	42	3.05	1.752	2.00		
Unemployed and actively seeking a new job	170	3.84	1.902	4.00		
Total	487	3.55	1.913	4.00		

K-W Kruskal-Wallis Test

9.3.4 Effects of Membership in and Experience with SNSs

The non-parametric Mann-Whitney U test was used to compare the median value for members of at least one SNS with the median value for non-members for the variables "preference for job boards over SNSs" and "intentions to use SNSs to apply for jobs." The results of this test are shown in Tables 9.13 and 9.14. With regard to preference for job boards over SNSs, although the median was higher for SNS members than for non-

members, the Mann-Whitney U statistic suggests that the difference is not significant. The median values of responses for members of SNSs and for non-members were the same for intentions to use SNSs to apply for jobs, as shown in Table 9.14. Thus it was not surprising that the results of the Mann-Whitney test indicated a non significant difference.

Table 9.13 Membership in SNSs and Preference for Job Boards over SNSs

Membership in at least one SNS	Preference for Job Boards over SNSs				Mann-Whitney U	Sig
	N	Mean	Std. Dev	Median		
Yes	440	5.35	1.674	6.00	8584	.203
No	44	5.05	1.684	5.00		
Total	484	5.32	1.675	6.00		

Table 9.14 Membership in SNSs and Intentions to Use SNSs to Apply for Jobs

Membership in at least one SNS	Intentions to Use SNSs to Apply for Jobs				Mann-Whitney U	Sig
	N	Mean	Std. Dev	Median		
Yes	443	3.55	1.913	4.00	9710	.967
No	44	3.57	1.934	4.00		
Total	487	3.55	1.913	4.00		

Kruskal-Wallis (K-W) one way analysis of variance by ranks test was used to determine if the participants' preference for job boards over SNSs and their intentions to use SNSs to apply for jobs varied based on their extent of experience with SNSs. The results of this analysis are shown in Tables 9.15 and 9.16. Also, since the variable "experience with SNSs" is ordinal, Spearman's rho non-parametric correlation coefficients were computed in order to determine whether there were linear relationships between experience with SNSs and preference for job boards over SNSs and between

experience with SNSs and intentions to use SNS to apply for a job. The computed chi-squared ($\chi 2$) statistics and Spearman's rho coefficients, shown in Tables 9.15 and 9.16, suggest the following: (a) preference for job boards over SNSs varied according to extent of experience with SNSs; (b) the positive relationship between experience with SNSs and preference for job boards over SNSs is significant at the 0.01 level, and (c) although intentions to use SNSs to apply for jobs varied according to extent of experience with SNSs, there is no significant linear relationship between experience with SNSs and intentions to use SNSs to apply for jobs.

Table 9.15 Experience with SNSs and Preference for Job Boards over SNSs

Length of time since start of use of SNSs	Preference for Job Boards over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Less than 1 year	27	4.33	1.881	4.00	K-W ($\chi 2$) = 21.043**	.001
> 1 year and < 2 years	31	4.58	1.803	5.00		
> 2 years and < 3 years	67	5.09	1.897	6.00	Spearman's rho = .153**	.001
> 3 years and < 4 years	82	5.73	1.370	6.00		
> 4 years and < 5 years	118	5.47	1.500	6.00		
> 5 years	115	5.54	1.672	6.00		
Total	440	5.35	1.674	6.00		

K-W Kruskal-Wallis Test; ** $p < 0.01$

Table 9.16 Experience with SNSs and Intentions to Use SNSs to Apply for Jobs

Length of time since start of use of SNSs	Intentions to Use SNSs to Apply for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
Less than 1 year	28	4.68	2.001	5.00	K-W ($\chi 2$) =16.229**	.006
> 1 year and < 2 years	32	3.56	1.883	3.50		
> 2 years and < 3 years	68	3.71	1.924	4.00	Spearman's rho = -.037	.437
> 3 years and < 4 years	81	3.00	1.732	2.00		
> 4 years and < 5 years	119	3.45	1.867	3.00		
> 5 years	115	3.66	1.955	4.00		
Total	443	3.55	1.913	4.00		

K-W Kruskal-Wallis Test; ** $p < 0.01$

9.3.5 Effects of Past Privacy Invasion Experience

Prior experience with incidents of privacy invasion was measured by asking participants to indicate on a scale of 1 to 7 (1 representing never and 7 representing very frequently), the frequency with which they have personally been the victim of what they felt was an improper invasion of their online privacy. Refer to Appendix E for frequency distribution of responses on past experiences with privacy invasion. The results in Table 9.17 show that respondents in general did not have frequent past experiences of privacy invasion and that there was no significant correlation between past privacy invasion experiences and either of the following two variables: "preference for job boards over SNSs in applying for jobs" and "behavioral intentions to use SNSs to apply for jobs."

Table 9.17 Past Privacy Invasion Experience, Job Boards/SNSs Preference and Intentions to Use SNSs to Apply for Jobs

Past Privacy Invasion Experience	N	Mean	Std Dev	Median	Spearman's rho	
					Prefer JB	**BI**
How frequently have you personally been the victim of what you felt was an *improper* invasion of your online privacy? (1 = never and 7 = very frequently)	487	2.78	1.575	2.00	rho = -.037 Sig = .424 N = 481	rho = .055 Sig = .226 N = 484

9.3.6 Effects of Media Exposure to Use/Misuse of Online Information

Media exposure to use/misuse of online information was assessed by asking participants to indicate on a scale of 1 to 7 (1 representing not at all and 7 representing very much), how much have they heard or read during the last year about the use and potential misuse of the information collected from the Internet. Refer to Appendix E for frequency distribution of responses on exposure to use/misuse of online information. The figures in Table 9.18 show that respondents in general had considerable media exposure to

use/misuse of online information. This media exposure was significantly correlated with preference for job boards over SNSs in applying for jobs. However, there was no significant association between media exposure to use/misuse of online information and behavioral intentions to use SNSs to apply for jobs.

Table 9.18 Exposure to Use/Misuse of Information, Job Boards/SNSs Preference and Intentions to Use SNSs to Apply for Jobs

Media Exposure to Use/Misuse of Online Information	N	Mean	Std Dev	Median	Spearman's rho	
					Prefer JB	BI
How much have you heard or read during the last year about the use and potential misuse of the information collected from the Internet? (1 = not at all and 7 = very much)	484	5.45	1.38	6.00	rho = .155** sig = .001 N = 478	rho = .008 sig = .857 N = 481

** p < 0.01

9.3.7 Effects of Beliefs about Recruiters' and Employers' Use of Social Networking Sites in the Recruitment Process

Participants' perceptions of recruiters' and potential employers' online behavior specific to SNSs were assessed by asking them about their extent of agreement on a scale of 1 to 7 (1 representing strongly disagree and 7 representing strongly agree) with the following two statements: (a) Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there; and (b) If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there. Frequency distributions on extent of agreement or disagreement with these statements are provided in Appendix E. Results of analyses on participants' perceptions of recruiters' and potential employers' online behavior specific to SNSs are shown in Table 9.19.

Participants tended to agree with the statements "even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there"

and "if I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there;" even more so, the latter.

There is a significant positive relationship between respondents' beliefs that even if they don't apply for a job through SNSs, employers and recruiters are likely to find information about them there, and their preference for job boards over SNSs in applying for jobs. However, there was no significant correlation between respondents' beliefs that if they don't apply for a job through SNSs, employers and recruiters are likely to find information about them there, and their intentions to apply for jobs using SNSs.

There is a significant positive relationship between respondents' perceptions about employers and recruiters being more likely to look for information about them on SNSs if they applied for jobs there and their preference for job boards over SNSs in applying for jobs. The results demonstrated that accordingly, there was a significant negative relationship between these same perceptions and intentions to apply for jobs using SNSs.

Table 9.19 Beliefs about Recruiters' and Employers' Use of SNSs in Recruitment Process, Job Boards/SNSs Preference and Intentions to Use SNSs to Apply for Jobs

Beliefs about Recruiters' and Employers' Use of SNSs	N	Mean	Std Dev	Median	Spearman's rho	
					Pref_JB	BI
Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there. (1 = strongly disagree and 7 = strongly agree)	486	4.84	1.621	5.00	rho = .168*** sig = .000 N = 481	rho = .070 sig = .123 N = 484
If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there. (1 = strongly disagree and 7 = strongly agree)	486	5.43	1.424	6.00	rho = .422*** sig = .000 N = 481	rho = -.198*** sig = .000 N = 484

*** p < 0.001

9.3.8 Association with Past Tendencies to Falsify Information Requested Online

Participants' past tendencies to falsify information requested online were quantified by asking them to indicate within specific ranges, shown in Tables 9.20 and 9.21, the average percent of the time they would falsify the information requested from them during the use of web sites. Kruskal-Wallis (K-W) one way analysis of variance by ranks test was used to determine if the participants' preference for job boards over SNSs and their intentions to use SNSs to apply for jobs varied based on their past tendencies to falsify information requested online. The results of this analysis are shown in Tables 9.20 and 9.21. Also, since the variable "past tendencies to falsify information requested online" is an ordinal, Spearman's rho non-parametric correlation coefficients were computed in order to determine whether there were linear relationships between past tendencies to falsify information requested online and preference for job boards over SNSs and between past tendencies to falsify information requested online and intentions to use SNS to apply for a job.

The computed Kruskal-Wallis chi-squared ($\chi 2$) statistics and Spearman's rho coefficients, shown in Tables 9.20 and 9.21, suggest the following: (a) preference for job boards over SNSs did not vary according to past tendencies to falsify information requested online; (b) there was no linear relationship between past tendencies to falsify information requested online and preference for job boards over SNSs; and (c) although intentions to use SNSs to apply for jobs did not vary significantly with past tendencies to falsify information requested online, there was a significant negative linear relationship between past tendencies to falsify information requested online and intentions to use SNSs to apply for jobs.

Table 9.20 Past Tendencies to Falsify Information Requested Online and Preference for Job Boards over SNSs

Past Tendencies to Falsify Information Requested Online	Preference for Job Boards over SNSs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
I have never falsified information	166	5.20	1.707	6.00	K-W (χ2) = 3.028	.553
Under 25% of the time	204	5.46	1.608	6.00		
26%–50% of the time	70	5.47	1.595	6.00	Spearman's rho = .047	.305
51%–75% of the time	21	5.19	1.861	5.00		
over 75% of the time	9	4.67	2.345	4.00		
Total	470	5.34	1.669	6.00		

K-W Kruskal-Wallis Test

Table 9.21 Past Tendencies to Falsify Information Requested Online and Intentions to Use SNSs in Applying for Jobs

Past Tendencies to Falsify Information Requested Online	Intentions to Use SNSs in Applying for Jobs				Test Statistic	Sig
	N	Mean	Std. Dev	Median		
I have never falsified information	169	3.74	1.928	4.00	K-W (χ2) = 7.360	.118
Under 25% of the time	204	3.52	1.949	4.00		
26%–50% of the time	70	3.30	1.821	3.00	Spearman's rho = -.101*	.028
51%–75% of the time	21	3.43	1.859	4.00		
over 75% of the time	9	2.22	1.093	2.00		
Total	473	3.54	1.914	4.00		

K-W Kruskal-Wallis Test; * $p < 0.05$

9.3.9 Association with Likelihood to Change Personal Information on SNSs

Participants were asked to indicate on a scale of 1 to 7 (1 representing very unlikely and 7 representing very likely), their likelihood to change information posted about them on the SNSs to which they belonged before applying for a job through these sites. If participants did not belong to any SNS, they were asked to select the option "not applicable." Refer to Appendix E for frequency distribution on respondents' likelihood to change information posted about them on the SNSs to which they belong before applying for a job through

these sites. The results in Table 9.22 suggest that respondents in general are more likely than not to change information posted about them on the SNSs before applying for a job through these sites. Likelihood to change personal information on SNSs before applying for a job positively correlated with preference for job boards over SNSs in applying for jobs. However, it did not have a significant relationship with intentions to use SNSs to apply for jobs.

Table 9.22 Likelihood to Change Personal Information on SNSs, Job Boards/SNSs Preference and Intentions to Use SNSs to Apply for Jobs

Likelihood to Change Personal Information in SNSs	N	Mean	Std Dev	Median	Spearman's rho	
					Prefer JB	BI
How likely are you to change information posted about you on the social networking sites to which you belong before applying for a job through these sites? (1 = very unlikely and 7 = very likely)	487	5.23	2.069	6.00	rho = . 176*** sig = .000 N = 482	rho = -.076 sig = .093 N = 485

*** $p < 0.001$

9.3.10 Effects of Model Variables (Beliefs and Perceptions)

Spearman's correlation analysis was used to determine whether the independent variables considered in the research model had an effect on behavioral intention to use SNSs to apply for jobs and on preference for job boards over SNSs. The latent variable scores for the final measurement model were used in this analysis. The correlation coefficients and the level of significance computed are shown in Table 9.23.

The results from the correlation analysis were not surprising. All constructs except provision of information on "inside connections" had significant relationships with the two dependent variables. If the relationship with preference for job boards over SNSs,

was positive, then it was negative with intention to use SNSs to apply for jobs, and vice versa.

Effort expectancy, privacy concerns and risk beliefs had positive relationships with preference for job boards over SNSs. Perceived justice/trusting beliefs, performance expectancy and social influence had negative relationships. The directions of the relationships were opposite for behavioral intention.

Table 9.23 Correlations between Model Variables and Preference for Job Boards over SNSs and Intentions to Apply for Jobs Using SNSs

Constructs	Spearman's rho	
	Prefer JB	**BI**
EE - Effort Expectancy	.160***	-.192***
IC_Info - Inside Connections Information	.076	-.065
JT - Justice/Trust	-.200***	.347***
PC - Privacy Concerns	.133**	-.199***
PE - Performance Expectancy	-.382***	.662***
Risk – Risk Beliefs	.420***	-.289***
SI - Social Influence	-.279***	.396***

9.4 Chapter Summary

The results of the test of the structural component of the alternative theoretical model were presented in this chapter. All hypotheses, except the following, were supported: H1.1 - Effort expectancy is negatively associated with intention to share information with recruiters and potential employers who use SNSs to recruit employees; H1.4 - respondents who were provided information about the inside connections feature would have greater performance expectancy than those who were not given this information; and H1.5 - There is a negative association between risk beliefs and intention to share

information with recruiters and potential employers who use SNSs to recruit employees. The model explained 37.3% of intention to share personal information with recruiters/potential employers who use SNSs to recruit employees and can therefore be described as moderate with respect to its explanatory power based on guidelines provided by Chin (1998, p. 323).

Analyses exploring variables that might be significantly associated with preference for job boards over SNSs (or vice versa) in applying for jobs and with intention to use SNSs to apply for jobs were also presented in this chapter. In summary, the results of these analyses suggest that preference for job boards over SNSs in applying for jobs is not significantly associated with gender; education; occupation; employment status; membership in SNSs; past experience with online privacy invasion; and past tendencies to falsify information requested online. Preference for job boards over SNSs in applying for jobs is, however, significantly associated with age; experience with the use of SNSs; exposure to use/misuse of online information from the media; beliefs about the likelihood of employers finding information about job seekers on SNSs even if these job seekers do not apply through these sites; beliefs about employers and recruiters being more likely to find personal information about job seekers on SNSs if these jobs seekers apply for jobs through these sites; and the likelihood to change personal information on SNSs before applying for a job. Moreover, significant positive relationships were found between the variable "preference for job boards over SNSs" and all of the aforementioned variables with which it was significantly associated except age. A slight negative relationship between age and preference for job boards over SNSs was observed.

The results of the exploratory analyses also suggest that intention to use SNSs to apply for jobs is not significantly associated with gender; occupation; employment status; membership in SNSs; past experience with online privacy invasion; exposure to use/misuse of online information from the media; beliefs about the likelihood of employers finding information about job seekers on SNSs even if these job seekers do not apply through these sites; and the likelihood to change personal information on SNS before applying for a job. However, intention to apply for jobs using SNSs is significantly associated with age; education; experience with the use of SNSs; beliefs about employers and recruiters being more likely to find personal information about job seekers on SNSs if these jobs seekers apply for jobs through these sites; and past tendencies to falsify information requested online. Further, significant negative relationships were found between the variable "intention to use SNSs to apply for jobs" and all of the aforementioned variables with which it was significantly associated except education. A significantly positive relationship was found between intention to use SNSs to apply for jobs and education.

CHAPTER 10

SUMMARY, DISCUSSION, CONCLUSIONS AND FUTURE RESEARCH

10.1   Introduction

This chapter concludes this dissertation with a review and discussion of key findings in this study. It also discusses the main contributions of this study in terms of theoretical and practical implications; the limitations of this study that should be taken into consideration in interpreting and drawing inferences from the results; and directions for future research.

10.2   Summary and Interpretation of Findings

The initial goal of this investigation was two-fold: (1) to develop and test a theoretical model that explicates job seekers' intentions to use social networking sites (SNSs) to apply for jobs; (2) to identify through exploratory analysis, the factors that determine preference for job boards over SNSs in applying for jobs.

The initial theoretical model was developed by integrating some aspects of the UTAUT —unified theory of technology and use of technology (Venkatesh et al. 2003) with privacy concerns, trusting beliefs and risk beliefs that are central to theories on Internet users' acceptance of e-commerce. Parallels were drawn between the concepts of trusting beliefs in e-commerce and perceived justice in online recruiting in order to include the construct referred to as "perceived justice/trusting beliefs" in the model. Also considered in this model was the possible effect of providing information on a feature provided in some SNSs that illustrates to job seekers, the individuals within their extended social networks that are employed by the potential employer. This was referred to as the "inside connections" feature.

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In exploring the determinants of preference for job boards over SNSs in applying for jobs, the factors considered were as follows: demographics (age, gender and education); occupation and employment status; membership in and experience with the use of SNSs; past experience with online privacy invasion; exposure to use/misuse of online information from the media; past tendencies to falsify information requested online; beliefs about recruiters' and potential employers' behavior with respect to harvesting information about potential employees in SNSs; and the likelihood to change personal information on SNSs before applying for a job.

Data from 490 respondents collected through an online survey were used in analyses performed in order to accomplish the goal of this investigation. These respondents were registered users of two career services databases managed individually by two universities in New Jersey, United States: New Jersey Institute of Technology (NJIT) and Rutgers New Brunswick Campus (Rutgers NB). These respondents were job seekers at the time of the survey or had previously been job seekers who had signed up for assistance in finding a job through the career services databases. Over 62.5% of these respondents indicated that they were either employed or unemployed and actively seeking a job.

A little more than half of the respondents were female (55.3%) and an overwhelming majority (over 75%) was within the age range 21 to 30. Respondents were in a very diverse range of occupations and more than 70.7% of them had completed at least a bachelor's degree.

The findings of this study are summarized according to: (1) test of the initial measurement model; (2) test of structural model of alternative theoretical model; (3)

description of respondents' intentions to apply for jobs using SNSs and of preference for job boards over SNSs; and (4) determinants of intentions to apply for jobs using SNSs and of preference for job boards over SNSs.

10.2.1 Test of Initial Measurement Model

The measurement model of the initial model proposed for testing in this study did not fit the data, and therefore, a few items had to be dropped in order to establish a valid measurement model. In attempts to establish a valid measurement model, one of the observations worth noting is the close correspondence between the responses to some items used to measure performance expectancy and the responses to the behavioral intention item (BI1): How likely are you to apply for a job through social networking sites? In particular, as shown in the correlation matrix (Table G.1) and the results of the stepwise regression (Table G.2) in Appendix G, the following items included in the performance expectancy scale seemed to be most highly correlated with BI1 and explained over half (50.6%) of its variance: PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept; PE8- Overall, I think SNSs would be useful in job seeking activities; PE5- I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job; and PE7 - It is not a waste of time using SNSs to find a job. Conceptually, BI1 is clearly measuring a construct different from that being measured by the PE items.

A possible explanation for the relatively high correlation is the lack of a clear mental model of what is involved in applying for a job using SNSs. Over 50% of respondents indicated that they had never used SNSs to apply for a job in the six months preceding the survey (refer to frequency distribution for JSB10 in Table E.3 of Appendix

E). Perhaps for these respondents, if they thought that SNSs were useful in improving their chances at securing a job, then to a similar degree, they would have intentions to use these sites for that purpose. In other words, participants' responses suggest that a clear distinction was not made between perception of the usefulness of SNSs in improving one's chances at securing a job and intended use of SNSs to apply for a job. This is probably because many of the participants had no recent practical experience with using SNSs to apply for jobs.

