E-recruitment Adoption among Chinese Job-Seekers

Haili Zhang[1]

Felicito Jabutay[2]

Qin Gao[3]

ABSTRACT

China has the second largest economy in the world, and businesses in the country are robust. In line with technological changes, businesses have also been fast in adopting newer technological or digital trends. One of these trends is E-recruitment. Data gathered from 404 randomly selected Chinese respondents were analyzed using structural equation modeling to identify the factors involved in the process leading to E-recruitment adoption. The multi-stage analysis results indicated that outcome expectation positively affects perceived usefulness of E-recruitment, while internet self-efficacy affects perceive ease of use. In turn, both perceived usefulness and perceived ease of use influence behavioral intention to use E-recruitment. The findings and recommendations provide valuable insights on the adoption of E-recruitment and its implications in modern businesses.

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[1]Graduate Student, Master of Business Administration International Program
Kasem Bundit University, Bangkok, 10250, Thailand,
E-Mail:1209663439@qq.com
[2]*Head, Management Department, Bachelor of Business Administration International Program*
Kasem Bundit University, Bangkok, 10250, Thailand
E-Mail: felicito.jab@kbu.ac.th
[3]Professor, Faculty of Education, Master of Education
Qujing Normal University,Qujing, 655000,China
E-Mail: 1045517458@qq.com

Introduction

In recent years, the internet has become more involved in people's daily life. It has been used in almost everything: from communication and entertainment to businesses. In many organizations, human resource (HR) managers have been using the internet to attract potential job candidates. With the internet functioning as an intermediary channel that provides the links between job seekers and employers, E-recruitment systems have had an explosive expansion in the past few years (De Meo, Quattrone, Terracina, & Ursino, 2009). This study wanted to analyze which personal factors can affect job seekers to use E-recruitment.

China's robust economy is the second largest in the world ("China's Economy," 2011). Coupling this with almost 800 million users in the country ("Number of Internet Users," 2018), E-recruitment activities are expected to be vast. Also, China is the world's largest Internet market. There are 90 per cent of Internet penetration in 2018, according to the latest global Internet usage forecast ("The number of Internet user in different generation," 2018). The figures indicate that internet use among young adults the stage of development where individuals start exploring for the most suitable jobs (Erikson, 1994) is very common; hence, they are more exposed to E-recruitment activities.

This study used a highly accepted and recognized technology acceptance model (TAM) (Davis, 1989) to examine the factors involved in the process leading to E-recruitment adoption of Chinese job seekers. Additionally, the study also used social cognitive theory (SCT) (Bandura, 1986) to explain applicants' awareness of E-recruitment process.

This study will be divided into the following sections. Firstly, the summary of data concerning internet use in China will be presented. Second, the literature review of E-recruitment adoption and its hypothesized antecedents will be discussed. Following this is the discussion of the research methodology that includes research participants, research procedure, and data analysis technique. Finally, results, discussion, limitations and future research avenues,

and conclusion and implication will be presented.

Literature Review

E-recruitment Adoption

E-recruitment adoption is the behavior when people are willing to use the webpage or E-recruitment as an information resource to find work. Applicants who adopt E-recruitment use the internet as a marketing tool to attract potential employers. A study conducted in the United States by Cho, Lee, and Liu (2011) indicated that there are significant relationships among the variables perceived enjoyment, usefulness, ease of use, technology self-efficacy, attitude toward Web sites, corporate image, and intention to apply. The current study deviates from Cho and company's study by focusing on the applicants' perception of the internet leading to E-recruitment adoption, rather than the internet's attractiveness.

Behavioral Intention to use E-recruitment

According to the theory of reasoned action, the antecedent of any behavior is the intention to perform that behavior(Fishbein, & Ajzen, 1975). Intentions are indicators of how hard people are willing to try and how much effort they are willing to put forth to perform a behavior. When a person's attitude changes, there is a strong desire to do something, the behavior will change. In the current study, behavioral intention is the final outcome of the process and it is considered the most direct antecedent of E-recruitment adoption. Hence, it is also viewed as the surrogate of the latter.

Outcome expectations

Outcome expectations is a judgment of the likely consequences such behavior will produce (Bandura, 1978). It follows that if individuals strongly believe that using the Internet to search for a job increases their odds of finding a position, it is logical to expect that they will form positive perceptions about the usefulness of the information provided by recruitment web sites (Williamson, Lepak, & King, 2003). Following this notion, the first hypothesis therefore is:

H1: Outcome expectation has a positive effect on perceived usefulness of E-recruitment adoption.

