## HOW ONLINE SOCIAL NETWORKS AFFECT MY JOB CHOICE INTENTION: AN EMPIRICAL APPROACH

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### Abstract

Recent years have witnessed the rapid proliferation of social networking sites, which have gradually changed people's way to deal with employment and recruitment process. From job seekers' perspective, their occupational decisions will be consciously or unconsciously affected by information and activities in online social networks. In this study, we focus on job choice intention, which is formed from an impressionable and suggestible state, but has predictive power on the final decision. Since it is a fairly new angle with scant literature, we adopted an exploratory approach and identified two influence mechanisms built upon expectancy theory. We conducted a survey on graduating college students from IT-related majors, and examined how the online social networks have significant impact on job choice intentions through information seeking behaviors and peer influence.

Keywords: online social networks, job choice intention, expectancy theory, peer influence, information seeking

### **1. INTRODUCTION**

Job seekers have often relied on social contacts and word-of-mouth in making their job choice decision (Van Hoye, 2007). With the advent of the Internet and social media, especially online social networking sites, new opportunities for both job seekers and hiring companies have been created. These new channels ease the communication and interaction between organization and individuals, and, more importantly, provide a platform for individuals to consult peers' opinions or observe peers' job decisions. For example, Facebook allows firms to broadcast news and updates by setting up the company profile like fan page. Job seekers could comment or share these posts, which are observable by their Facebook friends and might exert influence on others' job intention. Since the online social networking sites are changing people's way to deal with recruitment and employment, it is imperative to understand how the impact on job choice intention is created.

Prior research on intended job decisions has explored different dimensions that affect individuals' job choice, such as corporate social performance (Turban and Greening, 1997; Greening and Turban, 2000), social influence (Kilduff, 1992), as well as gender and economic reasons (Ge, Kankanhalli, Huang, & Sha, 2013). There are also studies on job search that identify and assess self and social variables (e.g. Kanfer, et al., 2001) and examine organizational attractiveness (Hoye, 2009). However, most of the past studies focused on offline influential factors. Online social networks allow individuals to be connected in an easy and costless manner and allow them to be more frequently and extensively exposed to peers' opinions and company updates. As online social networks are distinguished from offline referring in terms of larger reach, greater convenience and lower cost, the need to further investigate the antecedents of intended job choice in the setting of online social networks motivates our study.

The objective of our study is to explicate the influence of online social networks on individuals' intended job choice. As this study is considered as the first trial to address this issue, to the best of our knowledge, we have identified two main mechanisms through exploratory approach. One mechanism is through peer influence and the other is through information seeking behavior on that platform. Specifically, we intend to answer the research question: what is the impact of information seeking behavior and peer influence on intended job choice in the context of online social networks? In light of the expectancy theory, we have identified occupational valence and expectancy as two influential factors on individuals' job choice intention and explored the impact of peer influence and information seeking behaviors in the social networking context. We have then assessed our model by conducting a survey on graduating undergraduates in a research university. Our results suggest that peer influence and information seeking behavior seeking behavior on online social networks have significant impact on individuals' expectancy and valence of a certain job as well as the intention to choose the job.

Our study has several theoretical contributions. Firstly, drawing insights from social network theory, we identify the impact of online social networks on individuals' intended occupational decisions through two mechanisms: 1) online social networks as an interactive platform and 2) online social networks as an information source. Secondly, we extend the expectancy theory to the online social network context to investigate the motivation and intention of choice. From a practical perspective, our study also provides a better understanding of the effectiveness of online social network platform on intended job choice for hiring managers and job seekers. Companies can leverage the lower-cost but influential social networking platform to improve organizational images and attract potential applicants.

### 2. THEORETICAL DEVELOPMENT AND PROPOSED MODEL

The proposed research model is shown in **Figure 1**. Our model suggests that online social network sites function as interactive platforms and information providers and will directly and indirectly influence individuals' intention to choose certain occupation through information seeking behavior and peer

influence mechanism. The model also suggests the cognitive factors based on expectancy theory can influence the intended job choice individually and interactively.



Figure 1 Proposed Research Model

#### 2.1. Expectancy Theory

Proposed by Vroom (1964), expectancy theory has long been used in organizational behavior research to predict work performance and effectiveness (Hackman and Porter, 1968; Oliver, 1974) and understand individuals' job choice intention and decision, job attitudes and behaviors (Lawler and Suttle, 1973; Wanous et al., 1983). Particularly, Vroom's expectancy theory is widely accepted to study the work and motivation (Wahba and House, 1974), because it explicitly formulates three concepts- valence, instrumentality and expectancy- in order to assess the strength of a tendency (Mitchell, 1974). The central idea is that for each individual, the strength of her tendency to certain action is resulted from the strength of her expectancy towards the outcome and her evaluation on the value of this outcome (Lawler, 1973). By definition (Vroom, 1964), Valence is affective orientations towards outcomes, such as the importance, attractiveness, desirability or anticipated satisfaction with outcomes; Instrumentality is an outcomeoutcome association to assess relationship between outcomes and probability to obtain an outcome; Expectancy is an action-outcome association to assess the perceived probability of an action leading to an outcome (Mitchell, 1974; Van Eerde and Thierry, 1996). Built upon the three concepts, Vroom has presented the valence model and behavioral choice model such that the former depicts the option valence and usually predicts occupational preference, while the latter measures the force on an individual to perform an action and usually predicts occupational choice (Vroom, 1964; Mitchell, 1974; Brooks and Betz, 1990). In one word, the individual intends to choose the job with greatest motivational force, which is jointly determined by valence, instrumentality and expectancy.