10.2.2 Test of Structural Model of Alternative Theoretical Model

The results of the test of the alternative research model were mixed in terms of support and lack of support for hypothesized relationships between constructs. Factors such as performance expectancy, trust and information privacy concerns that were found to be driving forces of job seekers' intentions to share personal information with recruiters/potential employers in SNSs, have also been demonstrated to have similar effects on intentions to share personal information for other types of online transactions: e.g. with online marketers (Malhotra et al. 2004); for general Internet transactions (Dinev and Hart, 2006); and for e-commerce (Gefen et al. 2003; Pavlou, 2003)

The three hypotheses not supported by the data were: the proposed negative relationship between effort expectancy and intention to share information with recruiters and potential employers who use SNSs to recruit employees (H1.1); the hypothesized association between the availability of information on the "inside connections" feature and performance expectancy (H1.4); and the proposed negative relationship between risk beliefs and intention to share information with recruiters and potential employers who use SNSs to recruit employees (H1.5).

With regard to the non-significant direct effect of effort expectancy on intention to share personal information with recruiters and potential employers using SNSs to recruit employees, there are prior studies in which perceived ease of use (the equivalent to effort expectancy) was found to have no significant direct influence on intentions to perform actions that inherently involve the sharing of personal information e.g. performing a transaction with an online retailer (Pavlou, 2003). In the first of Pavlou's (2003) two studies, which involved student participants, perceived ease of use did not have a direct influence on intentions to transact with an online retailer. Pavlou (2003) attributed this finding to the participants' perceptions of the retailer's web site being skewed towards extremely easy to use. A similar argument cannot be used to explain the results of this study because descriptive statistics, shown in Table G.3 in Appendix G, suggest that the distribution for effort expectancy does not deviate significantly from normality (mean = 3.31, standard deviation = 1.435; $Z_{Skewness}$ = 2.145; $Z_{Kurtosis}$ = -1.809). That is, perceptions concerning the degree of difficulty as well as the time and effort required to secure a job using SNSs were not significantly skewed.

Another explanation for the non-significant direct effect of effort expectancy used by Pavlou (2003) was Davis's (1989) argument that ease of use may act indirectly on intentions to use. This indirect path was added to the alternative model and a slightly significant relationship between effort expectancy and performance expectancy was found as supported by the results of the bootstrap algorithm shown in Table G.4 in Appendix G.

In this study, it is worth noting that over half of the respondents (51%) indicated that they had never used SNSs in applying for jobs in the six months preceding the study.

Thus, it is possible that they had no real estimation of the effort that would be required from them to use these sites to apply for jobs.

With regard to the influence of risk beliefs on intentions to share personal information with recruiters and potential employers using SNSs to recruit employees, it is important to note that risk beliefs were found to have a significant positive relationship with privacy concerns and that privacy concerns in turn had a strong direct negative relationship with intentions to share personal information with recruiters and potential employers using SNSs to recruit employees. Studies such as Malhotra et al. (2004) suggest that the impact of information privacy concerns on behavioral intention is fully mediated by trusting and risk beliefs. However, Dinev and Hart's (2006) extended calculus model for e-commerce transactions suggests that perceived Internet privacy risk influences Internet privacy concerns, which in turn impacts willingness to provide personal information to transact on the Internet. In Dinev and Hart (2006, p. 64), Internet privacy risk refers to "perceived risk of opportunistic behavior related to the disclosure of personal information submitted by Internet users in general" and Internet privacy concerns are "concerns about opportunistic behavior related to the personal information submitted over the Internet by the respondent in particular." The results of the current study are more consistent with the model proposed by Dinev and Hart (2006).

Dinev and Hart (2006) posit that Internet privacy risk and privacy concerns are both risk beliefs. However, the latter reflects an internalization of the possibility of loss. Using a similar argument in the context of this study, it is probable that the internalization of the uncertainty and adverse consequences of utilizing the recruitment services offered by SNSs (risk beliefs) can result in greater information privacy concerns.

With respect to the influence of information on the "inside connections" feature, two questions were included in the questionnaire as manipulation checks, in order to determine if the experimental manipulation had an effect on (a) respondents' perceptions of the extent of information provided about the "inside connections" feature and (b) respondents' understanding of how online connections in SNSs could be used in a job search. The results of a correlation analysis between the absence/presence of information on the "inside connections" feature and the aforementioned measured variables (shown in Table 10.1) indicate that there was no relationship between presence/absence of information on the "inside connections" feature and perceptions of the extent of information provided on this feature. Perhaps respondents who were provided with the "inside connections" information did not pay very much attention to it. Consequently, their performance expectancies or expectations with respect to the utility of SNSs in helping them to find a job were no different from those of respondents who were not provided with the information on the "inside connections" feature.

Table 10.1 Spearman's Rho Correlation Analysis on Manipulation Checks Variables

Manipulation Checks	Information on "inside connections" feature (0-absence; 1-presence)
I believe that the information provided earlier on how online connections in a SNSs could help in securing jobs advertised on these sites was _____ (1-Limited; 7-Extensive): Mean 4.10; S.D. 1.357	.044
I have a good understanding of how online connections in SNSs could be used in a job search (1-Strongly disagree; 7-Strongly agree): Mean 4.74; S.D. 1.529	.094*

$* p < 0.05$

There was, however, a small but significant positive relationship between presence/absence of information on the "inside connections" feature and respondents' understanding of how online connections in SNSs could be used in a job search (refer to Table 10.1). This suggests that despite the positive impact of the availability of information on the "inside connections" feature on respondents' understanding of how online connections in SNSs could be used in a job, there was no significant association between the availability of that information and performance expectancy.

In summary, there is a possibility that respondents who were provided with information on the "inside connections" feature did not read that information as carefully as the researcher expected. This may have led to no significant difference in performance expectancy between the group of respondents provided with information on the "inside connections" feature and the group that was not. However, that information had an impact on respondents' understanding of how online connections in SNSs could be used in a job. Thus, the lack of support for H1.4 was not because the availability of information on the "inside connections" feature did not improve respondents' understanding of how online connections in SNSs could be used in a job search.

In this study, only a description of the "inside connections" feature was provided. Actual experience with using such a feature is expected to be far more engaging than simply reading a description about it. Perhaps with the actual use of a SNS that includes the "inside connections" feature, job seekers would have a clearer illustration of how this feature can be utilized in determining the paths in their social networks that can link them to potential employers. This may help them in developing a deeper appreciation of the utility of SNSs in helping them to secure a job (or greater performance expectancy).

10.2.3 Respondents' Intentions to Apply for Jobs Using SNSs and Preference for Job Boards over SNSs

In general, respondents seemed to be leaning away from being likely to apply for a job through SNSs. Also, overwhelmingly, they preferred the use of traditional job boards over SNSs in applying for jobs. These intentions and preference, based on the significant correlations in Table 9.23, are influenced by the variables included in the research model. Additionally, there are demographic attributes, specific Internet experiences and other beliefs discussed in the following section that also explain intention to use SNSs to apply for jobs and preference for traditional job boards over SNSs in applying for jobs.

There are, however, exogenous factors that are to be taken into consideration in explaining the respondents' intentions and preference. For instance, job boards have been in existence much longer than SNSs, and have been established as a source of jobs for a much longer period. Compared to the countless number of job boards, there are only a few SNSs that tend to focus specifically for recruitment, professional networking and job finding e.g. Linkedin, Plaxo, Xing, Ryze and Jobster. Other popular SNSs such as Facebook and MySpace tend to encourage the use of their marketplace or classified sections for advertising jobs. Therefore the innumerable job vacancies advertized in job boards are incomparable with the quantity advertized in SNSs. It is therefore not unreasonable to expect job seekers to prefer job boards to SNSs because job boards provide them with access to many more job opportunities.

There are job boards/SNSs collaborations that enable job seekers to benefit from the social networking aspect of SNSs while providing them with access to many more job opportunities. Plaxo, for instance, is now integrated with Simply Hired, which is a job

aggregator that searches job listings in job boards and organizational career sites, and aggregates job vacancy advertisements in a single location. The networking feature in Plaxo can be used in applying for jobs with Simply Hired. This job board/SNS type joint venture seems to be one of the future directions for online recruitment and job search.

10.2.4 Determinants of Intentions to Apply for Jobs Using SNSs and of Preference for Job Boards over SNSs

Table 10.2 shows a summary of the findings from the exploratory analyses conducted in order to determine that factors that are associated with or that predict intentions to apply for jobs using SNSs and preference for job boards over SNSs, As can be seen from the summary (Table 10.2), older respondents are more likely to apply for jobs using SNSs than younger respondents and have less preference for job boards. A probable explanation for this relationship is: older respondents are likely to have larger professional networks with individuals who are in a position to provide them with very good leads to job vacancies. Thus, they are able to appreciate better the benefits provided within SNSs such as facilitating connection to an employee within organizations of interest to job seekers.

There are also several variables related to trust/risks issues that predict preference for job boards. If individuals have frequently falsified information requested online in the past, then they are (understandably) more reluctant to be willing to supply information to prospective employers through SNSs, and more concerned about prospective employers looking information about them on SNSs. Perhaps, for instance, they have used a photo other than their own for the SNS profile. Hence the significant negative relationship between past tendencies to falsify information requested online and intentions to apply for jobs using SNSs. Likewise, if individuals are more likely to feel that they would have

to change the information about them on SNSs before applying for a job through them, they are also more likely to prefer job boards.

Table 10.2 Summary of Tests of Association between Explored Variables and (i) Intentions to Apply for Jobs Using SNSs and (ii) Preference for Job Boards over SNSs

Explored Variable	Intentions to Apply for Jobs Using SNSs	Preference for Job Boards over SNSs
Gender	No association	No association
Age	Significant positive association	Significant negative association
Education	Significant positive association	No association
Occupation	No association	No association
Employment status	No association	No association
Membership in SNSs	No association	No association
Experience with the use of SNSs	Significant association	Significant positive association
Past experience with online privacy invasion	No association	No association
Exposure to use/misuse of online information from the media	No association	Significant positive association
Past tendencies to falsify information requested online	Significant negative association	No association
Beliefs that even if they don't apply for a job through SNSs, employers and recruiters are likely to find information about them there	No association	Significant positive association
Perceptions about employers and recruiters being more likely to look for information about them on SNSs if they applied for jobs there	Significant negative association	Significant positive association
Likelihood to change personal information on SNSs before applying for a job	No association	Significant positive association

10.3   Contributions

10.3.1 Theoretical and Methodological Contributions to Information Systems Research

This study makes a number of theoretical and methodological contributions to information systems research. A theoretical model with moderate power ($R^2 = 37.3$) was developed to explain intention to share information with recruiters and potential

employers who recruit employees through SNSs. This model provides insights on the factors that have dominant effects on intention to share personal information for purposes such as finding a job in SNSs (e.g. performance expectancy and privacy concerns), and those that have indirect effects. (e.g. effort expectancy, social influence/image, risk beliefs and trusting beliefs). The model established in this study can also be used as theoretical justification for future research investigating similar issues.

Scales measuring concepts specific to job seeking in SNSs have been validated in this study. The Cronbach's alpha reliability coefficients for all the multi-item scales used in the tested research model were all greater than 0.85. Many of these scales were adapted from previously used measures. The scales for measuring performance expectancy and perceived justice/trusting beliefs took into consideration specific aspects of SNSs e.g. connections to other users; and information posted by others. These scales may therefore be more appropriate for future research in the context of SNSs, than the very general scales from which they were developed.

Several variables with significant associations with likelihood of using SNSs to apply for jobs and/or with preference for job boards over SNSs were identified e.g age, education, and experience with use of SNSs. These variables could be used in future studies to construct and test model to predict preference for job boards and likelihood of using SNSs.

10.3.2 Practical Implications

The results of the alternative model test suggest that privacy concerns are a major deterring factor with respect to job seekers' likelihood to share personal information with recruiters and employers using SNSs to recruit employees. However, performance

expectancy (or an appreciation of the utility of SNSs in helping job seekers improve their chances of securing an advertized job) and trust (or perceived justice in the use of personal information in the candidate selection process by potential employers/recruiters who recruit employees using SNSs) can mitigate the effects of these concerns.

Designers of SNSs must therefore create ways to alleviate the privacy concerns of job seekers while promoting the usefulness of these sites and the tools provided within these sites in helping job seekers secure advertized jobs. Moreover, designing SNSs that are easy to use by job seekers is important. However, it is not sufficient in encouraging the use of these sites for the purpose of interacting with recruiters and potential employers in efforts to secure a job.

Employers and recruiters utilizing SNSs to recruit employees should present themselves as trustworthy, with respect to how they handle personal information discovered online in their job candidate selection procedures.

10.4   Limitations

This study has limitations that are to be taken into consideration in interpreting the results and making generalizations from them. The first and most notable limitation in this study is the narrow scope of the behavioral intention explained by the structural model that was actually tested. In the initial theoretical model developed for testing in this study, two aspects of intended use of SNSs to apply for jobs were considered: (1) the likelihood of applying for jobs using SNSs and (2) the likelihood of sharing personal information with recruiters and potential employers who use SNSs to recruit employee. The former aspect had to be excluded from the theoretical model eventually tested in order to establish a valid measurement model. Thus, it cannot be inferred that the variables demonstrated to

be significant in predicting the behavioral intention considered in the model could also predict the actual use of tools provided within SNSs for applying for jobs e.g. the job application form in Linkedin and the email link in Xing.

A second limitation of this study, which closely relates to the first one, is the use of a single item to measure the dependent variable in the model that was eventually tested. Scales comprising a single question are generally considered to be less reliable than multi-item scales because of possible errors in interpreting and responding to the single question and also because of probable inconsistencies in the answers given by the same individual over time (Nunnally, 1978; Spector, 1982). Also, many researchers hold the view that many social and psychological concepts are broad in scope and simply cannot be assessed with a single question (Ives et al. 1983). It is argued, however, that single-item measures of constructs are appropriate if in the minds of survey respondents "(1) the object of the construct is "concrete singular," meaning that it consists of one object that is easily and uniformly imagined, and (2) the attribute of the construct is 'concrete,' again meaning that it is easily and uniformly imagined" (Bergkvist and Rossiter, 2007 p. 176). In this study, it was presumed that the object "SNSs" would be uniformly imagined because a description of these sites was provided in the survey. However, this description did not cover directly, the notion of sharing personal information with recruiters and potential employers who use these sites to recruit employees.

The third limitation is the use of a description of the "inside connections" feature in order to estimate the possible impact of the availability of this feature in SNSs on job seekers' performance expectancy or their belief that using SNSs to apply for an

advertized job will improve their chances of securing that job. It would have been more meaningful to job seekers to demonstrate the "inside connections" feature using actual names of their contacts within a specific SNS. Thus, although the description of the "inside connections" feature was not expected to have as much of an impact on performance expectancy as the actual experience of using the feature, it was still expected to have some influence. The relationship between provision of information on the "inside connections" feature and performance expectancy was found to be non-significant. However, this finding is inconclusive because perceptions of the extent of information on the "inside connections" feature for the respondents provided with a description of this feature were not significantly different from the perceptions of those who were not provided with this description.

The fourth limitation relates to how representative the survey sample is of (a) job seekers in general, and (b) the population from which the sample was selected. With regard to (a), the two sources of survey participants were career services databases of alumni and students from two universities. The sample therefore comprised a disproportionately large percentage of young college graduates, which is not reflective of the total population of job seekers. In addition, respondents were from one state in the Northeast U.S. and may differ from individuals residing in other regions of the U.S., let alone other nations. Therefore, one must be cautious in attempting to generalize the findings of this study, because the sample may not adequately represent the population of job seekers.

It is important to discuss the concern about the survey sample not being representative of the population from which it was selected —point (b) above— because

of the possibility of non-response bias due to low response rates. Section 6.5 discusses the reasons for the low response rates as well as the assessment of non-response bias based on a comparison of the sample and the population from which it was selected. A cursory examination of the characteristics, gender and occupation, suggests that non-response bias should not be a major consideration in the interpretation of the results of this study.

The fifth limitation pertains to the exclusion from the research model behavioral outcomes, such as, actual acceptance/refusal to use SNSs to apply for a job or actual acceptance/refusal to share personal information with recruiters and potential employers. A measure of actual behavior would add richness to the results of this study. However, with the use of the survey method and the inclusion of respondents who, at the time of completing the questionnaire, may not necessarily be prepared to apply for a job, it was not feasible to measure actual behavioral outcomes.

Finally, with regard to limitations, the data for this study were collected during the period July to September, 2009. During that period, unemployment rates in the US, according to the US Bureau of Labor Statistics, had been 9.4%, 9.7%, and 9.8% for July, August and September, respectively. Unemployment rates had not been as high as these since July to September 1983 (http://data.bls.gov/PDQ/servlet/SurveyOutputServlet). It is therefore possible that, in such desperate times, respondents would be likely to utilize any avenue available to them in order to secure a job and that, intentions to use SNSs to apply for jobs may have been overstated. Consequently, the results of this study could have been impacted by the dismal employment outlook at the time data were collected.

10.5   Future Research Directions

The data for this study were gathered (from July to September, 2009) during the midst of an economic recession in the US, as noted earlier. There is the possibility that responses from participants were influenced by their desperation to secure a new or better job because the labor market at the time of the study was not in their favor. Consequently, the results of this study may have been affected by the economic climate that existed at the time data were being collected. In order to assess such an effect, it would be necessary to conduct a longitudinal study during a period when employment prospects have improved. This longitudinal study would, for example, help in determining whether the model for explaining intention to share personal information with recruiters and potential employers who utilize SNSs to recruit employees is robust to various economic climates.

Some of the problems encountered in validating the initial measurement model suggest that there is a need for future research to help disentangle the various aspects of some of the constructs included in the research model of the current study. For instance, behavioral intention to apply for jobs using SNSs may involve more than the two aspects considered in this study. Future studies should consider the following as part of intention to apply for jobs using SNSs: (1) registering with the site and establishing a profile that would attract potential employers; (2) searching through job listings; (3) joining appropriate groups in which job vacancies are likely to be announced (4) establishing connections with individuals who might be able to provide good leads to employers of interest; (5) connecting to and possibly sharing information with potential employers; (6) performing activities, such as blogging, that may demonstrate knowledge and expertise; and (7) utilizing the tools (e.g. application forms or email links) provided within sites for the purpose of submitting an actual job application.

The investigation of the estimated effects of the "inside connections" feature on performance expectancy in this study yielded inconclusive results. However, with the increase in the inclusion of this feature in SNSs, it is important to understand its effects on performance expectancy or on intended use of SNSs to apply for jobs. In future studies investigating the "inside connections" feature, participants should experience the actual use of this feature. Alternatively, rather than simply providing a description of the "inside connections" feature, respondents should be required to walk-through a scenario which illustrates, through an example of a fictitious job seeker, how the inside connections feature can assist the job seeker in determining the path in his/her social network that can lead him/her to a contact employed with an employer of interest to him/her. In order to ensure that respondents do not skim through the scenario, they should be engaged in some activities or in answering key questions throughout the presentation of the scenario.

APPENDIX A

SUMMARY OF REVIEWED EMPIRICAL STUDIES ON ONLINE RECRUITMENT

This appendix presents a tabular summary of the studies reviewed in Chapter 3. Included in the summary of each study are: the research question(s) investigated; a short description of the research method and the participating subjects; a list of independent, mediating, moderating and dependent variables; the results and comments on the results such as unanticipated findings.