Internet self-efficacy

Internet self-efficacy is the belief in one's capabilities to organize and execute courses of Internet actions required to produce given attainments (Hsu, & Chiu, 2004). An empirical study conducted in Finland using a sample of 450 computer users demonstrated that computer self-efficacy has a direct effect on perceived ease of use (Igbaria, & Iivari, 1995). Using the description of the variable and borrowing the idea from the finding of the empirical study above, the current study proposes that applicants tend to adopt E-recruitment if they believe that they are efficient enough to use it with ease. Based on this conceptualization, hypothesis 2 is:

H2: Internet self-efficacy has a positive effect on perceived ease of use of E-recruitment.

Perceived ease of use

Perceived ease of use is a determinant of perceived usefulness because, assuming other things being equal, users consider a system more useful when it is more effort-free (Yi, & Hwang, 2003). A study conducted in Malaysia using data gathered from 281 new graduates supported the notion as the result showed that perceived ease of use indicates that the job seeker found the job-search website easy to operate (Brahmana, & Brahmana, 2013). Basing on this finding, the current study proposes that perceived ease of use of E-recruitment will have a positive effect on its perceived usefulness, and also a positive effect on behavioral intention to use; hence, the two hypotheses in this segment are:

H3: Perceived ease of use has a significant effect on the perceived usefulness of E-recruitment.

H4: There are positive relationship between perceived ease of use and behavioral intention to using E-recruitment.

Perceived usefulness

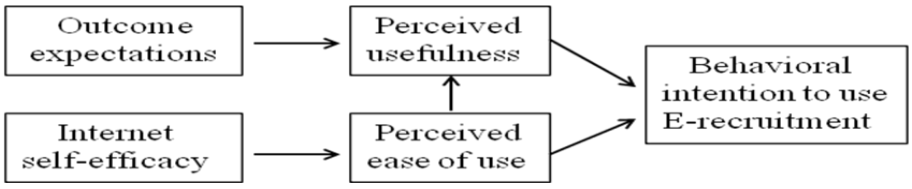
Perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). Using TAM, it can be said that perceived usefulness, as a major determinant, determines the behavior intended to be used by perceived ease of use (Mohd Yusoff, Muhammad, Zahari, Pasah, & Robert, 2009). Therefore, in this study, the relationship between perceived usefulness and behavioral intention to use is considered significant and positive. Consequently, hypothesis 5 is:

H5: Perceived usefulness has a positive effect on behavioral intention to use E-recruitment.

Conceptual Framework

As seen in Figure 1, the conceptualized relationships are a multi-stage structural model. The process starts with outcome expectations and internet self-efficacy affecting perceived usefulness and perceived ease of use, respectively. In turn, both perceived ease of use and perceived usefulness affect behavioral intention to use E-recruitment, while perceived ease of use also influences perceived usefulness in the process.

Figure1 Conceptual Framework of the Hypothesized Relationships



Method

Sample and Data Collection

Using online survey, questionnaires were sent to 600 randomly selected individuals listed on a database through e-mail or social media likes Wechat, Weibo and QQ. Finally, 404 answered questionnaires were collected, a response rate of 67.3%. Of the 404 respondents, 31.93% were men and 68.07% were women. Most of the respondents were aged from 21 to 25

(69.06%), and 73.02% of them have Bachelor's degree.

Measures

All of the Likert-type measures of the current study were adapted from established reliable scales. All scales have reliability coefficients that fulfilled the recommended value of .70 (Nunnally, 1967). Responses to the items of the scales were recorded on a 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

To measure outcome expectations, this study employed four measurement items adapted from Williamson's(2003) research. The items asked respondents to indicate the extent they agreed with statements regarding whether: (1) the use of the Internet increases their chances of finding the perfect job, (2) the use of the Internet increases the effectiveness of their job search, (3) the Internet is a useful way to look for a job, and (4) the Internet is an efficient way to look for a job(Williamson et al., 2003).The items have a construct reliability of .93.

For Internet self-efficacy, 13 items adapted from the works Hsu and Chiu(2004) were used. They developed 13 items to measure on 7 point Likert scale ranging from (1) I feel confident navigating the World Wide Web by following hyperlinks (2) I feel confident visiting a Web site by entering its address (URL) in the browser (3) I feel confident going backward and forward to previously visited Web pages without being lost in the hyperspace (cyberspace), and so on.The construct reliability of the scale is .95.

To measure perceived usefulness, according to Brahmana(2013), there are 4 items was measured on 7 point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). They were ranging from (1) Using E-Recruitment sites enable me to look for job quickly (2) Using E-Recruitment sites improved my job searches (3) Using E-Recruitment Sites to look for job was very effective (4) Using E-Recruitment site made it easier for me to look for jobs. The construct reliability is .94.