In this study, we adapt the expectancy theory to investigate the individual's intention towards a certain job choice. The valence here means option valence or occupational valence, namely the perceived attractiveness of each job to an individual. Based on occupational preference model, this option valence is the product of instrumentality and outcome valence. The expectancy is interpreted as individual's expectancy to succeed in the job. According to occupational choice model, motivational force is determined by the product of valence and expectancy. However, these two components vary independently, so we differentiate and identify each as one mechanism towards decision making in the online social platform. When valence is high, namely the job exhibits high attractiveness to the individual, it is more likely for the individual to choose this job due to the high utility of selecting this job. Similarly, when the individual can foresee more chances of success and has higher expectation of the job, she is also more likely to choose this job. Thus, we posit both the valence (i.e. the perceived attractiveness of a job to an individual) and expectancy (i.e. the individual's expectancy to succeed in a job) of a job have positive effects on individuals' intention to choose the job. Hence, we hypothesize:

HYPOTHESIS 1A (H1A): The perceived attractiveness (i.e. valence of a job) to an individual is positively related to the individual's intended job choice.

HYPOTHESIS 1B (H1B): The expectancy to succeed in a job is positively related to the individual's intended job choice.

In addition, we also argue that the valence and expectancy will have an interaction effect on intended job choice. Individuals are less motivated to choose a job with high valence (expectancy) if expectancy (valence) is low. For example, some people might consider chief executive officer to be a high-valence job with desirable income and high social status for some people. With the limitations in their own capability, however, they are likely to have low expectancy on the job, lowering the intention to choose the job. Similarly, some capable people are expected to handle the job but view the outcomes from the job as undesirable with unbalance in work and life and long committing hours. Hence, we hypothesize:

HYPOTHESIS 1C (H1C): There is an interaction effect between the perceived attractiveness and the expectancy to succeed in a job on individuals' intended job choice.

#### 2.2. Online Social Networking Sites and Information Seeking

Recent years have witnessed the rapid proliferation of social networking sites, which particularly facilitates user-to-company information sharing and social connection. For example, many companies have set up recruitment fan page and post recruitment news actively and timely. The vast availability of user- and company- generated content on the social networking sites exposes people to more information sources and promotes information seeking behaviors, hence allows for more informed decision making. Information seeking is viewed as a process of sense-making in which an individual is forming a personal point of view (Dervin, 1983). In our study, information seeking is differentiated from the term, online exposure, which captures the extensiveness of information the individual can receive, actively and passively. Information seeking, however, is the behavior initiated by the individual for her own sake.

Past research has demonstrated that both corporate image and recruitment image influence users' perception of the company and therefore alter job seekers' career decisions (Gatewood, et al., 1993). With more job information sources available, higher perception of person-job fit and person-organization fit can be achieved, which lead to higher job satisfaction and lower intention to quit (Saks and Ashforth, 1997). As more companies start to make their presences on the social networking sites, individuals' perceived corporate image might be changed by their information seeking behaviors. Individuals can perceive person-job fit and person-company fit conveniently and quickly through the online interactions on companies' social networking sites' profile pages in a proactive manner. Therefore, we posit that individuals' seeking job information can influence their impressions of both companies' corporate and recruitment image, which are two significant predictors to the perceived attractiveness of the occupation. Moreover, by establishing interactive connection and person-job fit and person-company fit perceptions, job information seeking online helps build the expectancy to succeed in the job. Hence, we hypothesize:

HYPOTHESIS 2 (H2): The extensiveness of individuals' information seeking behaviour (for certain job) is positively related to the perceived attractiveness of that job.

HYPOTHESIS 3 (H3): The extensiveness of individuals' information seeking behaviour (for certain job) is positively related to the expectancies to succeed in that job.

#### 2.3. Online Social Networking Sites and Peer Influence

Online social networking site also facilitates user-to-user information sharing and social connection. People can easily observe others' behaviors and are subject to social influence on the social networking sites. Past studies in offline context have showed that social influence affects the job choice through peer comparison (Kilduff, 1990, 1992). Job seekers compare themselves with similar others and act in accordance with what others are doing in the face of decisional ambiguity (Granovetter, 1973; Brown and Reingen, 1987). Because job seekers often intend to prove their worth to their peer groups, peer influence induces them to attain higher self-expectations rationally (Kulkarni, 2012). Similarly to the offline context, we posit that the strong presence of peer influence on social networking sites also exhibits influence on individuals' job choice decisions. Particularly, others' opinions and experience about a certain job could alter individuals' expectancies of the job. Here we focus on expectancy not the valence, because by definition (Vroom, 1964), expectancy is about belief and cognition, which can be more explicitly influenced by the behaviors and beliefs of others, while valence is about the emotional orientation towards the outcome, which focuses more on the intrinsic preferences of the individuals. Hence, we hypothesize:

# HYPOTHESIS 4 (H4): Peer influence (for certain job) is positively related to the individual's expectancy to succeed in the job.