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
Zusman and Landis (2002)	Two issues investigated: (a) Applicants' preferences with regard to web-based job postings and more traditional paper postings; and (b) the effects of web page quality on applicants' preferences.	Survey—Subjects: 92 undergraduates; IV: (a) Paper-based/computer-based job postings (b) attractiveness of website; DV: For both (a) and (b) Organization preference or likelihood of pursuing and interview or accepting a job at the organization.	Traditional (or paper-based) job postings preferred. Organizations with more attractive web pages were preferred over those with less attractive pages.	Findings, in terms of preference paper-based online methods, conflicted to those of Weiss and Barbette (2001) noted above.
Dineen et al. (2002)	To determine when an objective measure of person-organization (P-O) fit and interactive P-O fit feedback are more or less likely to impact organizational attraction in an online recruitment setting by examining (a) the mediating role of subjective P-O fit and (b) the moderating effects of two variables: agreement with feedback and self esteem.	Experiment with three conditions— Subjects: 234 students; IV: Objective person-organization (P-O) fit, Level of P-O feedback; MV: Subjective P-O fit; ModV: Agreement with P-O fit feedback, self esteem; DV: Overall organizational attraction.	Supported hypotheses: H1: Objective P-O fit with an organization is positively related to attraction. H2: Level of P-O fit feedback influences individuals' levels of attraction such that those receiving feedback indicating a high P-O fit are more attracted, whereas those receiving feedback indicating a low P-O fit are less attracted. H3: P-O fit feedback, objective P-O fit and level of agreement with fit feedback interact in predicting attraction such that the level of fit feedback relates more strongly to attraction when agreement is higher rather than lower, whereas objective P-O fit relates more strongly when agreement is lower rather than higher.	Hypotheses not supported: H6: The three way interaction effects of (a) objective P-O fit, P-O fit feedback, and agreement on attraction and (b) objective P-O fit, P-O fit feedback, and self esteem on attraction are mediated by subjective P-O fit.

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment (Continued)

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
			H4: P-O fit feedback, objective P-O fit, and self-esteem interact in predicting attraction such that the level of fit feedback relates more strongly to attraction among low rather than high self esteem individuals, whereas objective P-O fit relates more strongly to attraction among high rather than low self-esteem individuals. H5: The relationships between (a) objective P-O fit and attraction and (b) P-O fit feedback and attraction are mediated by subjective P-O fit.	
Williamson et al. (2003)	To test a research model, which proposes that the orientation of a web site (or the primary function it is designed to accomplish) shapes applicants' perceptions of the organization's web site, and these perceptions in turn influence applicants' sense of organizational attractiveness	Experiment with three conditions— Subjects: 252 business students; IV: Website orientation (screening, recruiting or dual-purpose), Outcome expectancy, Internet self efficacy; MV: Website content usefulness; Website ease of use; DV: Organizational attractiveness	Two hypotheses supported: H1a: Web site content usefulness will mediate the relationship between web site orientation and organizational attractiveness perceptions, such that individuals will view recruiting-oriented web sites as providing more useful information than screening-oriented web sites and, as a result, will be more attracted to companies utilizing recruiting-oriented web sites. H2: Internet outcome expectancy will influence individuals_ perceptions of organizational attractiveness through its effect on perceptions of web site content usefulness.	Unanticipated Results: The relationships between web site orientation, outcome expectancy and organization attraction were also mediated by web site ease of use.

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment (Continued)

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
Cober et al. (2003)	To identify salient factors that influence overall effectiveness of organizational recruitment websites.	Online surveys— Subjects: 118 undergraduates (Study 1), 122 undergraduates (Study 2); IV: Perceptions of website content (compensation, culture, development opportunities), Perceptions of website style (aesthetics and usability); DV: Organizational attraction (pursuit intentions, recommendation intentions)	In general, the two main hypotheses tested in this study were supported by the results of both studies. H1: Perceptions of compensation, culture, and developmental opportunities will be positively related to organizational attraction. H2: Perceptions of website style, as operationalized by aesthetics and usability, will account for significant variance in organizational attraction beyond that accounted for by perceptions of web site content.	In both studies, aesthetic characteristics of websites did not account for any significant unique variance in organizational attraction. Thus the variance in attraction explained by the construct 'website style' was due to the inclusion of website usability in this construct.
Tong et al. (2005)	Is perceived service quality affected by: (a) the cognitive measures of mental overload and (b) the objective measure of time spent completing online job seeking tasks?	Experiment with three conditions— Subjects: 100 students; IV: mental overload, time spent completing online job seeking tasks; DV: online service quality. Participants performed four tasks: (1) create an account; (2) create a résumé; (3) conduct a job search, and (4) complete a job application	There were significant negative relationships between the following pairs of variables: (i) performance time and perception of overall service quality; (ii) overall mental workload and perception of overall service quality; and (iii) perceived overall service quality and mental workload for each task except the first one, that is, "create an account."	A 27 item scale for perceived service quality was developed. This scale comprised five distinct components with eigenvalues greater than 1: general service quality, accuracy and efficiency, interface maneuvering speed and additional support.

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment (Continued)

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
Bauer et al. (2006)	Objective: to test a model designed to explain the effects of information privacy concerns on outcome variables such as test-taking motivation, organizational attraction and intentions towards organizations through the mediating variable procedural justice.	Two studies were used to test the model. Study 1 - longitudinal laboratory experiment, 117 student participants; Study 2 field experiment with 396 subjects. IV: Information Privacy concerns, Procedure justice; MV: Procedure justice; DV: Test-taking motivation, organizational attraction, Intention toward organization; Note: It was hypothesized that "experience with computers" would moderate relationships between MV and DVs	Both studies supported H1 and H2; that is: H1- Applicants who have generally lower concerns for personal information privacy will report higher procedural justice perceptions than applicants with generally higher concerns for privacy and H2- Applicants with positive perceptions of procedural justice will have more favorable reactions. Specifically, they will have (a) higher test-taking motivation, (b) higher organizational attraction, and (c) more positive intentions toward the organization.	Study 1 partially support H3 and did not support H4. Study 2 partially supported of H3 and H4. H3 states that Procedural justice mediates the relationship between "personal information privacy concerns" and the DVs. H4 asserts that "experience with computers" moderates the relationship between procedural justice and DVs
Allen et al. (2007)	To test a proposed model that explains the effects of objective characteristics, subjective considerations and critical recruitment contact on intentions to pursue employment in an organization.	Online survey— Subjects: 814 undergraduate and graduate business students; IV: Organization familiarity, organization image, Job information, Organization information; MV: Attitude towards organization, Attitude towards website; DV: Employment intentions	Supported hypotheses: H1 - The amount of organization information presented on an organization web site is positively related to job seekers' attraction to the organization. H4 - Organization image is positively related to job seekers' attraction to the organization beyond the effects of job and organization information. H5 - Attitude toward the web site is positively related to job seekers' attraction to the organization.	Unsupported hypotheses H2: The amount of job information presented on an organization web site is positively related to job seekers' attraction to the organization. H3: Organization familiarity is positively related to job seekers' attraction to the organization beyond the effects of job and organization information.

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment (Continued)

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
			H6 - The amount of job and organization information presented on an organization web site are positively related to attitude toward the web site. H7 (supported components) -Attitudes toward the organization mediate (a) the relationship between organization image and employment pursuit intentions, and (b) the relationship between organization information and employment pursuit intentions.	H7 (unsupported components): The direct significant relationship between job information and employment intention negated the mediating position of attitude toward the organization. Organization familiarity had no direct influence on attitude towards organization.
Koumbis (2007)	To investigate whether organizational attraction in a web-based recruitment context could be predicted by anticipated job embeddedness, and more specifically, by anticipated social links.	Experiment with two conditions—Subjects: 418 undergraduate students enrolled in various psychology courses at a Midwestern university; IV: Website content (strong social links vs. weak social links); MV: Anticipated job embeddedness (social links, fit, sacrifice); ModV: Social needs (achievement, affiliation, autonomy, dominance); DV: organizational attraction.	Supported hypotheses: H1 (supported components) - Website content was positively associated with only the social links dimension of anticipated job embeddedness. H2 - Overall anticipated job embeddedness and its individual dimensions ('social links', fit and sacrifice) were all positively correlated with organizational attraction. H3 (supported components) – The social links dimension of anticipated job embeddedness fully mediated the relationship between website content and organizational attraction	Unsupported hypotheses: H1 (unsupported components) - Website content was not positively associated with only the fit and the sacrifice dimensions of anticipated job embeddedness. H3 (unsupported components) - The fit and the sacrifice dimensions of anticipated job embeddedness did not mediate the relationship between website content and organizational attraction

Table A.1 Summary of Reviewed Empirical Studies on Online Recruitment (Continued)

Author(s)/Year	Research Question(s)/ Objective	Method— Subjects, Independent Var (IV), Mediating Var (MV), Moderating Var (ModV), Dependent Var (DV)	Results	Comments
				H4 - The relationship between anticipated embeddedness in the form of anticipated social links and organizational attraction was not moderated by the social needs of affiliation, autonomy, dominance, and achievement.

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL AND CONSENT FORM

Institutional Review Board Approval

NJIT NEW JERSEY INSTITUTE OF TECHNOLOGY
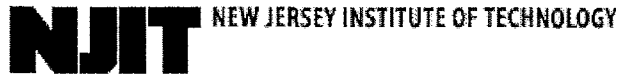
Institutional Review Board: HHS FWA 00003246
Notice of Approval
IRB Protocol Number: E132-09

Principal Investigators: Maria Plummer and Roxanne Hiltz
                            Information Systems

Title: Online Recruitment in Social Networking Sites: An
                            Understanding of Job Seekers' Perspectives
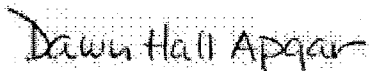
Performance Site(s): NJIT/Off-Campus   Sponsor Protocol Number (if applicable):

Type of Review: FULL [ ]   EXPEDITED [X]

Type of Approval: NEW [X]   RENEWAL [ ]   REVISION [ ]

Approval Date: February 11, 2009   Expiration Date: February 10, 2010

1. **ADVERSE EVENTS:** Any adverse event(s) or unexpected event(s) that occur in conjunction with this study must be reported to the IRB Office immediately (973) 642-7616.

2. **RENEWAL:** Approval is valid until the expiration date on the protocol. You are required to apply to the IRB for a renewal prior to your expiration date for as long as the study is active. It is your responsibility to ensure that you submit the renewal in a timely manner.

3. **CONSENT:** All subjects must receive a copy of the consent form as submitted.

4. **SUBJECTS:** Number of subjects approved: 300.

5. The investigator(s) did not participate in the review, discussion, or vote of this protocol.

6. **APPROVAL IS GRANTED ON THE CONDITION THAT ANY DEVIATION FROM THE PROTOCOL WILL BE SUBMITTED, IN WRITING, TO THE IRB FOR SEPARATE REVIEW AND APPROVAL.**

Dawn Hall Apgar

Dawn Hall Apgar, PhD, LSW, ACSW, Chair IRB   February 11, 2009

Consent Form

NEW JERSEY INSTITUTE OF TECHNOLOGY
323 MARTIN LUTHER KING BLVD.
NEWARK, NJ 07102

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

TITLE OF STUDY: Online Recruitment in Social Networking Sites: An Understanding of Job Seekers' Perspectives

RESEARCH STUDY:
I have been asked to participate in a research study under the direction of Dr. Starr Roxanne Hiltz, Distinguished Professor, Emerita and of Maria Plummer, Ph. D. Candidate, Information Systems Department, New Jersey Institute of Technology. Other professional persons who work with them as study staff may assist to act for them.

PURPOSE:
The purpose of this research is to determine, within the context of social networking sites, the factors that are pertinent in influencing job seekers' behavioral intentions such as: willingness to use SNSs to apply for a job and likelihood of changing information posted about them on SNSs before applying for a job through these sites.

DURATION:
My participation in this study will require approximately 20-25 minutes of my time.

PROCEDURES:
I have been told that, during the course of this study, the following will occur.
- After accepting the terms and conditions of this consent form, I will be asked to complete a series of questions in regard to a number of issues specific to the use of social networking sites in job seeking activities.
- I will also be asked to provide background information about myself such as gender, age, ethnicity, education and experience using the Internet.

PARTICIPANTS:
I will be one of about 500 participants in this study.

EXCLUSIONS:
I will inform the researcher if any of the following apply to me:

I am under the age of 18 years. Participants in this study must be 18 years and older.

RISKS/DISCOMFORTS:

I have been told that the study described above may involve the following risks and/or discomforts:

Although it is not likely that an unauthorized person will obtain your responses while you are in the process of entering them, or will be able to break into the server that will be storing the data, it is always possible that a determined hacker could do so. There is no completely secure interaction online-- as an online participant in this research, there is always the risk of intrusion by outside agents (i.e., hacking) and, therefore the possibility of being identified exists.

There also may be risks and discomforts that are not yet known.

I fully recognize that there are risks that I may be exposed to by volunteering in this study which are inherent in participating in any study; I understand that I am not covered by NJIT's insurance policy for any injury or loss I might sustain in the course of participating in the study.

CONFIDENTIALITY:

I understand confidential is not the same as anonymous. Confidential means that my name will not be disclosed if there exists a documented linkage between my identity and my responses as recorded in the research records. Every effort will be made to maintain the confidentiality of my study records. If the findings from the study are published, I will not be identified by name. My identity will remain confidential unless disclosure is required by law.

SurveyMonkey.com manages the server that stores the questionnaire responses. The following is included in SurveyMonkey's privacy statement: "we will not use the information collected from your surveys in any way, shape, or form. In addition, any other material you provide us (including images, email addresses, etc.) will be held in the strictest confidence.

PAYMENT FOR PARTICIPATION:

I have been told that, as one of approximately 300 participants in this study, I will be given an opportunity to enter a raffle in which prizes will be awarded to one first place, two second place and three third place winners as listed in the table below. Winners will be granted their choice of gift cards from either Amazon.com or American Express. If I choose to be part of this raffle, then I will provide a valid email address at which I can be contacted.

Rank	Number of winners	Prizes
1st	1	$100.00 gift card
2nd	2	$50.00 gift card each
3rd	3	$25.00 gift card each

RIGHT TO REFUSE OR WITHDRAW:

I understand that my participation is voluntary and I may refuse to participate, or may discontinue my participation at any time with no adverse consequence. I also understand that the investigator has the right to withdraw me from the study at any time.

INDIVIDUAL TO CONTACT:

If I have any questions about my treatment or research procedures, I understand that I should contact the principal investigator at:

Maria Plummer
Information Systems Department, GITC 5500, NJIT
University Heights, Newark, NJ, 07102
Email: mmp36@NJIT.edu
Phone: (347) 756-0657
 Or
Dr. Starr Roxanne Hiltz
Information Systems Department, GITC 5500, NJIT
University Heights, Newark, NJ, 07102
Email: Hiltz@NJIT.edu
Phone: (973) 361 6680

If I have any addition questions about my rights as a research subject, I may contact:

Dawn Hall Apgar, PhD, IRB Chair
New Jersey Institute of Technology
323 Martin Luther King Boulevard
Newark, NJ 07102
(973) 642-7616
dawn.apgar@njit.edu

SIGNATURE OF PARTICIPANT

I have read this entire form, or it has been read to me, and I understand it completely. All of my questions regarding this form or this study have been answered to my complete satisfaction. I agree to participate in this research study.

Participant Name _____

Signature _____

Date _____

SURVEY QUESTIONNAIRE

**Job Seekers Reactions to Recruitment Efforts
in Social Networking Sites**

1. JOB SEARCH BEHAVIOR

Please indicate the extent to which you engaged in the following job search behavior over the <u>previous six months</u>

Scale:

Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very frequently

1.1 Read the help wanted/classified ads in a newspaper, journal or professional association publication.

1.2 Listed yourself as a job applicant in a newspaper, journal or professional association publication.

1.3 Searched for job vacancies in the career section of the websites of specific companies/organizations.

1.4 Applied for a job through the career section of the websites of specific companies/organizations.

1.5 Searched for job vacancies in online job boards.

1.6 Entered your resume in the databases of online job boards.

1.7 Contacted an employment agency, executive search firm or state employment service.

1.8 Spoke with friends, relatives, colleagues, classmates, professors, previous employers or business acquaintances about their knowledge of potential job leads.

1.9 Searched for a job vacancy in social network sites.

1.10 Used social network sites to apply for a job.

2. EMPLOYMENT STATUS
Specify your employment status by selecting one of the following:

☐ Employed full-time or part-time and not actively seeking a new job

☐ Employed full-time or part-time and actively seeking a new job

☐ Unemployed and not actively seeking a new job

☐ Unemployed and actively seeking a new job

Note: Please complete this questionnaire, even if you don't consider yourself to be in the job market presently.

3. PRIVACY CONCERNS

Indicate the extent of your agreement or disagreement with the following statements.

Scale:

Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

Concerns Specific to the Excessive Collection of Personal Information

3.1 It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information.

3.2 f recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it.

3.3 It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment.

3.4 I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me.

Global Information Privacy Concerns

3.5 All things considered, the Internet causes serious privacy problems.

3.6 The most important thing to me is to keep my privacy intact from Internet users.

3.7 Compared with other issues on my mind, privacy of my personal information is very important.

3.8 I am concerned about online threats to the privacy of my personal information.

4. SOCIAL NETWORKING SITES

4.1 An Overview (Presented to all participants)

To ensure that all participants of this study have a similar understanding of what we mean by social networking sites (SNSs), we provide a brief description on this page. **Please read through this description and answer the questions below before proceeding to the next page.**

Social networking sites (SNSs) typically allow their users to perform four fundamental functions:

- Construct a public or semi-public profile of themselves, which typically includes the personal information such as interests and activities, contact information, educational and work background, and the list of groups to which the user belongs
- Connect with other users to form social networks (that is, accept them as "friends")
- View/traverse their connections and those made by others
- Use classic online communication tools (e.g. email, chat rooms, IM, discussion forums, blogs)

Individuals who accept invitations to be part of a user's immediate social network are called "friends" in some SNSs, or "connections" in others. It is possible to view a user's

"friends" or "connections" if you have that user's permission to do. A sample "Friends" or "Connections" page is shown in Figure 1. This page typically includes direct or indirect links to the profiles of the user's friends and to the "connections" or "friends" of these friends.
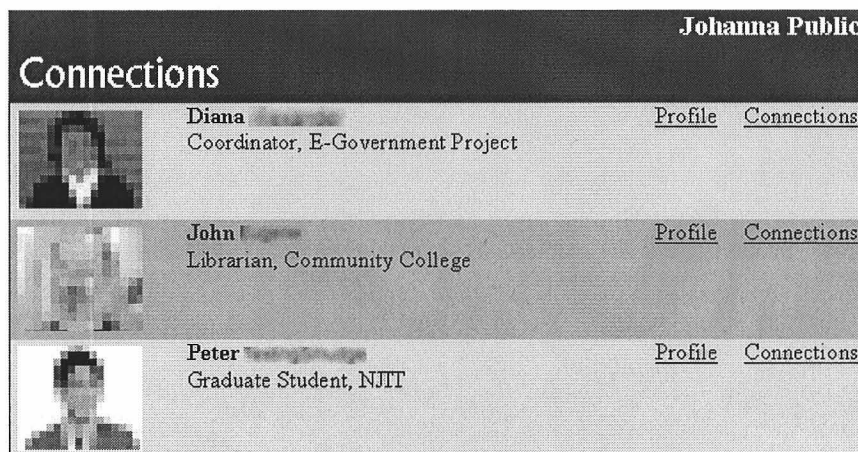
Figure 1: Sample Connections Page

4. 2 Perceived Justice/ Trusting Beliefs
On the following scale, select the number that most accurately reflects your beliefs.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

4.2.1 I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs.

4.2.2 I believe that only job specific information discovered from SNSs will be used by recruiters and potential employers.

4.2.3 I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs.

4.2.4 I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs.

4.2.5 I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs.

4.2.6 I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs.

4.2.7 I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs.

5. CAREER SERVICES IN SOCIAL NETWORKING SITES

Sample Job Advertisement (Presented to all participants)

Consider a typical job vacancy advertisement in a SNS. Such an advertisement is likely to include: a job description, required skills, and a short company description. Figure 2 shows an excerpt of a typical job vacancy advertisement for a company which we will refer to as Company X.

Job Description	
Title:	Web Application Developer
Location:	San Francisco
Type:	Fulltime
Responsibilities:	

- Technical design work, including database design, user interface design
- Develop and implement technical designs
- Drive testing and deployment processes

Skills

- BS/MS in Computer Science
- Experience in:
    - Object Oriented/Java/C++ development (at least 3 years)
    - Building database applications using Oracle, MySQL.
        - Building a scalable, complicated web-based application with high performance (JSP, JavaScript, AJAX is desirable).