In addition, job seekers will turn to their social context when they lack objective organization information to make an important job decision (Higgins 2001). They rely on informational social influence or word-of-mouth communication from credible strong ties (e.g. friends and family) when making job choice decisions (Van Hoye and Lievens, 2007, 2009). Moreover, the information cascades among peers may create herding behaviors because job seekers often regard a certain job decision that appeals to a large number of people from their social group as a worthy one. Since no one is in vacuum during decision making process, we infer there is a direct positive relationship between peer influence and the intention to choose the job. Hence, we hypothesize:

HYPOTHESIS 5 (H5): Peer influence (for certain job) is positively related to intention to choose that job.

#### 2.4. Control Variables

Apart from the constructs identified from perspectives of expectancy theory and online social networks, other possible influential factors of the intention to choose an occupation are also controlled in this proposed model, including gender, major, previous working experience, and online social network usage.

### **3. RESEARCH METHODOLOGY**

The data was collected through a survey of penultimate year or final year undergraduates in IT-related majors of a local research university. This is a suitable context to assess the proposed model. These graduating computing students are about to enter the job market soon and may have some nascent job plan and ideas in mind. In addition, they are the younger generation from IT-related majors who have higher exposure to online social networks and are more subject to the influence of online social networks. This hence allows us to examine the impact of online social networks on the intended job choices. In addition, we chose Facebook as the social networking site for investigation due to the extremely high penetration rate of Facebook in our targeted population.

To investigate the influence of social networking sites on individuals' job choices, we first needed to compile a list of situated job choices. Based on our specific context and targeted subjects, we chose those entry-level occupations that are of high interests to computing students. Three categories of jobs were identified in this specific context, which were developer (including software engineer, web developer etc.), IT consultant and business analyst. All the three job categories were related to IT jobs in different extents. While it would also be interesting to investigate non-IT jobs, we limited our study to these three IT related jobs only.

The survey instrument was developed systematically and items were adapted from prior studies as much as possible. A pilot study was also conducted by seeking feedback from professionals to help verify the instrument's reliability.

#### **3.1.** Construct Operationalization

According to Brooks and Betz (1990), *expectancy* or *occupational expectancy*, which is the expectancies to success in the occupation, was measured from four aspects: expectations of completing the education, expectation of getting a job in the field, expectations of being able to successfully do the job and expectations of advancing. The expectancy is considered as a formative construct because it is a composite of multiple indicators such that each item or indicator assesses a certain dimension and they are not interchangeable (Petter, et al., 2007).

*Valence* or *occupational valence*, which denotes the perceived attractiveness of a given option, was measured as the product of instrumentality (i.e. individual's perceived likelihood that a given occupation will bring specific outcome) and outcome valence (i.e. individual's preference for one outcome over another). It was measured using 8 outcomes: variety in job duties and activities, job security, high income, high prestige and social status, intellectual stimulation, flexible working hours, work and life balance, and fit of job to self-concept. As suggested by Brooks and Betz (1990), we calculated the occupational valence by multiplying the corresponding terms of "*outcome valence*" and "*instrumentality*". Similarly, the valence is also considered as a formative construct because each item represents one dimension and changes in those items would lead to the changes in the construct valence (Petter, et al., 2007).

The dependent variable, the *intention* to choose a job, was measured by both the occupational preference and choice. The subjects would be asked to indicate how appealing these occupations were and how likely they were going to choose the occupation. This construct is considered as a reflective since the items are affected by the same underlying concept (Jarvis, et al., 2003).

*Information seeking*, which means the behavior of seeking for job information on online social network, was operationalized based on the measures developed by Timmers and Glas (2010). To suit the context of this study, we only considered items like information scanning, strategically searching, and information evaluating. Similarly, this construct is also reflective because items are not assessing the full set of dimensions and are likely to covary (Jarvis, et al., 2003). To further explore the individuals' online behaviors, we also included some auxiliary variables. Specifically, items like the ability to obtain useful job and recruitment information were developed to capture a potential construct "online exposure".

By adapting measures from Fisher and Stafford (1999) to our context, the *peer influence*, which represents the impact from other people's opinion on job choice and career development could be assessed from items such as the peer's shown interest and encouragement received by subject. We also included the peer's influential power as the backup items. Again, this construct is reflective because all adapted items have a common core, and changes in underlying construct would result in changes in the items (Jarvis, et al., 2003).

The questionnaire is attached in the **Appendix** with item coding. All the items were measured using the 7-point Likert scale from "strongly disagree" to "strongly agree". To assess the proposed instruments and identify further refinement, we asked professional feedback from two PhD candidates and one professor. After revising the items and survey questions based on their feedback, we conducted a trial survey on a few experienced job seekers who were already in the job market. The result showed that the questionnaire was well structured and items were considered as adequate.