Company Description

We at Company X focus on innovation and smart business practices – but even as we continue to grow, we're committed to retaining a small-company feel. At Company X, we know that every employee has something important to say, and that every employee is integral to our success. We provide individually-tailored compensation packages that comprise competitive salary, bonus, and equity components, along with the opportunity to earn further financial bonuses and rewards.

Figure 2: Sample Job Advertisement

5.1 Are you a member of at least one social network site? ☐ Yes ☐ No. If "No", respondents will be directed to Section 5.2

Note: Only individuals who respond "Yes" to question 5.1 will continue with questions in this Section.

5.1.1 (a) What is the name of the SNS that you use most frequently? _____
(b) Approximately how many individuals are you directly connected to in this site?
(c) How frequently do you use this site?
   (1) Never
   (2) Once in a while
   (3) Once a week
   (4) A few times a week
   (5) Every day
   (6) Several times a day

5.1.2 (a) What is your second most frequently used SNS? _____
(b) Approximately how many individuals are you directly connected to in this site?
(c) How frequently do you use this site?
   (1) Never
   (2) Once in a while
   (3) Once a week
   (4) A few times a week
   (5) Every day
   (6) Several times a day

5.1.3 (a) What is your third most frequently used SNS? _____
(b) Approximately how many individuals are you directly connected to in this site?
(c) How frequently do you use this site?
   (1) Never
   (2) Once in a while
   (3) Once a week
   (4) A few times a week
   (5) Every day
   (6) Several times a day

5.1.4 How long ago did you start using SNSs
   (1) Less than 1 year
   (2) More than 1 year and less than 2 years
   (3) More than 2 year and less than 3 years
   (4) More than 3 year and less than 4 years
   (5) More than 4 year and less than 5 years
   (6) More than 5 years

5.2 Information on Inside Connections Feature (Presented to half of the subjects)

It is <u>very important</u> that you read the information provided below before answering the questions that follow.

Suppose that in addition to the job vacancy advertisement, a job seeker was given information about his/her **"inside connections"** to potential employers.

A job seeker's "inside connections" to a potential employer, for example Company X, are individuals within that job seeker's social network who are three degrees away or closer and work with that potential employer (Company X). This includes, as illustrated in Figure 3, the following individuals:

- friends (or first degree connections to the job seeker);
- friends of friends (or second degree connections);
- and, friends of friends of friends (or third degree)
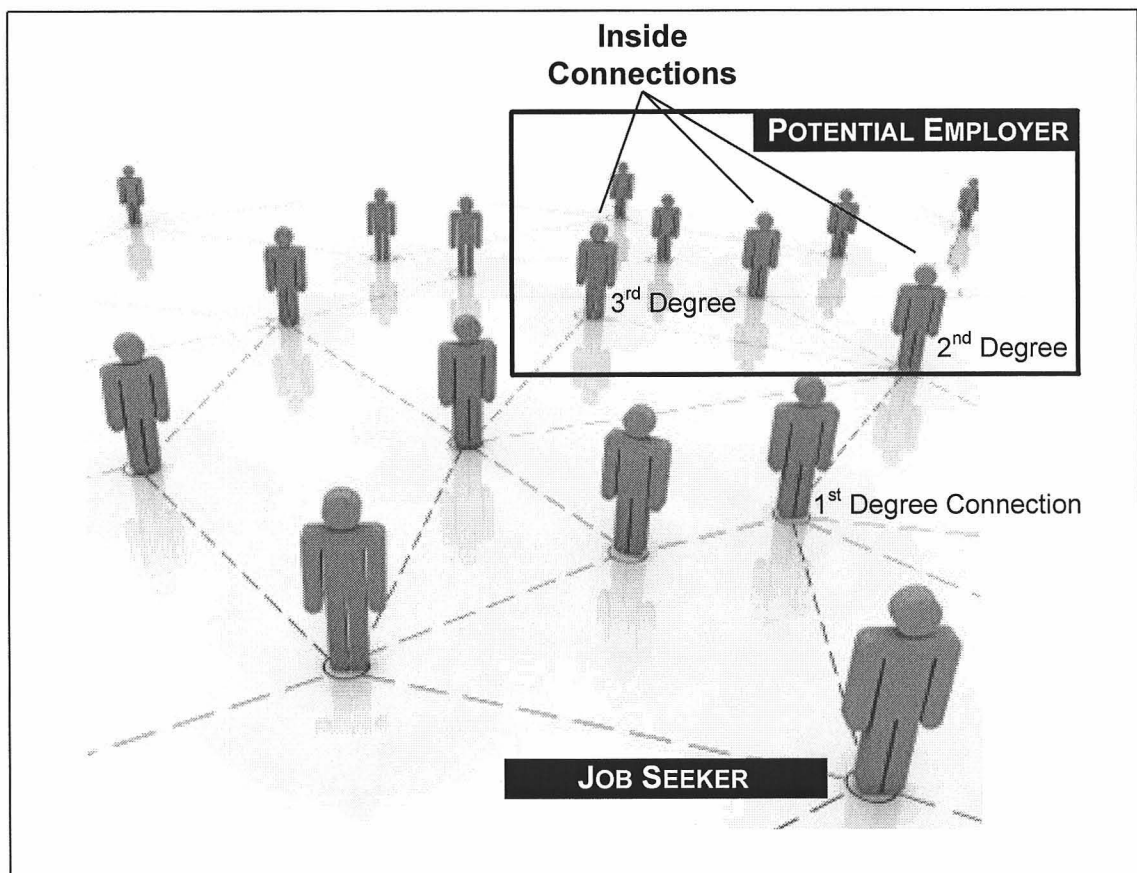
Figure 3: An illustration of "Inside Connections"

Figure 4 provides an example of the type of **"inside connections"** information that can be displayed to a job seeker who is interested in a position advertised by Company X.

Johanna Public
Inside Connections to Company X
Number of friends (direct connections) in your social network who work with Company X and may help you get this job: · **2**
• John Doe   • Anne Stewart
Number of friends of friends in your social network who work with Company X: · **3**
Number of friends of friends of friends in your social network who work with Company X: · **8**
Tip: **Ask your connections for introductions to contacts at Company X**

Figure 4: An illustration of Inside Connections information provided to job seekers

Note: For questions 5.2.1 to 5.2.3, if you are not a member of a SNS, answer the way you think you would feel if you were a member.

Based on the previous description of "inside connections" and the illustrations in Figures 3 and 4, please answer the following questions with respect to **the SNS that you use most frequently.**

Assume that, for this SNS, you could get "Inside Connections" information for a company to which you might want to apply.

What do you think is the minimum number of the following connections required to boost your chances of getting a job at that company?
5.2.1 Friends (direct connections) _____

5.2.2 Friends of friends (second degree connections) _____

5.2.3 How likely are you to use this type of "inside connections" information?
         Unlikely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Likely

6. PERFORMANCE EXPECTANCY

On the following scale, select the number that most accurately reflects your opinion. If you are not a member of a SNS, answer the way you think you would feel if you were a member.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

6.1 I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept.

6.2 I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job.

6.3 I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job.

6.4 I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job.

6.5 I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job.

6.6 In general, using SNSs would enable job seekers to find a job more quickly.

6.7 It is not a waste of time using SNSs to find a job.

6.8 Overall, I think SNSs would be useful in job seeking activities.

7. EFFORT EXPECTANCY

On the following scale, select the number that most accurately reflects your opinion.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

7.1 It would be difficult for me to become skillful at applying for jobs on SNSs.

7.2 Doing what is necessary to secure a job using SNSs would require too much time.

7.3 Doing what is necessary to secure a job using SNSs would require too much effort.

7.4 It would be complicated to apply for jobs on SNSs.

8. SOCIAL INFLUENCE

On the following scale, select the number that most accurately reflects your opinion.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

8.1 People who influence my behavior think that a good way to find a job is by applying through SNSs.

8.2 People who are important to me view applying for jobs on SNSs positively.

8.3 I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose.

8.4 In general, people who apply for jobs on SNSs have more prestige than those who do not.

8.5 Securing a job through SNSs is like a status symbol.

9. RISK BELIEFS
On the following scale, select the number that most accurately reflects your beliefs.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

9.1 There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs.

9.2 There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs.

9.3 Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs.

9.4 I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job.

10. FACILITATING CONDITIONS
Indicate the extent of your agreement or disagreement with the following.

Scale:
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

10.1 I have the knowledge necessary to use SNSs to apply for jobs.

10.2 I can afford to invest the time that would be necessary for me to apply for jobs using SNSs.

10.3 I can use the technical resources (computer and Internet access) available to me to apply for jobs on SNSs.

11. ATTITUDES AND BEHAVIORAL INTENTIONS AND PREFERENCES
Please answer accurately the following questions

11.1 How likely are you to apply for a job through social networking sites?
Very unlikely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very likely

11.2 How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates?
Very unlikely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very likely

11.3 I think it is a <u>bad</u> idea to apply for jobs through social networking sites.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

11.4 How likely are you to change information posted about you on the social networking sites to which you belong before applying for a job through these sites? If you are not a member of a SNS, please check this box: ☐ Not applicable.
Very unlikely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very likely

11.5 I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

11.6 I would prefer to use offline means over online means (including SNSs and job boards) in applying for a job.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

Beliefs about Employers and Recruiters Behavior in SNSs

11.7 Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

11.8 If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

Manipulation Checks

11.9 I have a good understanding of how online connections in SNSs could be used in a job search.
Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree

11.10 I believe that the information provided earlier on how online connections in a SNSs could help in securing jobs advertised on these sites was _____.
Limited | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Extensive

Open Ended Questions

11.11 Please describe the one main thing that might keep you from using social networking sites to apply for a job?

11.12 What features/services/information do you wish SNSs would provide to facilitate job hunting?

11.13 Do you have any other comments (including your experiences or the experiences of others) with regard to using SNSs in looking for a job?

12. BACKGROUND INFORMATION:

Finally, to assist with our analysis, we will appreciate it if you can provide the following background information about yourself.

12.1 Gender: ☐ Female   ☐ Male

12.2 In what age group do you belong? ☐Under 21 ☐21-30 ☐31-40 ☐41-50
☐51-60   ☐Over 60

12.3 Ethnicity (e.g. Asian, African American, Hispanic, Latino, Middle Eastern, White American, White Non-American, other): _____

12.4 What is your highest level of education?

☐   Some Schooling, no High
     School Diploma

☐   High School Graduate

☐   Pursuing Associates Degree   Specify major: _____

☐   Associates Degree   Specify major: _____

☐   Pursuing Bachelors Degree   Specify major: _____

☐   Bachelors Degree   Specify major: _____

☐   Pursuing Masters Degree   Specify major: _____

☐   Masters Degree   Specify major: _____

☐   Pursuing Doctoral Degree   Specify major: _____

☐   Doctoral Degree   Specify major: _____

12.5 What year did you graduate from the last degree program that you completed? _____

12.6.1 How often do you read novels?
        Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very frequently

12.6.2 How often do you engage in physical fitness exercises?
        Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very frequently

12.7 How would you describe your expertise with respect to the use of the Internet?
        Novice | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Expert

12.8 How frequently have you personally been the victim of what you felt was an improper invasion of your online privacy?
        Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very frequently

12.9 How much have you heard or read during the last year about the use and potential misuse of the information collected from the Internet?

Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very much

12.10 On average, what percent of the time do you falsify the information requested from you during the use of web sites?

☐ I have never falsified information; ☐ under 25% of the time; ☐ 26%–50% of the time; ☐ 51%–75% of the time; ☐ over 75% of the time

12.11 Select the one occupational group in which your ideal job fits in best. Groups are based on the Bureau of Labor Statistics Standard Occupational Classification

☐	Management	☐	Food Preparation and Serving Related
☐	Business and Financial Operations	☐	Building and Grounds Cleaning and Maintenance
☐	Computer and Mathematical	☐	Sales, Marketing and Related
☐	Architecture and Engineering	☐	Office and Administrative Support
☐	Life, Physical, and Social Science	☐	Farming, Fishing, and Forestry
☐	Community and Social Services	☐	Construction and Extraction
☐	Legal	☐	Installation, Maintenance, and Repair
☐	Education, Training, and Library	☐	Protective Services (Firefighting, Law Enforcement)
☐	Arts, Design, Entertainment, Sports, and Media	☐	Production (Manufacturing, Assembling, Food Processing)
☐	Healthcare Practitioners and Technicians	☐	Transportation and Material Moving
☐	Healthcare Support	☐	Military Specific

12.12 Please indicate your school affiliation? Choose the one from which you graduated most recently: ☐ NJIT; ☐ Rutgers New Brunswick; ☐ Rutgers Newark. (This question was asked at the beginning).

APPENDIX D

MISSING DATA ANALYSIS

This appendix provides, for each affiliation, information on the number of missing responses for each measured variable and percentage of total sample size this number represents. A close examination of these missing data statistics suggests that respondents chose to answer most of the questions and that there was no obvious pattern in questions for which there was some missing data.

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Social Influence									
SI1 - People who influence my behavior think that a good way to find a job is by applying through SNSs	131	0	.0	358	1	.3	489	1	.2
SI2 - People who are important to me view applying for jobs on SNSs positively	130	1	.8	358	1	.3	488	2	.4
SI3 - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose	131	0	.0	357	2	.6	488	2	.4
SI4 - In general, people who apply for jobs on SNSs have more prestige than those who do not	131	0	.0	357	2	.6	488	2	.4
SI5 - Securing a job through SNSs is like a status symbol	129	2	1.5	356	3	.8	485	5	1.0
Effort Expectancy									
EE1 - It would be difficult for me to become skillful at applying for jobs on SNSs	131	0	.0	358	1	.3	489	1	.2
EE2 - Doing what is necessary to secure a job using SNSs would require too much time	131	0	.0	357	2	.6	488	2	.4
EE3 - Doing what is necessary to secure a job using SNSs would require too much effort	130	1	.8	358	1	.3	488	2	.4
EE4 - It would be complicated to apply for jobs on SNSs	131	0	.0	357	2	.6	488	2	.4

Table D.1 Missing Data Analysis — Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Performance Expectancy									
PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	131	0	.0	359	0	.0	490	0	.0
PE2 - I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	131	0	.0	357	2	.6	488	2	.4
PE3 - I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	131	0	.0	359	0	.0	490	0	.0
PE4 - I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	131	0	.0	355	4	1.1	486	4	.8
PE5 - I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	131	0	.0	359	0	.0	490	0	.0
PE6 - In general, using SNSs would enable job seekers to find a job more quickly	130	1	.8	359	0	.0	489	1	.2
PE7 - It is not a waste of time using SNSs to find a job	131	0	.0	359	0	.0	490	0	.0
PE8 - Overall, I think SNSs would be useful in job seeking activities	130	1	.8	355	4	1.1	485	5	1.0

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Privacy Concerns (Collection of Personal Data)									
PC1- It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information	131	0	.0	359	0	.0	490	0	.0
PC2 - If recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it	130	1	.8	359	0	.0	489	1	.2
PC3 - It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment	130	1	.8	356	3	.8	486	4	.8
PC4 - I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me	131	0	.0	359	0	.0	490	0	.0
Privacy Concerns (General Internet)									
Priv_Gen1 - All things considered, the Internet causes serious privacy problems	131	0	.0	356	3	.8	487	3	.6
Priv_Gen2 - The most important thing to me is to keep my privacy intact from Internet users	129	2	1.5	358	1	.3	487	3	.6
Priv_Gen3 - Compared with other issues on my mind, privacy of my personal information is very important	131	0	.0	359	0	.0	490	0	.0
Priv_Gen4 - I am concerned about online threats to the privacy of my personal information	131	0	.0	359	0	.0	490	0	.0

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Perceived Justice/ Trusting Beliefs									
JT1 - I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs	131	0	.0	358	1	.3	489	1	.2
JT2 - I believe that only job specific information discovered from SNSs will be used by recruiters and potential employers	131	0	.0	357	2	.6	488	2	.4
JT3 - I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs	131	0	.0	356	3	.8	487	3	.6
JT4 - I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs	131	0	.0	358	1	.3	489	1	.2
JT5 - I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs	129	2	1.5	354	5	1.4	483	7	1.4
JT6 - I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs	131	0	.0	358	1	.3	489	1	.2
JT7 - I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs	131	0	.0	357	2	.6	488	2	.4

Table D.1 Missing Data Analysis — Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Risk Beliefs									
Risk1 - There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs	131	0	.0	357	2	.6	488	2	.4
Risk2 - There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs	131	0	.0	357	2	.6	488	2	.4
Risk3 - Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs	131	0	.0	357	2	.6	488	2	.4
Risk4 - I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job	130	1	.8	357	2	.6	487	3	.6
Behavioral Intentions									
BI1 - How likely are you to apply for a job through social networking sites? (Very unlikely/Very likely)	130	1	.8	357	2	.6	487	3	.6
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates? (Very unlikely/Very likely)	130	1	.8	356	3	.8	486	4	.8
BI3 - I think it is a bad idea to apply for jobs through social networking sites (R)	130	1	.8	356	3	.8	486	4	.8

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Facilitating Conditions									
FC1 - I have the knowledge necessary to use SNSs to apply for jobs	131	0	.0	357	2	.6	488	2	.4
FC2 - I can afford to invest the time that would be necessary for me to apply for jobs using SNSs	129	2	1.5	357	2	.6	486	4	.8
FC3 - I can use the technical resources (computer and Internet access) available to me to apply for jobs on SNSs	130	1	.8	356	3	.8	486	4	.8
Job Search Behavior									
JSB1 - Read the help wanted/classified ads in a newspaper, journal or professional association publication	131	0	.0	358	1	.3	489	1	.2
JSB2 - Listed yourself as a job applicant in a newspaper, journal or professional association publication	130	1	.8	358	1	.3	488	2	.4
JSB3 - Searched for job vacancies in the career section of the websites of specific companies/organizations	131	0	.0	358	1	.3	489	1	.2
JSB4 - Applied for a job through the career section of the websites of specific companies/organizations	131	0	.0	357	2	.6	488	2	.4
JSB5 - Searched for job vacancies in online job boards	130	1	.8	353	6	1.7	483	7	1.4
JSB6 - Entered your resume in the databases of online job boards	131	0	.0	355	4	1.1	486	4	.8
JSB7 - Contacted an employment agency, executive search firm or state employment service	130	1	.8	357	2	.6	487	3	.6
JSB8 - Spoke with friends, relatives, colleagues, classmates, professors, previous employers or business acquaintances about their knowledge of potential job leads	129	2	1.5	357	2	.6	486	4	.8

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
JSB9 - Searched for a job vacancy in social network sites	130	1	.8	359	0	.0	489	1	.2
JSB10 - Used social network sites to apply for a job	130	1	.8	356	3	.8	486	4	.8
Other Variables Measured with Interval Scales									
IC_LikelyUse - How likely are you to use this type of "inside connections" information?	64	1	1.5	171	2	1.2	235	3	1.3
Pref_JB - I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job	128	3	2.3	356	3	.8	484	6	1.2
Pref_Offline - I would prefer to use offline means over online means (including SNSs and job boards) in applying for a job	131	0	.0	357	2	.6	488	2	.4
EmpUseofSNS - Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there	130	1	.8	356	3	.8	486	4	.8
EmpSNSSearch - If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there	130	1	.8	356	3	.8	486	4	.8
Chg_Info - How likely are you to change information posted about you on the social networking sites to which you belong before applying for a job through these sites? (Very unlikely/Very likely)	131	0	.0	356	3	.8	487	3	.6
Net_Expert - How would you describe your expertise with respect to the use of the Internet?	128	3	2.3	355	4	1.1	483	7	1.4
Media_Expose - How much have you heard or read during the last year about the use and potential misuse of the information collected from the Internet?	129	2	1.5	355	4	1.1	484	6	1.2

Table D.1 Missing Data Analysis —Variables Measured with Interval Scales (Continued)

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Priv_Vict - How frequently have you personally been the victim of what you felt was an improper invasion of your online privacy?	130	1	.8	357	2	.6	487	3	.6
IC_InfoProvided - I believe that the information provided earlier on how online connections in a SNSs could help in securing jobs advertised on these sites was _____ (limited/extensive)	130	1	.8	356	3	.8	486	4	.8
IC_Understand - I have a good understanding of how online connections in SNSs could be used in a job search	131	0	.0	354	5	1.4	485	5	1.0
Novel_Freq - How often do you read novels?	128	3	2.3	357	2	.6	485	5	1.0
Exercise_Freq - How often do you engage in physical fitness exercises?	0	131	100.0	284	75	20.9	284	206	42.0
Since_Grad - What year did you graduate from the last degree program that you completed? (derived by subtract graduation year from 2009)	123	8	6.1	292	67	18.7	415	75	15.3

Table **D.2** Missing Data Analysis —Variables Measured with Nominal and Ordinal Scales

	NJIT			Rutgers(New Brunswick)			NJIT_Rutgers Pooled		
	N	Missing	(%)	N	Missing	(%)	N	Missing	(%)
Gender	131	0	.0	359	0	.0	490	0	.0
Age	131	0	.0	359	0	.0	490	0	.0
Education	131	0	.0	359	0	.0	490	0	.0
Occupation	127	4	3.1	344	15	4.2	471	19	3.9
Emp_Stat – Employment Status	131	0	.0	359	0	.0	490	0	.0
SNS_Mem – Member of at least one SNS	131	0	.0	359	0	.0	490	0	.0
SNS_Exp – Experience in using SNS	111	0	.0	335	0	.0	446	0	.0
False_Info - Frequency of Falsifying information requested online	126	5	3.8	350	9	2.5	476	14	2.9

APPENDIX E

DESCRIPTIVE STATISTICS ON MEASURED VARIABLES

This appendix presents for each institution, descriptive statistics such as the means and standard deviations for the variables measured using an interval scale. This appendix also presents the frequency distributions for these variables. However, these distributions are for the entire dataset. The frequency distributions of the variables measure with nominal and ordinal scales are provided in Chapter 8 along with comparisons of the distributions for the two institutions.