### **3.2. Survey Administration**

The targeted population of this study was the potential job seekers who were graduating soon from ITrelated majors. The survey started from 21 October to 8 November, 2013 and was conducted in both online and paper-based manners in the computing department of a research university in Singapore. A total of 132 responses were collected from which 4 incomplete responses were eliminated. We also manually looked through the rest 128 usable responses, and removed 1 response without a valid online social network account, 1 response from other school department, 1 response without the intention to choose any of provided occupations, and 2 responses from junior undergraduates who might not be a good representative of potential job seekers yet. So there were 123 usable responses left for data analysis.

The respondents ranged from age 22 to 25 with over 60% males. They were at their penultimate or final year of undergraduate study and most of them were majoring in Information Systems or Electronic Commerce. They were mainly from Singapore and People's Republic of China, and over 60% of them were either Singapore citizens or permanent residents. Most of the respondents had prior working experience such as internship. Over 70% of respondents expected to achieve a second class honours degree upon graduation and more than half the respondents' expected salary fell in the interval of 3001-4000 Singaporean dollars. In addition, more than 70% of the respondents claimed that they used online social network such as Facebook at daily basis.

### 4. DATA ANALYSIS AND RESULTS

Partial Least Squares (PLS) analysis was conducted to assess the proposed research model. We chose PLS over other covariance-based techniques for mainly three reasons. Firstly, PLS can handle both reflective and formative constructs, both of which were used in our study. Items of a formative construct represent different dimensions of a construct while items of a reflective construct represent a single, unidimensional concept (Diamantopoulos and Winklhofer, 2001). Therefore, there is a need to conduct different tests to ensure the reliability and validity of the formative and reflective constructs. Secondly, PLS can cope with relatively small sample size and support exploratory study (Gefen et al., 2011), which was the case of our study. Thirdly, PLS path modeling makes only the very limited distributional assumptions of ordinary least squares (OLS) regression (Gefen et al., 2011). As our formal tests indicated that the item responses in our study were not all normally distributed, PLS will be a better choice. SmartPLS Version 2.0 was used to assess the measurement and structural models. Because we also examined the interaction effect using PLS, all the data were standardized in our analyses.

Since we collected three sets of data on the jobs of business analyst, IT consultant and developer, we performed testing on our measurements and structural model using these three sets of data respectively. The descriptive analysis suggested that most of the respondents were from the Department of Information Systems (IS). Based on our understanding, students in IS major were more likely to choose non-technical jobs such as business analyst and consultant rather than developer. Our data also showed that 74 respondents intended to become business analysts by selecting at least a 'slightly agree' option, whereas only 71 and 45 respondents did that for the job of consultant and developer. Thus, we would use the dataset of business analyst as our main dataset. The analyses of the other two datasets were also included to further assess our proposed research model.

### 4.1. Exploratory Factor Analysis (EFA)

Because several new or modified scales were utilized in this study, we first assessed the measures of reflective constructs using exploratory factor analysis (EFA). We used SPSS 22.0 with principal components analysis and Varimax rotation to test the convergent and discriminant validity of the reflective constructs. To ensure convergent and discriminant validity, item loadings on intended factors should be more than 0.6 whereas those on unintended factors should be less than 0.4 (Gefen et al., 2005).

As discussed in the section 3.1 on construct operationalization, we have included three backup items (i.e. PI1F\_BA, PI5F\_BA and PI6F\_BA) for the construct of *peer influence* on Facebook (PI\_BA) during data collection process. However, the results of EFA showed that these backup items were not able to load on the same factor with the other three main items for PI\_BA and that the main items were adequate for measurement of the construct. Therefore, we omitted all the three backup items.

When EFA was conducted on the three reflective constructs (PI\_BA, IS\_BA and INT\_BA), two items PI3F\_BA and IS3F\_BA did not satisfy the condition of convergent and discriminant validity. The

descriptions of the two questions were hence examined to identify the cause of the problem. PI3F\_BA measures *peer influence* on Facebook and was stated as "On Facebook, my friends like to share information about the job of XXX". However, the valence of the information was not specified in the question. Since negative information of certain jobs might decrease people's intention of choosing, this item might not be appropriate in the context. IS3F\_BA measures the information seeking behavior (IS\_BA) and was measured through the question of "I will evaluate the information I get from Facebook about the job of XXX". While the other two items of IS\_BA were measuring the information seeking behavior itself, item IS3F\_BA was more related to post-seeking and evaluation process and might confuse the subjects. Therefore, we decided to drop PI3F\_BA and PI3F\_BA.

Construct and Items	INT_BA	IS_BA	PI_BA		
Information Seeking on Facebook (IS_BA)					
IS1F_BA	.130	.856	.155		
IS2F_BA	.114	.866	.213		
Peer Influence on Facebook (PI_BA)					
PI2F_BA	.164	.135	.902		
PI4F_BA	.266	.398	.664		
Intention of Choosing Business Analyst (INT_BA)					
INT1_BA	.923	.095	.170		
INT2_BA	.914	.172	.195		
INT3_BA	.938	.120	.153		
Variance % (Without Rotation)	51.718	20.864	10.591		

Table 1 Exploratory Factor Analysis (EFA) on Reflective Constructs

After dropping the items, both convergent and discriminant validity were satisfied for the three reflective constructs (see **Table 1**). Because PLS performed measurement model testing and structural model testing simultaneously, we will further analyse the convergent and discriminant validity in the next section.

### 4.2. Test of Measurement Model

The measurement model was assessed by examining reliability, convergent validity and discriminant validity of the instrument items. Reflective and formative constructs were treated differently during assessment because measures of a formative construct are not necessarily correlated and internal consistent (Diamantopoulos and Winklhofer, 2001). Hence, item weights were used to identify the relevant importance of items in forming each construct (Chin, 1998).

For the reflective constructs, reliability was assessed with Cronbach's alpha coefficient (see **Table 2**). All constructs achieved scores above 0.70 except for PI\_BA, whose Cronbach's alpha was 0.651. As a cut-off point of 0.60 is accepted for exploratory study (Straub, 2004), all of our constructs satisfied this criteria and demonstrated sufficient reliability. Convergent validity was assessed by examining item loading, factor composite reliability (CR), average variance extracted (AVE) by each construct (see **Table 2**). All item loadings and composite reliability were above the recommended threshold of 0.70 and all AVEs were above 0.50 (Chin et al., 2003). In addition, all item loadings were significant at the level of 0.001 (t > 3.29). Therefore, the convergent validity of the reflective construct was satisfied.

Discriminant validity was assessed by comparing construct correlations and square root of AVE. The correlation matrix (see **Table 3**) shows that all the non-diagonal entries (i.e. construct correlation) did not transcend the diagonal entries (i.e. square root of AVE), indicating discriminant validity was satisfied

(Straub et al., 2004). The correlation between EXP\_BA and INT\_BA as well as that between VALI\_BA and INT\_BA were rather high. However, these two correlations were between an independent variable and the dependent variable rather than two independent variables. Thus, they would not cause problems of multicollinearity (Farrar et al., 1967).

Constructs	Item	Item Loading	<b>T-Value</b>
Information Seeking on Facebook (IS_BA)	IS1F_BA	0.926	14.063
$\alpha = 0.749$ ; CR = 0.886; AVE = 0.796	IS2F_BA	0.857	11.871
Peer Influence on Facebook (PI_BA)	PI2F_BA	0.844	17.677
$\alpha = 0.651$ ; CR = 0.851; AVE = 0.741	PI4F_BA	0.877	18.511
Intention of Choosing Business Analyst (INT_BA)	INT1_BA	0.942	52.151
$\alpha = 0.946$ ; CR = 0.965; AVE = 0.903	INT2_BA	0.951	76.024
	INT3_BA	0.958	113.718

*Table 2 Confirmatory Factor Analysis on Reflective Constructs (a: Cronbach's Alpha; CR: Composite Reliability; AVE: Average Variance Extracted)* 

	EXP_BA	EXP_BA * VALI_BA	INT_BA	IS_BA	PI_BA	VALI	Mean	Standard Deviation
EXP_BA	N.A.						5.084	1.322
EXP_BA * VALI_BA	-0.323	N.A.					N.A.	N.A.
INT_BA	0.837	-0.297	0.950				5.108	1.538
IS_BA	0.269	-0.315	0.303	0.892			4.179	1.068
PI_BA	0.423	-0.212	0.449	0.504	0.807		4.236	1.349
VALI_BA	0.623	-0.199	0.722	0.299	0.434	N.A.	3.656	0.883

Table 3 Construct Correlation vs. Average Variance Extracted (AVE)

For the two formative constructs (VALI\_BA and EXP\_BA), the item weights were used to examine items' relevant important in forming each construct. We initially included all the formative indicators developed based on prior research. However, items of VALI3\_BA, VALI6\_BA and EXP1 did not exhibit significant item weights. VALI3\_BA and VALI6\_BA measured the occupational valence from the dimension of salary and flexible working hours respectively, whereas EXP1 measured the expectancy of completing the current degree. Because of the specialty of our context where the dropout rate could be neglected, EXP1 did not fit within the scope of our study and hence was omitted. To determine the reason for the low item weight in VALI3\_BA and VALI6\_BA, we tested for multicollinearity within the formative construct of VALI\_BA. The item-item correlation table <sup>1</sup> suggested high correlation between VALI3\_BA and VALI6\_BA and VALI6\_BA and VALI7\_BA, which were not desirable in formative constructs. Because both VALI7\_BA and VALI6\_BA were measuring the life-dimension of a job and were somehow interchangeable concepts, we decided to drop VALI6\_BA<sup>2</sup>. VALI3\_BA, on the other hand, was preserved in our model. Salary is an important aspect in determining the attractiveness of a job and measures different dimension compared to VALI4\_BA (social status). In addition, it was expectable

<sup>&</sup>lt;sup>1</sup> The item-item correlation table is not included here due to page constraint.