For each institution, skewness and kurtosis statistics for the variables relevant to the research models are included in this appendix. However, for variables not considered in the research model, skewness and kurtosis statistics for the combined dataset are provided.

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
SI1 - People who influence my behavior think that a good way to find a job is by applying through SNSs	131	3.34	1.538	358	2.96	1.567	489	3.07	1.567
SI2 - People who are important to me view applying for jobs on SNSs positively	130	3.55	1.463	358	3.23	1.551	488	3.31	1.533
SI3 - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose	131	3.27	1.574	357	2.93	1.625	488	3.02	1.617
SI4 - In general, people who apply for jobs on SNSs have more prestige than those who do not	131	2.73	1.649	357	2.38	1.484	488	2.48	1.536
SI5 - Securing a job through SNSs is like a status symbol	129	2.45	1.576	356	2.26	1.478	485	2.31	1.505
EE1 - It would be difficult for me to become skillful at applying for jobs on SNSs	131	3.18	1.769	358	3.12	1.779	489	3.13	1.775
EE2 - Doing what is necessary to secure a job using SNSs would require too much time	131	3.50	1.760	357	3.41	1.601	488	3.43	1.644
EE3 - Doing what is necessary to secure a job using SNSs would require too much effort	130	3.45	1.752	358	3.32	1.584	488	3.35	1.630
EE4 - It would be complicated to apply for jobs on SNSs	131	3.44	1.798	357	3.19	1.615	488	3.26	1.668
PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	131	4.01	1.571	359	3.69	1.593	490	3.78	1.592
PE2 - I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	131	4.04	1.491	357	3.65	1.605	488	3.75	1.583
PE3 - I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	131	4.11	1.522	359	3.56	1.667	490	3.71	1.646

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales (Continued)

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
PE4 - I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	131	4.21	1.579	355	3.83	1.691	486	3.93	1.668
PE5 - I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	131	4.11	1.550	359	3.58	1.639	490	3.72	1.631
PE6 - In general, using SNSs would enable job seekers to find a job more quickly	130	3.92	1.590	359	3.61	1.627	489	3.69	1.621
PE7 - It is not a waste of time using SNSs to find a job	131	4.31	1.745	359	4.05	1.664	490	4.12	1.688
PE8 - Overall, I think SNSs would be useful in job seeking activities	130	4.27	1.665	355	3.91	1.682	485	4.01	1.683
PC1- It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information	131	3.92	1.754	359	3.94	1.642	490	3.93	1.671
PC2 - If recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it	130	4.60	1.816	359	4.86	1.722	489	4.79	1.749
PC3 - It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment	130	4.48	1.740	356	4.45	1.736	486	4.46	1.735
PC4 - I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me	131	4.35	1.754	359	4.29	1.711	490	4.31	1.721
Priv_Gen1 - All things considered, the Internet causes serious privacy problems	131	4.39	1.796	356	4.72	1.732	487	4.63	1.753
Priv_Gen2 - The most important thing to me is to keep my privacy intact from Internet users	129	4.87	1.729	358	4.74	1.695	487	4.77	1.703
Priv_Gen3 - Compared with other issues on my mind, privacy of my personal information is very important	131	5.07	1.702	359	4.90	1.690	490	4.94	1.693

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales (Continued)

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Priv_Gen4 - I am concerned about online threats to the privacy of my personal information	131	5.15	1.683	359	4.95	1.611	490	5.00	1.631
JT1 - I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs	131	3.77	1.685	358	3.74	1.448	489	3.75	1.513
JT2 - I believe that only job specific information discovered from SNSs will be used by recruiters and potential employers	131	3.52	1.883	357	2.96	1.685	488	3.11	1.755
JT3 - I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs	131	3.76	1.797	356	3.37	1.505	487	3.47	1.597
JT4 - I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs	131	3.67	1.689	358	3.54	1.548	489	3.57	1.586
JT5 - I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs	129	3.33	1.725	354	2.96	1.556	483	3.06	1.609
JT6 - I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs	131	3.80	1.666	358	3.53	1.489	489	3.60	1.541
JT7 - I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs	131	3.69	1.768	357	3.39	1.535	488	3.47	1.604
Risk1 - There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs	131	3.92	1.572	357	4.31	1.624	488	4.21	1.618

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales (Continued)

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Risk2 - There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs	131	4.13	1.516	357	4.62	1.449	488	4.49	1.482
Risk3 - Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs	131	4.18	1.597	357	4.55	1.492	488	4.45	1.528
Risk4 - I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job	130	3.95	1.716	357	4.15	1.604	487	4.10	1.635
BI1 - How likely are you to apply for a job through social networking sites? (Very unlikely/Very likely)	130	3.90	1.988	357	3.42	1.872	487	3.55	1.913
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates? (Very unlikely/Very likely)	130	3.63	1.726	356	3.56	1.720	486	3.58	1.720
BI3 - I think it is a bad idea to apply for jobs through social networking sites (R)	130	4.48	1.869	356	3.84	1.871	486	4.01	1.890
FC1 - I have the knowledge necessary to use SNSs to apply for jobs	131	5.00	1.819	357	5.03	1.766	488	5.02	1.779
FC2 - I can afford to invest the time that would be necessary for me to apply for jobs using SNSs	129	4.85	1.746	357	4.79	1.623	486	4.80	1.655
FC3 - I can use the technical resources (computer and Internet access) available to me to apply for jobs on SNSs	130	5.54	1.581	356	5.74	1.373	486	5.68	1.432
JSB1 - Read the help wanted/classified ads in a newspaper, journal or professional association publication	131	3.31	2.061	358	3.32	1.973	489	3.32	1.995
JSB2 - Listed yourself as a job applicant in a newspaper, journal or professional association publication	130	2.15	1.843	358	1.73	1.529	488	1.84	1.627

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales (Continued)

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
JSB3 - Searched for job vacancies in the career section of the websites of specific companies/organizations	131	5.64	1.603	358	4.97	1.918	489	5.15	1.861
JSB4 - Applied for a job through the career section of the websites of specific companies/organizations	131	5.41	1.839	357	4.80	2.081	488	4.97	2.035
JSB5 - Searched for job vacancies in online job boards	130	5.74	1.772	353	4.95	2.053	483	5.16	2.010
JSB6 - Entered your resume in the databases of online job boards	131	5.50	1.974	355	4.39	2.164	486	4.69	2.170
JSB7 - Contacted an employment agency, executive search firm or state employment service	130	3.78	2.333	357	2.59	2.094	487	2.91	2.221
JSB8 - Spoke with friends, relatives, colleagues, classmates, professors, previous employers or business acquaintances about their knowledge of potential job leads	129	5.24	1.903	357	5.12	1.749	486	5.15	1.790
JSB9 - Searched for a job vacancy in social network sites	130	3.35	2.213	359	3.23	2.217	489	3.27	2.215
JSB10 - Used social network sites to apply for a job	130	2.96	2.155	356	2.54	2.075	486	2.66	2.102
IC_LikelyUse - How likely are you to use this type of "inside connections" information?	64	5.08	1.897	171	4.80	1.862	235	4.88	1.871
Pref_JB - I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job	128	4.95	1.738	356	5.45	1.634	484	5.32	1.675
Pref_Offline - I would prefer to use offline means over online means (including SNSs and job boards) in applying for a job	131	3.56	1.873	357	4.08	1.962	488	3.94	1.950
EmpUseofSNS - Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there	130	4.49	1.731	356	4.97	1.562	486	4.84	1.621

Table E.1 Mean and Standard Deviation of Variables Measured Using Interval Type Scales (Continued)

	NJIT			Rutgers (New Brunswick)			NJIT_Rutgers Pooled		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
EmpSNSSearch - If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there	130	5.26	1.401	356	5.49	1.429	486	5.43	1.424
Chg_Info - How likely are you to change information posted about you on the social networking sites to which you belong before applying for a job through these sites? (Very unlikely/Very likely; Not Applicable)	115	4.67	2.029	339	5.15	1.976	454	5.031,	1.998
Net_Expert - How would you describe your expertise with respect to the use of the Internet?	128	6.18	1.015	355	5.93	1.011	483	5.99	1.017
Media_Expose - How much have you heard or read during the last year about the use and potential misuse of the information collected from the Internet?	129	5.55	1.369	355	5.41	1.340	484	5.45	1.348
Priv_Vict - How frequently have you personally been the victim of what you felt was an improper invasion of your online privacy?	130	2.60	1.533	357	2.85	1.587	487	2.78	1.575
IC_InfoProvided - I believe that the information provided earlier on how online connections in a SNSs could help in securing jobs advertised on these sites was _____ (limited/extensive)	130	4.18	1.389	356	4.08	1.347	486	4.10	1.357
IC_Understand - I have a good understanding of how online connections in SNSs could be used in a job search	131	4.66	1.481	354	4.76	1.548	485	4.74	1.529
Novel_Freq - How often do you read novels?	128	4.01	1.978	357	4.46	1.856	485	4.34	1.898
Exercise_Freq - How often do you engage in physical fitness exercises?	---	---.	---.	284	5.05	1.564	284	5.05	1.564
Since_Grad - What year did you graduate from the last degree program that you completed? (derived by subtract graduation year from 2009)	123	2.94	7.057	292	1.40	3.151	415	1.86	4.707

Table E.2 Frequency Distributions for Research Model Variables

Variables		Response Frequencies							Total
		1	2	3	4	5	6	7	
Behavioral Intention									
BI1 - How likely are you to apply for a job through social networking sites?*	Count	92	93	53	80	79	53	37	487
	Row N %	18.9%	19.1%	10.9%	16.4%	16.2%	10.9%	7.6%	100.0%
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates?*	Count	78	69	72	118	85	38	26	486
	Row N %	16.0%	14.2%	14.8%	24.3%	17.5%	7.8%	5.3%	100.0%
B3_R - I think it is a <u>bad</u> idea to apply for jobs through social networking sites.	Count	60	61	71	104	59	72	59	486
	Row N %	12.3%	12.6%	14.6%	21.4%	12.1%	14.8%	12.1%	100.0%
Effort Expectancy									
EE1- It would be difficult for me to become skillful at applying for jobs on SNSs.	Count	119	93	73	89	56	40	19	489
	Row N %	24.3%	19.0%	14.9%	18.2%	11.5%	8.2%	3.9%	100.0%
EE2 - Doing what is necessary to secure a job using SNSs would require too much time.	Count	67	89	109	90	74	40	19	488
	Row N %	13.7%	18.2%	22.3%	18.4%	15.2%	8.2%	3.9%	100.0%
EE3 - Doing what is necessary to secure a job using SNSs would require too much effort.	Count	72	92	102	110	58	33	21	488
	Row N %	14.8%	18.9%	20.9%	22.5%	11.9%	6.8%	4.3%	100.0%
EE4 - It would be complicated to apply for jobs on SNSs.	Count	82	99	107	89	55	35	21	488
	Row N %	16.8%	20.3%	21.9%	18.2%	11.3%	7.2%	4.3%	100.0%
Perceived Justice/ Trusting Beliefs									
JT1 - I believe that recruiters and potential employers would be trustworthy in handling information about job seekers that can be obtained from SNSs.	Count	43	61	103	123	104	37	18	489
	Row N %	8.8%	12.5%	21.1%	25.2%	21.3%	7.6%	3.7%	100.0%
JT2 - I believe that recruiters and potential employers would tell the truth and fulfill promises related to the use of information about job seekers that can be obtained from SNSs.	Count	107	108	83	87	45	32	26	488
	Row N %	21.9%	22.1%	17.0%	17.8%	9.2%	6.6%	5.3%	100.0%

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Table E.2 Frequency Distributions for Research Model Variables (Continued)

Variables		Response Frequencies							Total
		1	2	3	4	5	6	7	
JT3 - I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs.	Count	63	83	98	119	71	34	19	487
	Row N %	12.9%	17.0%	20.1%	24.4%	14.6%	7.0%	3.9%	100.0%
JT4 - I trust that recruiters and potential employers would keep the best interests of job seekers in mind when dealing with information about them that can be obtained from SNSs.	Count	51	84	105	114	71	46	18	489
	Row N %	10.4%	17.2%	21.5%	23.3%	14.5%	9.4%	3.7%	100.0%
JT5 - I trust that recruiters and potential employers will evaluate fairly information about job seekers that is posted by others on SNSs.	Count	96	106	99	95	46	25	16	483
	Row N %	19.9%	21.9%	20.5%	19.7%	9.5%	5.2%	3.3%	100.0%
JT6 - I believe that recruiters and potential employers will evaluate fairly job seekers' activities (e.g. blogging, contributions to discussion boards, membership in certain groups) in SNSs.	Count	50	71	107	134	69	39	19	489
	Row N %	10.2%	14.5%	21.9%	27.4%	14.1%	8.0%	3.9%	100.0%
JT7 - I believe that recruiters and potential employers will not use against job seekers information about their connections and contacts revealed in SNSs.	Count	61	92	91	117	72	37	18	488
	Row N %	12.5%	18.9%	18.6%	24.0%	14.8%	7.6%	3.7%	100.0%
Privacy Concerns									
PC1 - It would bother me if recruiters and potential employers practicing online recruitment ask me for personal information.	Count	38	73	80	125	81	53	40	490
	Row N %	7.8%	14.9%	16.3%	25.5%	16.5%	10.8%	8.2%	100.0%
PC2 - If recruiters and potential employers practicing online recruitment ask me for personal information, I would think twice before providing it.	Count	21	44	50	84	92	98	100	489
	Row N %	4.3%	9.0%	10.2%	17.2%	18.8%	20.0%	20.4%	100.0%
PC3 - It bothers me to give personal information to so many recruiters and potential employers practicing online recruitment.	Count	23	56	61	111	78	84	73	486
	Row N %	4.7%	11.5%	12.6%	22.8%	16.0%	17.3%	15.0%	100.0%
PC4 - I am concerned that recruiters and potential employers practicing online recruitment are collecting too much personal information about me.	Count	35	46	66	125	86	69	63	490
	Row N %	7.1%	9.4%	13.5%	25.5%	17.6%	14.1%	12.9%	100.0%
Performance Expectancy									
PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	Count	46	68	92	119	98	43	24	490
	Row N %	9.4%	13.9%	18.8%	24.3%	20.0%	8.8%	4.9%	100.0%

Table E.2 Frequency Distributions for Research Model Variables (Continued)

Variables			Response Frequencies							Total
			1	2	3	4	5	6	7	
PE2 - I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	Count		41	77	96	114	89	50	21	488
	Row N %		8.4%	15.8%	19.7%	23.4%	18.2%	10.2%	4.3%	100.0%
PE3 - I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	Count		53	84	69	123	93	44	24	490
	Row N %		10.8%	17.1%	14.1%	25.1%	19.0%	9.0%	4.9%	100.0%
PE4 - I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	Count		49	59	75	111	106	56	30	486
	Row N %		10.1%	12.1%	15.4%	22.8%	21.8%	11.5%	6.2%	100.0%
PE5 -- I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	Count		53	76	82	112	102	42	23	490
	Row N %		10.8%	15.5%	16.7%	22.9%	20.8%	8.6%	4.7%	100.0%
PE6 - In general, using SNSs would enable job seekers to find a job more quickly	Count		51	76	90	122	81	45	24	489
	Row N %		10.4%	15.5%	18.4%	24.9%	16.6%	9.2%	4.9%	100.0%
PE7 - It is not a waste of time using SNSs to find a job	Count		39	49	83	121	89	60	49	490
	Row N %		8.0%	10.0%	16.9%	24.7%	18.2%	12.2%	10.0%	100.0%
PE8 - Overall, I think SNSs would be useful in job seeking activities -	Count		43	63	68	119	93	64	35	485
	Row N %		8.9%	13.0%	14.0%	24.5%	19.2%	13.2%	7.2%	100.0%
Risk Beliefs										
Risk1 - There would be great potential for loss of job opportunities associated with granting potential employers and recruiters, access to information about job seekers on SNSs	Count		29	45	74	149	81	58	52	488
	Row N %		5.9%	9.2%	15.2%	30.5%	16.6%	11.9%	10.7%	100.0%
Risk2 - There would be too much uncertainty in the job candidate selection process associated with giving recruiters and potential employers, access to information about job seekers on SNSs	Count		15	36	57	136	123	72	49	488
	Row N %		3.1%	7.4%	11.7%	27.9%	25.2%	14.8%	10.0%	100.0%
Risk3 - Providing recruiters and potential employers with access to information about job seekers on SNSs would involve many unexpected problems in applying for jobs	Count		16	39	66	127	121	64	55	488
	Row N %		3.3%	8.0%	13.5%	26.0%	24.8%	13.1%	11.3%	100.0%

Table E.2 Frequency Distributions for Research Model Variables (Continued)

Variables			Response Frequencies							Total
			1	2	3	4	5	6	7	
Social Influence										
Risk4 - I believe that giving potential employers and recruiters access to information about job seekers on SNSs will have a negative effect on my prospects for obtaining a job		Count	28	64	71	139	90	44	51	487
		Row N %	5.7%	13.1%	14.6%	28.5%	18.5%	9.0%	10.5%	100.0%
SI1 - People who influence my behavior think that a good way to find a job is by applying through SNSs		Count	99	101	89	113	54	22	11	489
		Row N %	20.2%	20.7%	18.2%	23.1%	11.0%	4.5%	2.2%	100.0%
SI2 - People who are important to me view applying for jobs on SNSs positively		Count	78	86	74	153	59	29	9	488
		Row N %	16.0%	17.6%	15.2%	31.4%	12.1%	5.9%	1.8%	100.0%
SI3 - I am likely to apply for jobs on SNSs because of the proportion of my friends and acquaintances who use it for that purpose		Count	115	97	78	102	61	27	8	488
		Row N %	23.6%	19.9%	16.0%	20.9%	12.5%	5.5%	1.6%	100.0%
SI4 - In general, people who apply for jobs on SNSs have more prestige than those who do not		Count	186	101	59	95	27	12	8	488
		Row N %	38.1%	20.7%	12.1%	19.5%	5.5%	2.5%	1.6%	100.0%
SI5 - Securing a job through SNSs is like a status symbol		Count	210	100	54	80	24	9	8	485
		Row N %	43.3%	20.6%	11.1%	16.5%	4.9%	1.9%	1.6%	100.0%

Table E.3 Frequency Distributions for Variables Excluded from Research Model

Variables		1	2	3	4	5	6	7	Total
				Response Frequencies					
Privacy Concerns - General Internet (1- Strongly Disagree; 7 – Strongly agree)									
Priv_Gen1 - All things considered, the Internet causes serious privacy problems	Count	20	54	54	93	96	78	92	487
	Row N %	4.1%	11.1%	11.1%	19.1%	19.7%	16.0%	18.9%	100.0%
Priv_Gen2 - The most important thing to me is to keep my privacy intact from Internet users	Count	22	32	58	92	97	91	95	487
	Row N %	4.5%	6.6%	11.9%	18.9%	19.9%	18.7%	19.5%	100.0%
Priv_Gen3 - Compared with other issues on my mind, privacy of my personal information is very important	Count	18	30	53	86	86	107	110	490
	Row N %	3.7%	6.1%	10.8%	17.6%	17.6%	21.8%	22.4%	100.0%
Priv_Gen4 - I am concerned about online threats to the privacy of my personal information	Count	16	24	48	94	89	111	108	490
	Row N %	3.3%	4.9%	9.8%	19.2%	18.2%	22.7%	22.0%	100.0%
Facilitating Conditions (1- Strongly Disagree; 7 – Strongly agree)									
FC1 - I have the knowledge necessary to use SNSs to apply for jobs	Count	17	47	38	66	91	96	133	488
	Row N %	3.5%	9.6%	7.8%	13.5%	18.6%	19.7%	27.3%	100.0%
FC2 - I can afford to invest the time that would be necessary for me to apply for jobs using SNSs	Count	18	39	42	91	117	89	90	486
	Row N %	3.7%	8.0%	8.6%	18.7%	24.1%	18.3%	18.5%	100.0%
FC3 - I can use the technical resources (computer and Internet access) available to me to apply for jobs on SNSs	Count	8	9	22	61	74	128	184	486
	Row N %	1.6%	1.9%	4.5%	12.6%	15.2%	26.3%	37.9%	100.0%
Job Search Behavior (1- Never; 7 – Very frequently)									
JSB1 - Read the help wanted/classified ads in a newspaper, journal or professional association publication	Count	125	85	67	63	68	32	49	489
	Row N %	25.6%	17.4%	13.7%	12.9%	13.9%	6.5%	10.0%	100.0%
JSB2 - Listed yourself as a job applicant in a newspaper, journal or professional association publication	Count	350	42	19	26	20	14	17	488
	Row N %	71.7%	8.6%	3.9%	5.3%	4.1%	2.9%	3.5%	100.0%

Table E.3 Frequency Distributions for Variables Excluded from Research Model (Continued)

Variables		Response Frequencies							Total
		1	2	3	4	5	6	7	
JSB3 - Searched for job vacancies in the career section of the websites of specific companies/organizations	Count	32	22	48	52	83	87	165	489
	Row N %	6.5%	4.5%	9.8%	10.6%	17.0%	17.8%	33.7%	100.0%
JSB4 - Applied for a job through the career section of the websites of specific companies/organizations	Count	51	33	31	58	66	91	158	488
	Row N %	10.5%	6.8%	6.4%	11.9%	13.5%	18.6%	32.4%	100.0%
JSB5 - Searched for job vacancies in online job boards	Count	50	22	26	52	63	91	179	483
	Row N %	10.4%	4.6%	5.4%	10.8%	13.0%	18.8%	37.1%	100.0%
JSB6 - Entered your resume in the databases of online job boards	Count	72	37	36	47	73	76	145	486
	Row N %	14.8%	7.6%	7.4%	9.7%	15.0%	15.6%	29.8%	100.0%
JSB7 - Contacted an employment agency, executive search firm or state employment service	Count	229	47	35	42	36	45	53	487
	Row N %	47.0%	9.7%	7.2%	8.6%	7.4%	9.2%	10.9%	100.0%
JSB8 - Spoke with friends, relatives, colleagues, classmates, professors, previous employers or business acquaintances about their knowledge of potential job leads	Count	32	19	36	59	96	99	145	486
	Row N %	6.6%	3.9%	7.4%	12.1%	19.8%	20.4%	29.8%	100.0%
JSB9 - Searched for a job vacancy in social network sites	Count	172	62	50	48	49	42	66	489
	Row N %	35.2%	12.7%	10.2%	9.8%	10.0%	8.6%	13.5%	100.0%
JSB10 -Used social network sites to apply for a job	Count	248	53	32	40	39	32	42	486
	Row N %	51.0%	10.9%	6.6%	8.2%	8.0%	6.6%	8.6%	100.0%
Other Measured Variables									
IC_LikelyUse - How likely are you to use this type of "inside connections" information?	Count	15	16	27	33	44	34	66	235
	Row N %	6.4%	6.8%	11.5%	14.0%	18.7%	14.5%	28.1%	100.0%
IC_InfoProvided - I believe that the information provided earlier on how online connections in a SNSs could help in securing jobs advertised on these sites was (limited/extensive)	Count	26	39	56	180	124	44	17	486
	Row N %	5.3%	8.0%	11.5%	37.0%	25.5%	9.1%	3.5%	100.0%

Table E.3 Frequency Distributions for Variables Excluded from Research Model (Continued)

Variables		Response Frequencies							Total
		1	2	3	4	5	6	7	
IC_Understand - I have a good understanding of how online connections in SNSs could be used in a job search	Count	16	30	46	100	144	80	69	485
	Row N %	3.3%	6.2%	9.5%	20.6%	29.7%	16.5%	14.2%	100.0%
Pref_JB - I would rather use job boards (e.g. Monster.com and CareerBuilder.com) than SNSs in applying for a job	Count	17	19	40	64	77	110	157	484
	Row N %	3.5%	3.9%	8.3%	13.2%	15.9%	22.7%	32.4%	100.0%
Pref_Offline - I would prefer to use offline means over online means (including SNSs and job boards) in applying for a job	Count	70	65	67	100	61	58	67	488
	Row N %	14.3%	13.3%	13.7%	20.5%	12.5%	11.9%	13.7%	100.0%
EmpUseofSNS - Even if I don't apply for a job through SNSs, employers and recruiters are likely to find information about me there	Count	21	34	32	91	125	102	81	486
	Row N %	4.3%	7.0%	6.6%	18.7%	25.7%	21.0%	16.7%	100.0%
EmpSNSSearch - If I applied through SNSs, it would be more likely that employers and recruiters would look for personal information about me there	Count	5	14	25	84	93	126	139	486
	Row N %	1.0%	2.9%	5.1%	17.3%	19.1%	25.9%	28.6%	100.0%
Chg_Info - How likely are you to change information posted about you on the social networking sites to which you belong before applying for a job through these sites? (Very unlikely/Very likely)	Count	40	37	29	40	75	84	149	454
	Row N %	8.2%	7.6%	6.0%	8.2%	15.4%	17.2%	30.6%	100.0%
Net_Expert - How would you describe your expertise with respect to the use of the Internet?	Count	0	5	5	23	102	168	180	483
	Row N %	0.0%	1.0%	1.0%	4.8%	21.1%	34.8%	37.3%	100.0%
Media_Expose - How much have you heard or read during the last year about the use and potential misuse of the information collected from the Internet?	Count	2	18	27	48	130	137	122	484
	Row N %	.4%	3.7%	5.6%	9.9%	26.9%	28.3%	25.2%	100.0%
Priv_Vict - How frequently have you personally been the victim of what you felt was an improper invasion of your online privacy?	Count	122	128	93	65	48	20	11	487
	Row N %	25.1%	26.3%	19.1%	13.3%	9.9%	4.1%	2.3%	100.0%
Novel_Freq - How often do you read novels?	Count	34	71	64	84	82	57	93	485
	Row N %	7.0%	14.6%	13.2%	17.3%	16.9%	11.8%	19.2%	100.0%
Exercise_Freq - How often do you engage in physical fitness exercises?	Count	4	16	29	50	67	51	67	284
	Row N %	1.4%	5.6%	10.2%	17.6%	23.6%	18.0%	23.6%	100.0%

Table E.4 Skewness and Kurtosis Tests for Research Model Variables —NJIT

	N	Skewness			Kurtosis		
		Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
SI1	131	.178	.212	0.840	-.529	.420	-1.260
SI2	130	-.017	.212	-0.080	-.492	.422	-1.166
SI3	131	.124	.212	0.585	-.791	.420	-1.883
SI4	131	.625	.212	**2.948**	-.490	.420	-1.167
SI5	129	.915	.213	**4.296**	.105	.423	0.248
EE1	131	.313	.212	1.476	-.960	.420	-2.286
EE2	131	.307	.212	1.448	-.840	.420	-2.000
EE3	130	.328	.212	1.547	-.756	.422	-1.791
EE4	131	.317	.212	1.495	-.908	.420	-2.162
PE1	131	-.122	.212	-0.575	-.440	.420	-1.048
PE2	131	.061	.212	0.288	-.435	.420	-1.036
PE3	131	-.157	.212	-0.741	-.425	.420	-1.012
PE4	131	-.121	.212	-0.571	-.636	.420	-1.514
PE5	131	-.168	.212	-0.792	-.557	.420	-1.326
PE6	130	.070	.212	0.330	-.675	.422	-1.600
PE7	131	-.145	.212	-0.684	-.803	.420	-1.912
PE8	130	-.202	.212	-0.953	-.697	.422	-1.652
PC1	131	.008	.212	0.038	-.844	.420	-2.010
PC2	130	-.231	.212	-1.090	-.986	.422	-2.336
PC3	130	-.113	.212	-0.533	-.871	.422	-2.064
PC4	131	-.204	.212	-0.962	-.717	.420	-1.707
JT1	131	-.073	.212	-0.344	-.802	.420	-1.910
JT2	131	.293	.212	1.382	-.914	.420	-2.176
JT3	131	.103	.212	0.486	-.901	.420	-2.145
JT4	131	.258	.212	1.217	-.679	.420	-1.617
JT5	129	.380	.213	1.784	-.624	.423	-1.475
JT6	131	.047	.212	0.222	-.609	.420	-1.450
JT7	131	.139	.212	0.656	-.850	.420	-2.024

Table E.4 Skewness and Kurtosis Tests for Research Model Variables —NJIT
(Continued)

	N	Skewness			Kurtosis		
		Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
Risk1	131	.140	.212	0.660	-.400	.420	-0.952
Risk2	131	.032	.212	0.151	-.162	.420	-0.386
Risk3	131	-.017	.212	-0.080	-.367	.420	-0.874
Risk4	130	.194	.212	0.915	-.550	.422	-1.303
BI1	130	-.028	.212	-0.132	-1.216	.422	**-2.882**
BI2	130	-.073	.212	-0.344	-.817	.422	-1.936
BI3_R	130	-.363	.212	-1.712	-.816	.422	-1.934

Table E.5 Skewness and Kurtosis Tests for Research Model Variables —Rutgers NB

Measured Variable	N	Skewness			Kurtosis		
		Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
SI1	358	.469	.129	**3.636**	-.546	.257	-2.125
SI2	358	.166	.129	1.287	-.724	.257	**-2.817**
SI3	357	.454	.129	**3.519**	-.785	.257	**-3.054**
SI4	357	.887	.129	**6.876**	.018	.257	0.070
SI5	356	1.049	.129	**8.132**	.344	.258	1.333
EE1	358	.472	.129	**3.659**	-.825	.257	**-3.210**
EE2	357	.260	.129	2.016	-.719	.257	**-2.798**
EE3	358	.354	.129	**2.744**	-.509	.257	-1.981
EE4	357	.492	.129	**3.814**	-.453	.257	-1.763
PE1	359	.082	.129	0.636	-.702	.257	**-2.732**
PE2	357	.113	.129	0.876	-.806	.257	**-3.136**
PE3	359	.141	.129	1.093	-.842	.257	**-3.276**
PE4	355	-.082	.129	-0.636	-.832	.258	**-3.225**
PE5	359	.106	.129	0.822	-.791	.257	**-3.078**
PE6	359	.130	.129	1.008	-.705	.257	**-2.743**
PE7	359	-.032	.129	-0.248	-.680	.257	**-2.646**
PE8	355	-.051	.129	-0.395	-.814	.258	**-3.155**
PC1	359	.106	.129	0.822	-.724	.257	**-2.817**
PC2	359	-.539	.129	**-4.178**	-.642	.257	**-2.498**
PC3	356	-.212	.129	-1.643	-.928	.258	**-3.597**
PC4	359	-.138	.129	-1.070	-.764	.257	**-2.973**
JT1	358	.016	.129	0.124	-.428	.257	-1.665
JT2	357	.671	.129	**5.202**	-.403	.257	-1.568
JT3	356	.199	.129	1.543	-.564	.258	-2.186
JT4	358	.157	.129	1.217	-.711	.257	**-2.767**
JT5	354	.579	.130	**4.454**	-.326	.259	-1.259
JT6	358	.184	.129	1.426	-.452	.257	-1.759
JT7	357	.216	.129	1.674	-.668	.257	**-2.599**

Table E.5 Skewness and Kurtosis Tests for Research Model Variables —Rutgers NB (Continued)

Measured Variable	N	Skewness			Kurtosis		
		Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
Risk1	357	-.105	.129	-0.814	-.565	.257	-2.198
Risk2	357	-.322	.129	-2.496	-.299	.257	-1.163
Risk3	357	-.208	.129	-1.612	-.493	.257	-1.918
Risk4	357	-.006	.129	-0.047	-.653	.257	-2.541
BI1	357	.271	.129	2.101	-1.109	.257	**-4.315**
BI2	356	.145	.129	1.124	-.842	.258	**-3.264**
BI3_R	356	.116	.129	0.899	-1.055	.258	**-4.089**

Table E.6 Skewness and Kurtosis Tests for Variables Excluded from Research Model (NJIT and Rutgers NB Pooled)

Measured Variable	N	Mean	Std Dev	Skewness			Kurtosis		
				Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
Priv_Gen1	487	4.63	1.753	-0.291	0.111	-2.622	-0.896	0.221	-4.054
Priv_Gen2	487	4.77	1.703	-0.421	0.111	-3.793	-0.667	0.221	-3.018
Priv_Gen3	490	4.94	1.693	-0.53	0.11	-4.818	-0.615	0.22	-2.795
Priv_Gen4	490	5	1.631	-0.56	0.11	-5.091	-0.459	0.22	-2.086
FC1	488	5.02	1.779	-0.612	0.111	-5.514	-0.692	0.221	-3.131
FC2	486	4.8	1.655	-0.475	0.111	-4.279	-0.531	0.221	-2.403
FC3	486	5.68	1.432	-1.117	0.111	-10.063	0.801	0.221	3.624
JSB1	489	3.32	1.995	0.427	0.11	3.882	-1.044	0.22	-4.745
JSB2	488	1.84	1.627	1.942	0.111	17.495	2.618	0.221	11.846
JSB3	489	5.15	1.861	-0.783	0.11	-7.118	-0.459	0.22	-2.086
JSB4	488	4.97	2.035	-0.711	0.111	-6.405	-0.777	0.221	-3.516
JSB5	483	5.16	2.01	-0.895	0.111	-8.063	-0.45	0.222	-2.027
JSB6	486	4.69	2.17	-0.516	0.111	-4.649	-1.145	0.221	-5.181
JSB7	487	2.91	2.221	0.699	0.111	6.297	-1.071	0.221	-4.846
JSB8	486	5.15	1.79	-0.849	0.111	-7.649	-0.175	0.221	-0.792
JSB9	489	3.27	2.215	0.463	0.11	4.209	-1.265	0.22	-5.750
JSB10	486	2.66	2.102	0.913	0.111	8.225	-0.653	0.221	-2.955
IC_LikelyUse	235	4.88	1.871	-0.51	0.159	-3.208	-0.81	0.316	-2.563
IC_Understand	485	4.74	1.529	-0.443	0.111	-3.991	-0.242	0.221	-1.095
IC_InfoProvided	486	4.1	1.357	-0.345	0.111	-3.108	0.121	0.221	0.548
Pref_JB	484	5.32	1.675	-0.857	0.111	-7.721	-0.128	0.222	-0.577
Pref_Offline	488	3.94	1.95	0.052	0.111	0.468	-1.12	0.221	-5.068
EmpUseofSNS	486	4.84	1.621	-0.608	0.111	-5.477	-0.255	0.221	-1.154
EmpSNSSearch	486	5.43	1.424	-0.749	0.111	-6.748	0	0.221	0.000
Chg_Info	487	5.23	2.069	-0.724	0.111	-6.523	-0.622	0.221	-2.814
Net_Expert	483	5.99	1.017	-1.091	0.111	-9.829	1.531	0.222	6.896
Media_Expose	484	5.45	1.348	-0.839	0.111	-7.559	0.304	0.222	1.369
Priv_Vict	487	2.78	1.575	0.734	0.111	6.613	-0.236	0.221	-1.068
Novel_Freq	485	4.34	1.898	-0.098	0.111	-0.883	-1.136	0.221	-5.140
Exercise_Freq	284	5.05	1.564	-0.445	0.145	-3.069	-0.599	0.288	-2.080
Since_Grad	415	1.86	4.707	5.603	0.12	46.692	35.374	0.239	148.008

APPENDIX F

MODEL ASSESSMENTS FOR VARIOUS CATEGORIES OF RESPONDENTS

The measurement model of the initial theoretical model were tested using partial least squares (PLS) for the following categories of respondents in order to determine whether the results would be substantially different from those obtained for the entire sample of respondents:

1. NJIT affiliates
2. Rutgers New Brunswick affiliates
3. Active job seekers
4. Respondents who applied for jobs using SNSs in the last six months

The measurement model tested included all items of each scale relevant to the research model, except items SI1, SI2 and SI3 for the "social influence" construct and item BI3_R for the "behavioral intention" construct. The results of these tests are summarized in the following discussion and in Table F.1.

The initial measurement model did not fit the data from each category of respondents. The scale items dropped for each category of respondents are shown in Table F.1. In order to establish a valid measurement model, it was necessary to drop the item BI1 for each category. It is interesting to note, however, that for the group of active job seekers and the group of respondents who used SNSs to apply for job in the six-month period preceding the survey, all eight items of the performance expectancy scale were retained in the final measurement model as shown in Tables F.1, F.7 and F.9. For the NJIT sample, it was necessary to drop items PE6, PE7 and PE8, as shown in Tables F1 and F3. For the Rutgers NB sample, it was necessary to drop items PE1 and PE8, as shown in Tables F1 and F5.

Table F.1 Items Dropped from Behavioral Intention and Performance Expectancy Scales

Behavioral Intention and Performance Expectancy Scales	NJIT Affiliates (N=131)	Rutgers NB Affiliates (N=359)	Active Job Seekers (N=306)	Applied for Jobs Using SNSs (N=242)
BI1 - How likely are you to apply for a job through social networking sites? (Very unlikely/Very likely)	Dropped	Dropped	Dropped	Dropped
BI2 - How likely are you to provide personal information requested by recruiters and potential employers who use social networking sites to recruit job candidates? (Very unlikely/Very likely)	Kept	Kept	Kept	Kept
PE1 - I am optimistic that the use of SNSs in my job search would help me find a job that I would like to accept	Kept	Dropped	Kept	Kept
PE2 - I am positive that the information that would be or is in my SNS(s) profile(s) has the potential to improve my chances of finding a desirable job	Kept	Kept	Kept	Kept
PE3 - I am confident that engaging in activities (e.g. blogging, contributing to discussion boards, joining certain groups) in SNSs could improve my chances of finding a good job	Kept	Kept	Kept	Kept
PE4 - I am optimistic about getting help from my online connections and contacts in SNSs in finding a good job	Kept	Kept	Kept	Kept
PE5 - I am hopeful that the information posted about me by others in SNSs profile(s) would improve my chances of finding a good job	Kept	Kept	Kept	Kept
PE6 - In general, using SNSs would enable job seekers to find a job more quickly	Dropped	Kept	Kept	Kept
PE7 - It is not a waste of time using SNSs to find a job	Dropped	Kept	Kept	Kept
PE8 - Overall, I think SNSs would be useful in job seeking activities	Dropped	Dropped	Kept	Kept

The structural model of the alternative research model was tested for each category of respondents because the item BI1 was dropped from the measurement model in each case. In the light of the non-significant relationship between effort expectancy and intention to share information with recruiters and potential employers obtained for the entire sample and the possibility of a significant relationship existing between effort expectancy and performance expectancy, a slight modification was made to the alternative model tested. Performance expectancy was more accurately named SNSs'

performance expectancy and a path was drawn from effort expectancy to SNSs' performance expectancy. The results of the structural model tests are summarized in Table F.2.