 $<sup>^{2}</sup>$  We also tested for multicollinearity within the formative scales by running a series of regression models with each item serving as the dependent variable and the other items as independent variables. However, all the VIFs were below the threshold of 3.3, which was different from our initial conjecture of multicollinearity. Despite this, we still decided to drop the items due to their misfit of context.

that VALI3\_BA and VALI4\_BA would be highly correlated because high social status jobs often have high salary as well. Therefore, we decided to keep the item VALI3\_BA to preserve content validity (Petter et al., 2007). Item weights of the revised instruments are summarized in **Table 4**.

Construct	Item	Item Weight	<b>T-Value</b>
Occupational Valence (VALI_BA)	VALI1_BA	0.358	2.543
	VALI2_BA	-0.225	1.899
	VALI3_BA	0.099	0.905
	VALI4_BA	0.322	1.873
	VALI5_BA	-0.220	1.566
	VALI7_BA	0.242	2.323
	VALI8_BA	0.617	5.267
Expectancy (EXP_BA)	EXP2_BA	0.407	2.658
	EXP3_BA	0.276	1.981
	EXP4_BA	0.389	2.461

### Table 4 Item Weights of Formative Constructs

We also examined the extent of common method bias with Harman's one-factor test (Harman, 1976). All constructs were entered into an unrotated principal components factor analysis (Podsakoff et al., 1986) and the highest percentage of variance equals to 45.87. Since none of a single factor accounted for more than 50% of the variance (Harman, 1976), common method bias was unlikely in our study.

### 4.3. Tests of Structural Model

A hierarchical moderated multiple regression using PLS was conducted to examine the interaction effects (Kankanhalli et al., 2012). All independent variables were entered into the model in the first step and the interaction term was entered in the second step. The Statistical significance of the path coefficients and variance explained ( $R^2$ ) were checked to test the structural model (see **Table 5** and **Figure 2**). Constructs in our model could explain 77.4% of the intention to choose the job of business analyst.

The significant positive coefficients of path H1A and H1B showed that both occupational expectancy and valence were positive related to the intention to choose the occupation. However, there was no significant relationship between the interaction term and job choice intention, resulting in unsupported H1C. The results also showed that information seeking behavior was positively related to occupational valence (i.e. H2 supported) but not occupational expectancy (i.e. H3 not supported). The positive path coefficient of peer influence to expectancy also indicated that peer influence is positively related to occupational expectancy (i.e. H4 supported). However, H5 was weakly supported at a significance level of 0.1, indicating a weakly significant positive relationship between peer influence and occupational valence.

A set of control variables was also included in the model and also showed some interesting insights. Specifically, there was a significant relationship between major and the intention of occupational choice, which was also consistent with the common belief.



Figure 2 Results of Structural Model with Job: Business Analyst

	Path Coefficient	T-Value	Result
Without Interaction Effects			
VALI_BA -> INT_BA	0.308**	5.579	Significant
EXP_BA -> INT_BA	0.505**	6.631	Significant
IS_BA -> VALI_BA	0.299**	3.016	Significant
IS_BA -> EXP_BA	0.075	1.172	Not Significant
PI_BA -> EXP_BA	0.385**	4.551	Significant
PI_BA -> INT_BA	0.057*	1.730	Weakly Significant
<u>Control Variables</u>			
GEND	0.039	1.253	Not Significant
MAJ	0.188**	2.688	Significant
WEXP	-0.061	1.652	Weakly Significant
HR_FB	0.023	0.827	Not Significant
With Interaction Effects			
VALI_BA -> INT_BA	0.310**	5.887	H1A Supported
EXP_BA -> INT_BA	0.502**	6.708	H1B Supported
IS_BA -> VALI_BA	0.299**	2.943	H2 Supported
IS_BA -> EXP_BA	0.075	1.069	H3 Not Supported
PI_BA -> EXP_BA	0.385**	4.444	H4 Supported
PI_BA -> INT_BA	0.056*	1.732	H5 Weakly Supported
Interaction Term			
EXP_BA * VALI_BA -> INT_BA	-0.010	0.322	H1C Not Supported
<u>Control Variables</u>			
GEND	0.038	1.189	
MAJ	0.188**	2.655	
WEXP	-0.060	1.566	
HR FB	0.023	0.794	

*Table 5 Results of Structural Model* (p < 0.05 (*t-value of 1.96*): \*\*, p < 0.1 (*t-value of 1.65*): \*)

### 4.4. Tests Using Alternative Datasets

Same testing procedures were performed on the datasets of consultant and developer respectively.