For each category of respondents, hypotheses H1.1, H1.4 and H1.5 were not supported as shown in Table F.2. For the NJIT sample, R^2 was 39.3% as shown in Table F.2 and Figure F.1. The path coefficients and statistical significance of relationships between constructs for the NJIT sample are shown in Table F.4 and Figure F.1.

For the Rutgers NB sample, hypotheses H1.6 and H1.8, in addition to the three previously mentioned ones,, were not supported. Additionally, the relationship between effort expectancy and performance expectancy was shown to be insignificant (refer to Tables F.2 and F.6, and Figure F.2). R^2 for the Rutgers NB sample was 38.1% as shown in Table F.2 and Figure F.2.

For the respondents who indicated that they were active job seekers, hypothesis H1.8, in addition to H1.1, H1.4 and H1.5, was not supported. Additionally, the relationship between effort expectancy and performance expectancy was shown to be significant (refer to Tables F.2 and F.8, and Figure F.3). R^2 for the group of active job seekers was 35.1% as shown in Table F.2 and Figure F.3.

For the respondents who indicated that they had used SNSs to apply for jobs in the six-month period preceding the survey, hypotheses H1.6 and H1.8, in addition to H1.1, H1.4 and H1.5, were not supported. Moreover, the relationship between effort expectancy and performance expectancy was shown to be significant (refer to Tables F.2 and F.10, and Figure F.4). R^2 for respondents who indicated that they had used SNSs to

apply for jobs in the six-month period preceding the survey was 31.5% as shown in Table

F.2 and Figure F.4.

Table F.2 Summary of Results of Hypotheses Testing

R^2, Model Paths (Hypotheses)	NJIT Affiliates (N=131)	Rutgers NB Affiliates (N=359)	Active Job Seekers (N=306)	Applied for Jobs Using SNSs (N=242)
R^2 (%)	39.3	38.1	35.1	31.4
Effort Expectancy -> Behavioral Intention (H1.1)	ns	ns	ns	ns
Effort Expectancy -> Performance Expectancy	**	ns	*	*
Performance Expectancy -> Behavioral Intention (H1.2)	***	***	***	***
Social Influence/Image -> Performance Expectancy (H1. 3)	**	***	***	***
Inside Connections Info -> Performance Expectancy (H1.4)	ns	ns	ns	ns
Risk Beliefs -> Behavioral Intention (H1.5)	ns	ns	ns	ns
Perceived Justice/Trust -> Risk Beliefs (H1.6)	*	ns	*	ns
Perceived Justice/Trust -> Performance Expectancy (H1.7)	**	**	**	**
Privacy Concerns -> Perceived Justice/Trust (H1.8)	*	ns	ns	ns
Privacy Concerns -> Behavioral Intention (H1.9)	*	*	*	*
Privacy Concerns -> Risk Beliefs (H1.10)	**	***	***	***

* - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$

Table F.3 Cross Loadings in Final Measurement Model (NJIT Affiliates, N=131)

	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI2	**1.000**	-0.213	-0.009	0.323	-0.451	0.493	-0.329	0.330
EE1	-0.111	**0.643**	-0.099	0.050	0.060	-0.101	0.260	0.230
EE2	-0.230	**0.964**	-0.076	-0.070	0.235	-0.240	0.448	0.143
EE3	-0.227	**0.940**	-0.084	-0.072	0.281	-0.215	0.459	0.141
EE4	-0.134	**0.871**	-0.045	-0.041	0.216	-0.208	0.327	0.139
IC Info	-0.009	-0.084	**1.000**	-0.156	-0.001	-0.007	0.113	-0.062
JT1	0.256	-0.126	-0.101	**0.756**	-0.191	0.307	-0.261	0.020
JT2	0.227	0.104	-0.030	**0.771**	-0.087	0.382	-0.206	0.119
JT3	0.338	-0.070	-0.108	**0.893**	-0.188	0.380	-0.315	0.091
JT4	0.175	-0.121	-0.215	**0.720**	-0.145	0.246	-0.155	0.230
JT5	0.235	0.031	-0.218	**0.816**	-0.225	0.197	-0.212	0.173
JT6	0.251	-0.034	-0.075	**0.818**	-0.350	0.202	-0.188	0.041
JT7	0.297	-0.069	-0.170	**0.851**	-0.267	0.310	-0.274	0.075
PC1	-0.379	0.205	0.004	-0.135	**0.789**	-0.244	0.170	-0.081
PC2	-0.335	0.201	-0.114	-0.222	**0.764**	-0.185	0.156	0.047
PC3	-0.431	0.210	0.040	-0.246	**0.912**	-0.194	0.322	-0.130
PC4	-0.317	0.191	0.045	-0.232	**0.786**	-0.065	0.274	0.011
PE1	0.443	-0.262	-0.024	0.319	-0.185	**0.846**	-0.218	0.179
PE2	0.445	-0.285	-0.005	0.272	-0.196	**0.866**	-0.156	0.190
PE3	0.433	-0.170	-0.015	0.357	-0.173	**0.873**	-0.203	0.338
PE4	0.373	-0.145	0.020	0.282	-0.184	**0.806**	-0.069	0.196
PE5	0.400	-0.113	0.001	0.324	-0.153	**0.868**	-0.178	0.327
Risk1	-0.189	0.298	0.146	-0.197	0.191	0.013	**0.741**	0.032
Risk2	-0.262	0.398	0.117	-0.282	0.180	-0.175	**0.889**	-0.024
Risk3	-0.367	0.387	0.068	-0.280	0.324	-0.242	**0.907**	-0.112
Risk4	-0.272	0.434	0.081	-0.235	0.275	-0.211	**0.879**	-0.026
SI4	0.282	0.166	-0.090	0.172	-0.070	0.265	-0.070	**0.929**
SI5	0.332	0.157	-0.027	0.060	-0.033	0.277	-0.023	**0.935**
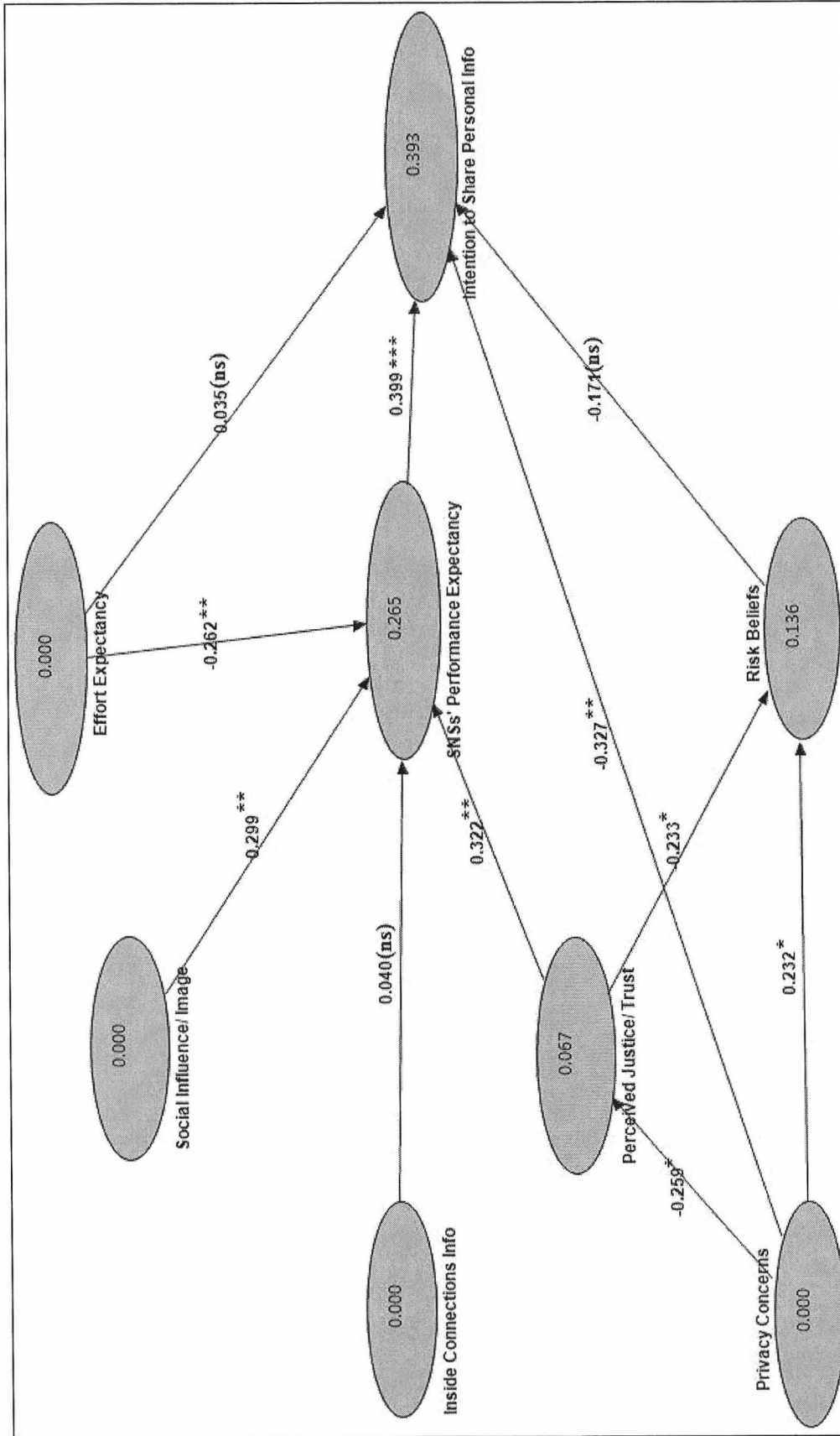
Figure F.1 Path coefficients and levels of significance of structural model test using PLS (NJIT affiliates).

Table F.4 Alternative Research Model Path Statistics for NJIT Affiliates

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Intention to Share Personal Info (H1.1)	0.035	0.382	0.352
Effort Expectancy -> SNSs' Performance Expectancy	-0.262**	2.733	0.004
SNSs' Performance Expectancy -> Intention to Share Personal Info (H1.2)	0.399***	4.464	0.000
Social Influence/ Image -> SNSs' Performance Expectancy (H1.3)	0.299**	2.792	0.003
Inside Connections Info -> SNSs' Performance Expectancy (H1.4)	0.040	0.427	0.335
Risk Beliefs -> Intention to Share Personal Info (H1.5)	-0.171	1.488	0.070
Perceived Justice/ Trust -> Risk Beliefs (H1.6)	-0.233*	2.034	0.022
Perceived Justice/ Trust -> SNSs' Performance Expectancy (H1.7)	0.322**	2.794	0.003
Privacy Concerns -> Perceived Justice/ Trust (H1.8)	-0.259*	2.261	0.013
Privacy Concerns -> Risk Beliefs (H1.9)	0.232*	2.068	0.020
Privacy Concerns -> Intention to Share Personal Info(H1.10)	-0.327**	3.271	0.001

* - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$

Table F.5 Cross Loadings in Final Measurement Model (Rutgers NB Affiliates, N=359)

|	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI2	**1.000**	-0.129	-0.035	0.392	-0.411	0.497	-0.234	0.320
EE1	-0.062	**0.720**	0.010	0.124	0.090	-0.033	0.165	0.169
EE2	-0.068	**0.859**	0.100	0.097	0.102	-0.074	0.215	0.126
EE3	-0.080	**0.862**	0.093	0.119	0.121	-0.043	0.196	0.149
EE4	-0.164	**0.920**	0.115	0.016	0.140	-0.120	0.245	0.085
IC Info	-0.035	0.106	**1.000**	-0.049	-0.060	-0.013	0.027	-0.045
JT1	0.304	0.012	-0.019	**0.664**	-0.204	0.222	-0.121	0.123
JT2	0.237	0.087	-0.072	**0.673**	-0.071	0.289	-0.175	0.321
JT3	0.319	0.047	-0.028	**0.845**	-0.115	0.310	-0.195	0.279
JT4	0.303	0.089	-0.079	**0.779**	-0.118	0.317	-0.105	0.269
JT5	0.317	0.071	-0.053	**0.768**	-0.106	0.296	-0.178	0.363
JT6	0.354	0.038	0.008	**0.846**	-0.199	0.282	-0.167	0.280
JT7	0.301	0.090	-0.029	**0.850**	-0.194	0.331	-0.117	0.316
PC1	-0.331	0.061	-0.063	-0.112	**0.816**	-0.104	0.149	-0.080
PC2	-0.355	0.142	-0.022	-0.163	**0.860**	-0.074	0.193	-0.044
PC3	-0.411	0.122	-0.047	-0.214	**0.922**	-0.123	0.220	-0.103
PC4	-0.322	0.147	-0.082	-0.135	**0.878**	-0.049	0.207	0.002
PE2	0.434	-0.042	-0.008	0.327	-0.108	**0.856**	-0.230	0.389
PE3	0.387	-0.048	0.004	0.276	-0.112	**0.797**	-0.149	0.413
PE4	0.336	-0.072	0.036	0.294	-0.002	**0.793**	-0.129	0.315
PE5	0.394	-0.053	-0.016	0.359	-0.081	**0.861**	-0.218	0.409
PE6	0.468	-0.093	-0.041	0.327	-0.080	**0.861**	-0.208	0.396
PE7	0.440	-0.163	-0.029	0.287	-0.109	**0.802**	-0.248	0.305
Risk1	-0.036	0.182	0.031	-0.135	0.110	-0.097	**0.712**	-0.018
Risk2	-0.166	0.207	0.021	-0.178	0.223	-0.202	**0.875**	-0.088
Risk3	-0.273	0.270	0.038	-0.190	0.230	-0.244	**0.910**	-0.157
Risk4	-0.220	0.162	0.000	-0.136	0.146	-0.209	**0.822**	-0.020
SI4	0.307	0.140	-0.021	0.353	-0.052	0.435	-0.104	**0.942**
SI5	0.293	0.117	-0.065	0.323	-0.072	0.408	-0.085	**0.934**
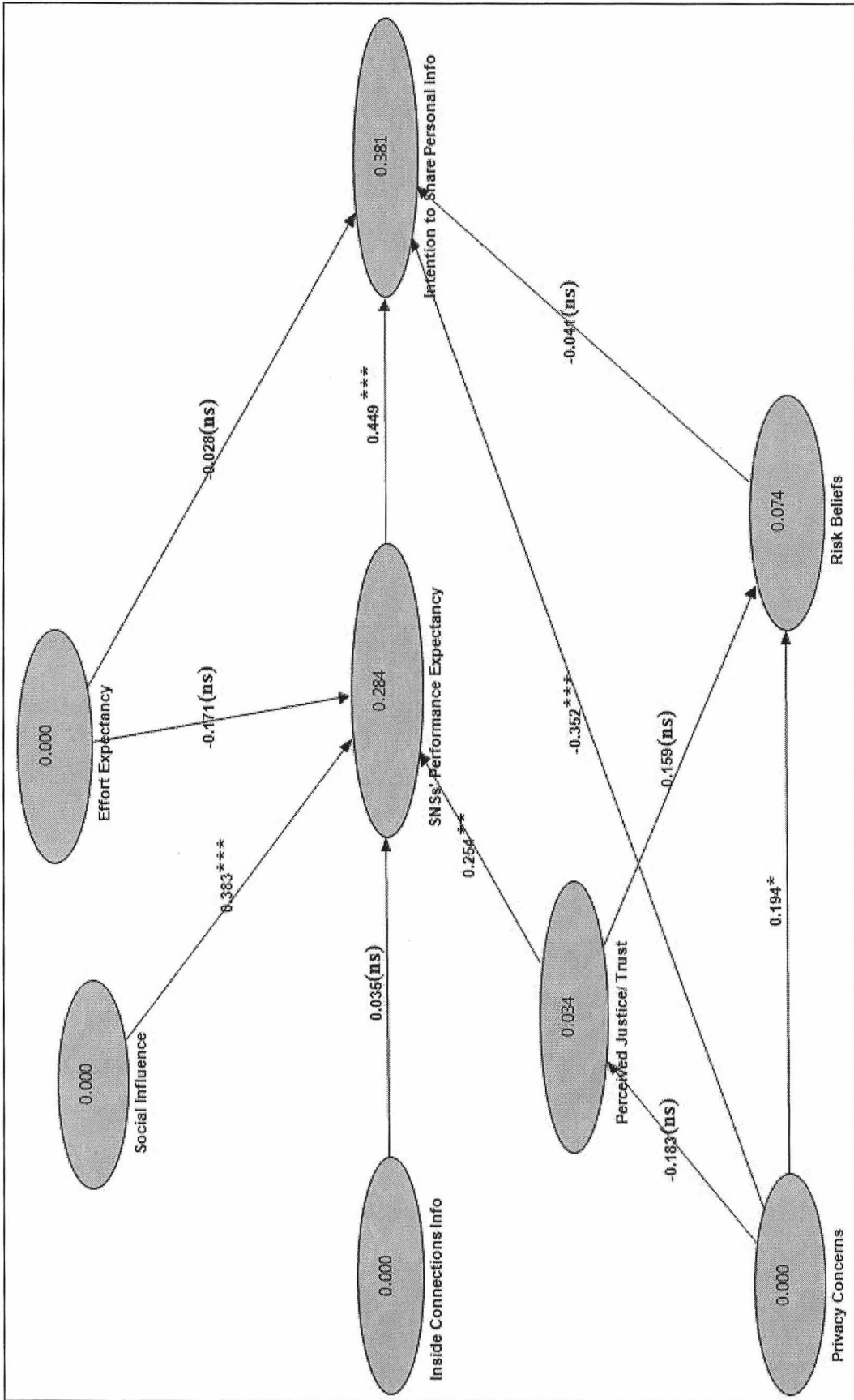
Figure F.2 Path coefficients and levels of significance of structural model test using PLS (Rutgers NB affiliates).