Figure 3 Results of Structural Model with Job: Consultant



Figure 4 Results of Structural Model with Job: Developer

### **5. DISCUSSION**

### 5.1. Discussion of Results

The tests on the structural model show that only 2 out of 7 hypotheses are not supported. Firstly, H1C is not supported such that the interaction effect between expectancy and valence is inconclusive. One possible reason is that their impact on the intention of occupational choice is parallel. Thus, there is not interaction effect between the two constructs. Secondly, H3 is not supported such that there is no statistically significant relationship between expectancy and information seeking behavior. One explanation may be that individuals seek for certain job information because of curiosity or lack of relevant knowledge while the expectation for this job is undetermined. When they obtain more information on the job, their expectation for this job can be altered again. For example, one is very good at coding but she may search for job information about consultant, because she wonders what actually the job scope is, and she shows no interest in becoming a consultant. Finally, she may find out herself does not suit this job and as always she expects herself to become a developer.

The rest 5 hypotheses are all supported. Therefore, we can still draw the conclusion that information seeking behaviors will indirectly influence the intended job choice by influencing the valence. On the other hand, peer influence will influence the intended job choice directly and indirectly by influencing the expectancy. Hence, the impact of online social network on intended job choice is empirically demonstrated via the two possible mechanisms identified.

#### **5.2. Limitation and Conclusion**

Our study has several limitations that shed light on future research. Firstly, some construct items need further validation. Due to the exploratory nature and the novelty of this study, we borrow and adapt some concepts from offline context, which may not be perfectly applicable. In addition, due to the time limit, we do not really go through every step to develop items, such as Q-sorting, and in future, we should do more instruments selection to ensure instrument validity.

Secondly, the external validity of the proposed model needs more investigation. Our data were collected from a single kind of setting and only focused on computing students. Generalizing the results to other contexts or settings hence requires cautious examinations and checking. The survey instrument developed in our study might also provide some insights for further studies on career aspiration in other context.

Thirdly, this study only examines the intention of choosing a certain occupation. Due to the difficulty of conducting the survey on industry or graduates, our sample only covered undergraduates and we were not able to obtain their actual occupational choice upon graduation. Therefore, future research may consider extend the current framework to examine the actual occupational choice.

In conclusion, we have taken an exploratory approach and identified and demonstrated the antecedents and mechanisms that influence job choice intention in online social networks. With a deeper understanding, the online social networks can be better leveraged in recruitment and employment process.

### **APPENDIX: ITEMS AND CODING**

Questionnaire: Item Code (DV: developer/ CT: consultant/ BA: business analyst)	Construct	
EXP1: I expect that I will be able to complete my degree. EXP2: Given I had completed my degree, I expect that I will be able to get a job of: EXP3: Given I had completed the my degree, I expect I will be able to successfully do the job of: EXP4: Given I had completed the my degree, I expect that I will be able to advance in my career: [developer/consultant/business analyst]		
INT1: The occupation of is appealing to me. [developer/consultant/business analyst] INT2: I will choose the job of [developer/consultant/business analyst] INT3: I predict I will choose the job of: [developer/consultant/business analyst]		
Below is a list of outcomes that might be achieved in your future job or career. Rate the outcomes according to how important or desirable they are to you.INS1_1: variety in job duties and activities INS1_2: job securityINS1_5: intellectual stimulation INS1_6: flexible working hours INS1_3: high incomeINS1_3: high incomeINS1_7: work and life balance INS1_4: high prestige and social status	Instrumentality	
<ul> <li>VAL1: I think a person will find variety in the job duties and activities if the person is doing job of:</li> <li>VAL2: I think a person will find his/her job secure if the person is doing the job of:</li> <li>VAL3: I think a person will achieve a high income if the person is doing the job of:</li> <li>VAL4: I think a person will achieve a high social status or become prestigious if the person is doing the job of:</li> <li>VAL5: I think a person will stimulate his/her intellectual ability if the person is doing the job of:</li> <li>VAL6: I think a person will have flexible working hours if the person is doing the job of:</li> <li>VAL7: I think a person will achieve work-life balance if the person is doing the job of:</li> <li>VAL8: I think a person will feel a fit of job to his/herself if the person is doing the job of:</li> <li>[developer/consultant/business analyst]</li> </ul>	Outcome Valence	

<ul> <li>PI1F: Some of my friends on Facebook are my role models.</li> <li>PI2F: My Facebook friends show special interest in the job of:</li> <li>PI3F: My Facebook friends like to share information about the job of:</li> <li>PI4F: My Facebook friends encourage me to choose the job of:</li> <li>PI5F: My Facebook friends do not care what job I am going to choose.</li> <li>PI6F: I will take my Facebook contacts' career decisions into consideration when choosing jobs. [developer/consultant/business analyst]</li> </ul>	Peer Influence
IS1F: I will strategically search for the company and recruitment information on Facebook about the job of: IS2F: I would like to scan through the information I have obtained on Facebook about the job of: IS3F: I will evaluate the information I get from Facebook about the job of: [developer/consultant/business analyst]	Information Seeking
OE1F: I am able to obtain useful information for my career decisions on Facebook about the job of: OE2F: I am able to obtain fruitful recruitment information on Facebook about the job of: [developer/consultant/business analyst]	Online Exposure

#### REFERENCES

- Brooks, L., & Betz, N. E. (1990). Utility of expectancy theory in predicting occupational choices in college students. Journal of Counseling Psychology, 37(1), 57.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. Journal of Consumer Research, 350-362.
- Chin, W. W. (1998). The partial least squares approach for structural equation modeling.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. Information systems research, 14(2), 189-217.
- Dervin, B. (1983). An overview of sense-making research: Concepts, methods, and results to date. Seattle: School of Communications, University of Washington.
- Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: an alternative to scale development. Journal of Marketing research, 269-277.
- Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: The problem revisited. The Review of Economics and Statistics, 49(1), 92-107.
- Fisher, T. A., & Stafford, M. E. (1999). Reliability and validity of the Career Influence Inventory: A pilot study. Journal of Career Assessment, 7(2), 187-202.
- Gatewood, R. D., Gowan, M. A., & Lautenschlager, G. J. (1993). Corporate image, recruitment image and initial job choice decisions. Academy of Management journal, 36(2), 414-427.
- Ge, C., Kankanhalli, A., Huang, K.-W., & Sha, X. (2013). Do economic recession and gender influence the likelihood of entry job in IT for IT graduates? Paper presented at the Proceedings of the 2013 annual conference on Computers and people research.
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. Communications of the Association for Information Systems, 16(1), 109.
- Gefen, D., Straub, D. W., & Rigdon, E. E. (2011). An update and extension to SEM guidelines for admnistrative and social science research. Management Information Systems Quarterly, 35(2), iii-xiv.
- Granovetter, M. S. (1973). The strength of weak ties. American journal of sociology, 1360-1380.
- Greening, D. W., & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. Business & Society, 39(3), 254-280.
- Hackman, J. R., & Porter, L. W. (1968). Expectancy theory predictions of work effectiveness. Organizational Behavior and Human Performance, 3(4), 417-426.
- Harman, H. H. (1976). Modern factor analysis. University of Chicago Press.
- Higgins, M.C. (2001), "Follow the leader? The effects of social influence on employer choice",
- Group & Organization Management, Vol. 26 No. 3, pp. 255-82.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. Journal of consumer research, 30(2), 199-218.
- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personalitymotivational analysis and meta-analytic review.Journal of Applied Psychology, 86(5), 837.

- Kankanhalli, A., Pee, L. G., Tan, G. W., & Chhatwal, S. (2012). Interaction of individual and social antecedents of learning effectiveness: A study in the IT research context. Engineering Management, IEEE Transactions on, 59(1), 115-128.
- Kilduff, M. (1990), "The interpersonal structure of decision making: a social comparison approach to organizational choice", Organizational Behavior and Human Decision Processes, Vol. 47 No. 2, pp. 270-88.
- Kilduff, M. (1992), "The friendship network as a decision-making resource: dispositional moderators of social influences on organizational choice", Journal of Personality and Social Psychology, Vol. 62 No. 1, pp. 168-80.
- Kulkarni, M., & Nithyanand, S. (2012). Social influence and job choice decisions. Employee Relations, 35(2), 2-2.
- Lawler, E. E., III. (1973). Motivation in work organizations. Monterey, Calif.: Brooks/Cole.
- Lawler III, E. E., & Suttle, J. L. (1973). Expectancy theory and job behavior.Organizational Behavior and Human Performance, 9(3), 482-503.
- Mitchell, T. R. (1974). Expectancy models of job satisfaction, occupational preference and effort: A theoretical, methodological, and empirical appraisal.Psychological Bulletin, 81(12), 1053.
- Oliver, R. L. (1974). Expectancy theory predictions of salesmen's performance. Journal of Marketing Research, 243-253.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. Mis Quarterly, 31(4), 623-656.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of management, 12(4), 531-544.
- Saks, A. M., & Ashforth, B. E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. Personnel Psychology, 50(2), 395-426.
- Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. Communications of the Association for Information Systems, 13(24), 380-427.
- Timmers, C. F., & Glas, C. A. (2010). Developing scales for information-seeking behaviour. Journal of Documentation, 66(1), 46-69.
- Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. Academy of management journal, 40(3), 658-672.
- Van Eerde, W., & Thierry, H. (1996). Vroom's expectancy models and work-related criteria: A metaanalysis. Journal of applied psychology, 81(5), 575.
- Van Hoye, G. and Lievens, F. (2007), "Social influences on organizational attractiveness: investigating if and when word of mouth matters", Journal of Applied Social Psychology, Vol. 37 No. 9, pp. 2024-47.
- Van Hoye, G. and Lievens, F. (2009), "Tapping the grapevine: a closer look at word-of-mouth as a recruitment source", Journal of Applied Psychology, Vol. 94 No. 2, pp. 341-52.
- Vroom, V. H. (1964). Work and Motivation. New York: Wiley.
- Wabba, M. A., & House, R. J. (1974). Expectancy theory in work and motivation: Some logical and methodological issues. Human Relations, 27(2), 121-147.

Wanous, J. P., Keon, T. L., & Latack, J. C. (1983). Expectancy theory and occupational/organizational choices: A review and test. Organizational Behavior and Human Performance, 32(1), 66-86.