Table F.6 Alternative Research Model Path Statistics for Rutgers NB Affiliates

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Intention to Share Personal Info (H1.1)	-0.028	0.272	0.393
Effort Expectancy -> SNSs' Performance Expectancy	-0.171	1.502	0.067
SNSs' Performance Expectancy -> Intention to Share Personal Info (H1.2)	0.449***	4.687	0.000
Social Influence/ Image -> SNSs' Performance Expectancy (H1.3)	0.383***	3.991	0.000
Inside Connections Info -> SNSs' Performance Expectancy (H1.4)	0.035	0.370	0.356
Risk Beliefs -> Intention to Share Personal Info (H1.5)	-0.041	0.423	0.336
Perceived Justice/ Trust -> Risk Beliefs (H1.6)	-0.159	1.281	0.100
Perceived Justice/ Trust -> SNSs' Performance Expectancy (H1.7)	0.254**	2.500	0.006
Privacy Concerns -> Perceived Justice/ Trust (H1.8)	-0.183	1.564	0.059
Privacy Concerns -> Risk Beliefs (H1.9)	0.194*	1.645	0.050
Privacy Concerns -> Intention to Share Personal Info(H1.10)	-0.352***	4.001	0.000

* - p < 0.05; ** - p < 0.01; *** - p < 0.001

Table F.7 Cross Loadings in Final Measurement Model (Active Job Seekers, N=306)

|	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI2	**1.000**	-0.127	-0.056	0.312	-0.418	0.466	-0.304	0.318
EE1	-0.032	**0.641**	0.028	0.061	0.063	-0.010	0.200	0.182
EE2	-0.101	**0.925**	0.082	0.031	0.166	-0.097	0.272	0.146
EE3	-0.137	**0.931**	0.077	0.029	0.213	-0.098	0.291	0.154
EE4	-0.115	**0.863**	0.103	-0.036	0.156	-0.145	0.275	0.118
IC Info	-0.056	0.093	**1.000**	0.000	-0.043	0.004	0.017	-0.019
JT1	0.227	-0.087	0.017	**0.609**	-0.155	0.184	-0.106	0.045
JT2	0.190	0.103	0.000	**0.695**	0.000	0.320	-0.144	0.226
JT3	0.271	0.009	0.025	**0.853**	-0.094	0.334	-0.264	0.211
JT4	0.211	0.005	-0.056	**0.765**	-0.077	0.302	-0.132	0.267
JT5	0.259	0.028	-0.046	**0.789**	-0.124	0.265	-0.249	0.251
JT6	0.269	0.000	0.061	**0.826**	-0.234	0.256	-0.185	0.165
JT7	0.253	0.003	-0.002	**0.835**	-0.173	0.324	-0.208	0.158
PC1	-0.348	0.070	-0.007	-0.103	**0.810**	-0.156	0.171	-0.103
PC2	-0.306	0.222	-0.072	-0.108	**0.819**	-0.056	0.197	0.054
PC3	-0.435	0.190	-0.032	-0.188	**0.920**	-0.160	0.283	-0.099
PC4	-0.301	0.168	-0.038	-0.121	**0.822**	-0.069	0.244	0.018
PE1	0.417	-0.110	0.023	0.340	-0.142	**0.825**	-0.206	0.358
PE2	0.398	-0.058	0.014	0.252	-0.140	**0.853**	-0.210	0.363
PE3	0.322	-0.036	0.010	0.271	-0.074	**0.768**	-0.245	0.415
PE4	0.261	-0.049	0.013	0.276	0.001	**0.771**	-0.142	0.323
PE5	0.326	-0.052	0.015	0.324	-0.083	**0.834**	-0.301	0.410
PE6	0.437	-0.120	-0.011	0.298	-0.120	**0.865**	-0.260	0.402
PE7	0.415	-0.177	0.001	0.325	-0.171	**0.833**	-0.342	0.305
PE8	0.466	-0.144	-0.026	0.360	-0.131	**0.887**	-0.331	0.352
Risk1	-0.138	0.221	0.067	-0.237	0.198	-0.150	**0.767**	-0.039
Risk2	-0.188	0.265	0.015	-0.223	0.236	-0.260	**0.866**	-0.127
Risk3	-0.350	0.314	0.011	-0.208	0.272	-0.316	**0.887**	-0.208
Risk4	-0.308	0.234	-0.022	-0.178	0.199	-0.301	**0.863**	-0.099
SI4	0.296	0.176	0.003	0.281	-0.044	0.434	-0.150	**0.932**
SI5	0.298	0.126	-0.037	0.184	-0.043	0.383	-0.129	**0.934**
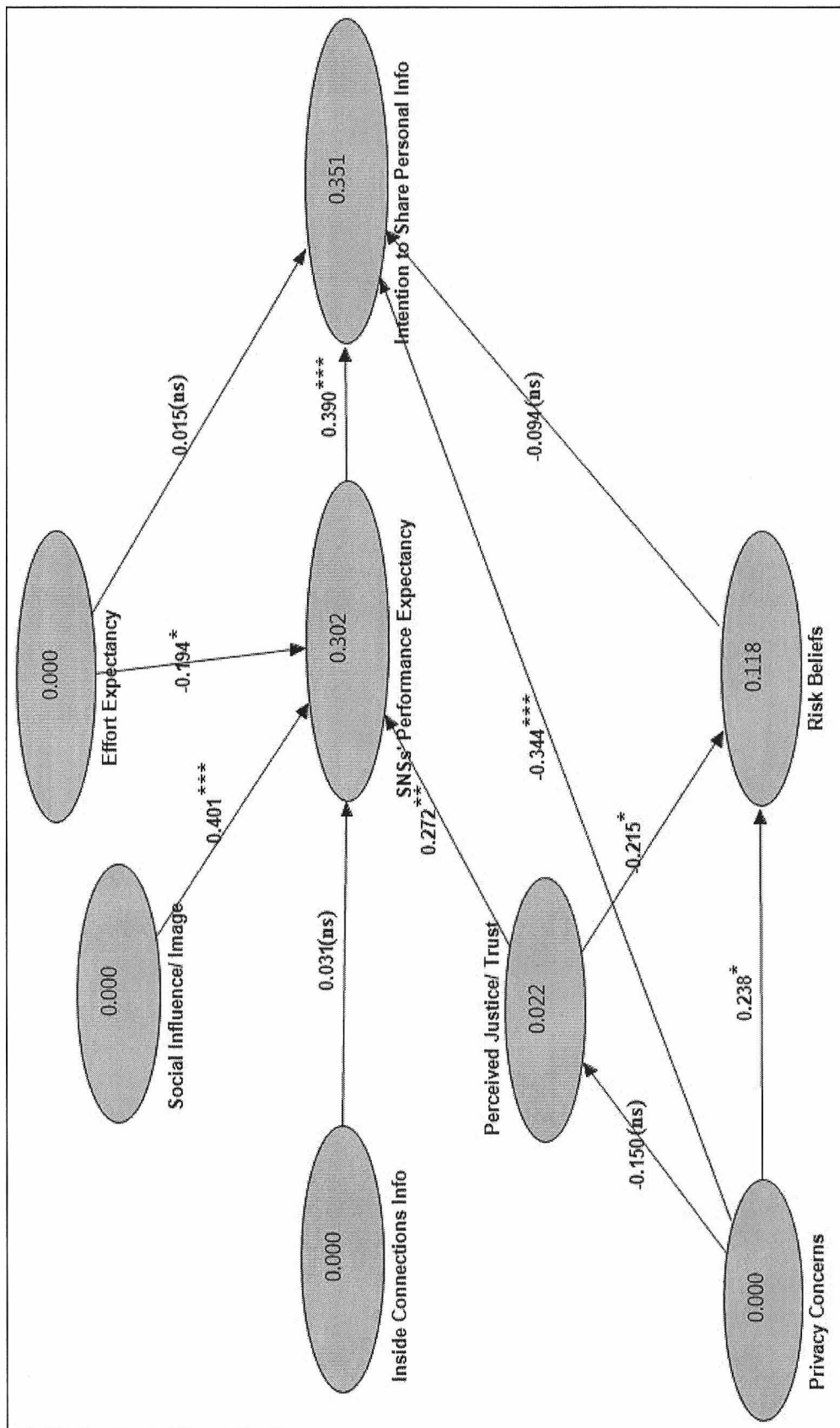
Figure F.3 Path coefficients and levels of significance of structural model test using PLS (active job seekers).

Table F.8 Alternative Research Model Path Statistics for Active Job Seekers

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Intention to Share Personal Info (H1.1)	0.015	0.144	0.443
Effort Expectancy -> SNSs' Performance Expectancy	-0.194*	1.709	0.044
SNSs' Performance Expectancy -> Intention to Share Personal Info (H1.2)	0.390***	4.055	0.000
Social Influence/ Image -> SNSs' Performance Expectancy (H1.3)	0.401***	4.201	0.000
Inside Connections Info -> SNSs' Performance Expectancy (H1.4)	0.031	0.357	0.361
Risk Beliefs -> Intention to Share Personal Info (H1.5)	-0.094	0.779	0.218
Perceived Justice/ Trust -> Risk Beliefs (H1.6)	-0.215*	1.788	0.037
Perceived Justice/ Trust -> SNSs' Performance Expectancy (H1.7)	0.272**	2.666	0.004
Privacy Concerns -> Perceived Justice/ Trust (H1.8)	-0.150	1.251	0.106
Privacy Concerns -> Risk Beliefs (H1.9)	0.238*	2.157	0.016
Privacy Concerns -> Intention to Share Personal Info(H1.10)	-0.344***	3.531	0.000

* - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$

Table F.9 Cross Loadings in Final Measurement Model (Respondents who used SNSs to Apply for Jobs, N=242)

	BI	EE	IC Info	JT	PC	PE	Risk	SI
BI2	**1.000**	-0.101	-0.010	0.298	-0.310	0.455	-0.086	0.296
EE1	-0.061	**0.729**	-0.044	0.124	0.149	-0.111	0.357	0.230
EE2	-0.071	**0.908**	0.009	0.036	0.174	-0.146	0.402	0.243
EE3	-0.088	**0.881**	-0.028	0.020	0.227	-0.135	0.356	0.249
EE4	-0.114	**0.881**	0.028	-0.003	0.182	-0.168	0.340	0.206
IC Info	-0.010	-0.005	**1.000**	-0.053	-0.031	0.002	0.097	0.032
JT1	0.285	-0.009	-0.066	**0.665**	-0.043	0.243	-0.131	0.031
JT2	0.145	0.073	-0.013	**0.750**	0.032	0.252	-0.117	0.159
JT3	0.212	0.053	-0.031	**0.861**	0.000	0.307	-0.144	0.101
JT4	0.297	0.005	-0.034	**0.830**	-0.099	0.310	-0.066	0.226
JT5	0.189	0.077	-0.105	**0.785**	-0.009	0.220	-0.086	0.228
JT6	0.272	0.035	-0.014	**0.828**	-0.173	0.232	-0.062	0.123
JT7	0.256	0.023	-0.045	**0.867**	-0.100	0.317	-0.123	0.167
PC1	-0.242	0.129	0.001	0.018	**0.811**	-0.022	0.118	0.002
PC2	-0.261	0.201	-0.060	-0.096	**0.837**	0.024	0.193	0.089
PC3	-0.323	0.197	0.007	-0.123	**0.912**	-0.007	0.205	-0.032
PC4	-0.213	0.204	-0.062	-0.006	**0.866**	0.078	0.157	0.048
PE1	0.391	-0.164	0.050	0.280	0.048	**0.812**	-0.134	0.294
PE2	0.415	-0.131	0.021	0.285	-0.003	**0.879**	-0.184	0.319
PE3	0.353	-0.103	0.052	0.285	-0.011	**0.830**	-0.150	0.388

|								
PE4	0.308	-0.103	0.008	0.278	0.034	**0.779**	-0.054	0.221
PE5	0.310	-0.075	-0.074	0.277	0.018	**0.801**	-0.165	0.343
PE6	0.368	-0.143	-0.022	0.248	0.052	**0.851**	-0.156	0.314
PE7	0.407	-0.189	-0.020	0.273	-0.005	**0.832**	-0.225	0.196
PE8	0.466	-0.196	-0.012	0.347	0.001	**0.898**	-0.194	0.282
Risk1	0.010	0.344	0.148	-0.065	0.175	-0.016	**0.781**	0.084
Risk2	-0.028	0.371	0.084	-0.140	0.177	-0.158	**0.870**	0.074
Risk3	-0.137	0.377	0.066	-0.137	0.182	-0.212	**0.904**	-0.003
Risk4	-0.109	0.345	0.050	-0.089	0.154	-0.229	**0.836**	0.073
SI4	0.295	0.258	0.044	0.237	0.039	0.347	0.028	**0.933**
SI5	0.247	0.236	0.013	0.092	0.010	0.303	0.088	**0.911**
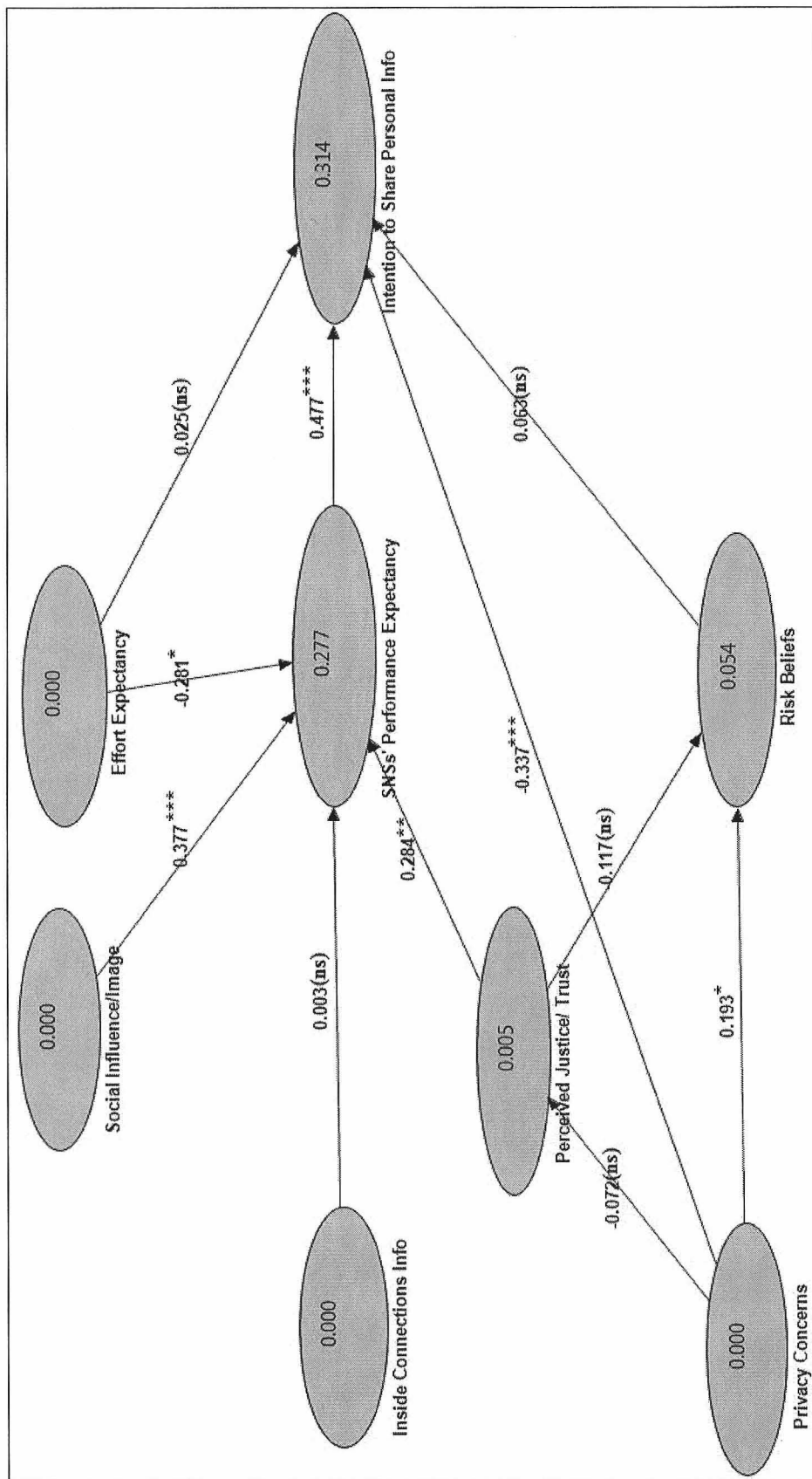
Figure F.4 Path coefficients and levels of significance of structural model test using PLS (respondents who used SNSs to apply for jobs).

Table F.10 Alternative Research Model Path Statistics for Respondents who have used SNSs to Apply for Jobs

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Intention to Share Personal Info (H1.1)	0.025	0.225	0.411
Effort Expectancy -> SNSs' Performance Expectancy	-0.281*	2.273	0.012
SNSs' Performance Expectancy -> Intention to Share Personal Info (H1.2)	0.477***	5.581	0.000
Social Influence/ Image -> SNSs' Performance Expectancy (H1.3)	0.377***	3.788	0.000
Inside Connections Info -> SNSs' Performance Expectancy (H1.4)	0.003	0.034	0.486
Risk Beliefs -> Intention to Share Personal Info (H1.5)	0.063	0.541	0.294
Perceived Justice/ Trust -> Risk Beliefs (H1.6)	-0.117	0.848	0.199
Perceived Justice/ Trust -> SNSs' Performance Expectancy (H1.7)	0.284**	3.223	0.001
Privacy Concerns -> Perceived Justice/ Trust (H1.8)	-0.072	0.558	0.289
Privacy Concerns -> Risk Beliefs (H1.9)	0.193*	1.702	0.045
Privacy Concerns -> Intention to Share Personal Info(H1.10)	-0.337***	3.394	0.000

* - p < 0.05; ** - p < 0.01; *** - p < 0.001

APPENDIX G

MORE IN-DEPTH ANALYSIS TO EXPLAIN FINDINGS

Table G.1 Correlation Matrix for BI1 and PE Items

	BI1	PE1	PE2	PE3	PE4	PE5	PE6	PE7
BI1	1							
PE1	.638***	1						
PE2	.584***	.734***	1					
PE3	.532***	.645***	.666***	1				
PE4	.523***	.636***	.603***	.570***	1			
PE5	.575***	.625***	.685***	.680***	.682***	1		
PE6	.604***	.710***	.668***	.620***	.637***	.682***	1	
PE7	.599***	.639***	.634***	.535***	.568***	.594***	.699***	
PE8	.655***	.733***	.685***	.616***	.646***	.657***	.801***	.833***

*** $p < .001$

Table G.2 Result of Stepwise Regression with BI1 as the Dependent Variable and PE Items as the Independent Variables

Predicting Variables	R	R Square	Adjusted R Square	Change Statistics		
				R Square Change	F Change	Sig. F Change
PE8	.656	.431	.429	.431	358.526	.000
PE8, PE1	.696	.484	.482	.053	48.929	.000
PE8, PE1, PE5	.707	.500	.497	.016	15.176	.000
PE8, PE1, PE5, PE7	.711	.506	.501	.005	5.168	.023

Table G.3 Skewness and Kurtosis Tests for Model Constructs (Latent Variables)

Model Constructs (Latent Variables)	Mean	Std Dev	Skewness			Kurtosis		
			Statistic	Std. Error	Z Skewness	Statistic	Std. Error	Z Kurtosis
BI – Behavioral Intentions	3.58	1.720	.087	.110	0.791	-.828	.220	**-3.764**
EE – Effort Expectancy	3.31	1.435	.236	.110	2.145	-.398	.220	-1.809
IC_Info – Inside Connections Information	----	---	---	---	---	---	---	---
JT – Justice/Trust	3.44	1.259	.185	.110	1.682	-.209	.220	-0.950
PC – Privacy Concerns	3.76	1.380	.081	.110	0.736	-.279	.220	-1.268
PE – Performance Expectancy	4.38	1.470	-.209	.110	-1.900	-.524	.220	-2.382
Risk – Risk Beliefs	4.33	1.318	-.012	.110	-0.109	-.129	.220	-0.586
SI – Social Influence	2.39	1.419	.905	.110	**8.227**	.245	.220	1.114

Bolded Z scores indicate significant departure from normal distribution.

Table G.4 Results of Bootstrap Algorithm on Test of Alternative Model plus the Path from Effort Expectancy to Performance Expectancy

Path	Coefficient	T Statistic	Sig
Effort Expectancy -> Behavioral Intention (H1.1)	-0.019	0.198	0.422
Performance Expectancy -> Behavioral Intention (H1.2)	0.423***	4.514	0.000
Social Influence/Image -> Performance Expectancy (H1. 3)	0.381***	3.869	0.000
Inside Connections Info -> Performance Expectancy (H1.4)	0.049	0.596	0.276
Risk Beliefs -> Behavioral Intention (H1.5)	-0.073	0.716	0.237
Perceived Justice/Trust -> Risk Beliefs (H1.6)	-0.194*	1.653	0.049
Perceived Justice/Trust -> Performance Expectancy (H1.7)	0.280**	2.592	0.005
Privacy Concerns -> Perceived Justice/Trust (H1.8)	-0.205*	1.841	0.033
Privacy Concerns -> Behavioral Intention (H1.9)	-0.345***	3.821	0.000
Privacy Concerns -> Risk Beliefs (H1.10)	0.199*	1.664	0.048
Effort Expectancy -> Performance Expectancy	*-0.181**	*1.655*	*0.049*

* - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$

Table G.5 Correlation Analysis with Marker Variables

	Frequency of Reading Novels (N=485)		Frequency of Engaging in Physical Fitness Exercises (N=284)	
	Spearman's Rho	Sig.	Spearman's Rho	Sig
BI – Behavioral Intentions	-.056	.216	.064	.281
EE – Effort Expectancy	-.023	.617	-.077	.198
IC_Info – Inside Connections Information	-.016	.718	.085	.154
JT – Justice/Trust	-.054	.232	-.009	.879
PC – Privacy Concerns	.083	.069	-.017	.770
PE – Performance Expectancy	-.066	.149	.043	.475
Risk – Risk Beliefs	.139**	.002	-.065	.277
SI – Social Influence	-.021	.638	.029	.626
Average of absolute (Spearman's rho)	.057		.049	

** p < 0.01

Table G.6 Total Variance Explained (Principal Component Analysis)

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	9.318	29.119	29.119
2	4.087	12.772	41.891
3	3.420	10.688	52.579
4	2.327	7.273	59.852
5	2.057	6.428	66.280
6	1.442	4.507	70.786

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