Perceived ease of use was measured using 4 items, these were ranged from (1)

Learning to E-recruitment sites was easy for me (2) I found it easy to do what I want to do in E-recruitments sites (3) My interaction with E-Recruitment sites was clear and understandable (4) It was easy for me to become skilful at using E-recruitment sites formulated by Brahmana and Brahmana(2013). The reliability coefficient of the scale is .94.

Behavioral Intention to Use was measured using 4 items through the scale formulated by Brahmana and Brahmana (2013).And these 4 items were measured on 7 point scale ranging from (1) The Likelihood that I would use E-recruitment site for job search is high (2) I am willing to use E-Recruitment site for vacancy search (3) In the near future, I would consider using E-recruitment sites for vacancy search (4) I regularly use E-recruitment site for job search. The scale has a reliability alpha of .91.

Data Analysis

Data analysis were divided into three phases: 1) preliminary data screening, 2) testing the measurement theory, and 3) testing the structural theory. Phases two and three are composed of six stages that cover all the structural equation modelling (SEM) process (Hair, Black, Babin, Anderson, & Tatham, 1998).

In the preliminary data screening, the statistical assumptions needed for SEM were examined. The results indicated that statistical assumptions were not violated since no outliers were found; the relationships between exogenous and endogenous variables were found to be linear; multicollinearity was not an issue; and, although the Shapiro-Wilk statistics were significant ($p < .001$), the sample size ($n=404$) was large enough to consider the non-normality issue non-critical based on the asymptotic distribution theory (Levin, Lin, & Chu, 2002).

In CFA, for the model fit to be considered good, Chi-Square (χ^2) is preferably small and insignificant; the Standardized Root Mean Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) should be at most .08; and the Comparative Fit Index should be at least .90 (Hair, Black, Babin, Anderson, & Tatham, 1998). RMSEA that is not over .10 can also be considered acceptable (Kenny, Kaniskan, & McCoach,

2015). Fulfilling the guidelines also means that the absolute and incremental fits of the model are acceptable. The findings (see Table 1) indicated that the measurement model had acceptable and moderate model fit as all figures in the fit indices were within the acceptable ranges.

Through AMOS (version 22), the structural relationships were established. The resulting values in the fit indices did not change materially, indicating that the fit of the structural model were still within acceptable levels. In addition, all of the hypothesized directions of the relationships were supported. Hence, the structural model fulfilled all validity concerns, implying its usability for hypotheses testing.

Table 1 Fit Indices comparison of the original measurement model, modified measurement models, and the structural model

Model	$\chi 2$	df	Sig.	CFI	PCFI	SRMR	RMSEA
Measurement Model	1572	367	.00	.90	.82	.05	.09
Structural Model	1599	371	.00	.90	.82	.05	.09

Results

Following the conventional guideline of interpreting effect sizes of .02, .15, and .35 as small, medium, and large, respectively; it can be said that outcome expectation (β = .64, p < .001) and perceived ease of use (β = .64, p < .001) had large effects on perceived usefulness. Hence, H1 and H3 were supported. With regards to the effect of internet self-efficacy on perceived ease of use, a large effect was seen (β = .82, p < .001), satisfying H2. Finally, both H4 and H5 were also supported since perceived usefulness (β = .56, p < .001) and perceived ease of use (β = .39, p < .001) were revealed to have large effects on the output variable behavioural intention to use E-recruitment.

Table 2 Hypotheses Testing Results

	β
Outcome Expectation → Perceived Usefulness	**.64*** **
Internet Self-efficacy → Perceived Ease of Use	**.82*** **
Perceived Ease of Use → Perceived Usefulness	**.39*** **
Perceived Usefulness → Behavioural Intention to Use E-recruitment	**.56*** **
Perceive Ease of Use → Behavioural Intention to Use E-recruitment	**.39*** **

Note. *$p < .05$. **$p < .01$. ***$p < .001$

Discussions

The results of the study confirmed that perceived ease of use of E-recruitment tends to be higher when job seekers has a high level of internet self-efficacy. And also Chinese Job-Seekers who adopt E-recruitment have high perception on the usefulness of E-recruitment granted that they have high expectations for the outcome and high perception on the ease of use of E-recruitment. As perceived usefulness and perceived ease of use of E-recruitment increase, job seekers then have higher tendencies to develop behavioural intention to use E-recruitment, resulting to E-recruitment adoption.

Limitations and Directions for Future Research

The results of the current study provide useful and valuable insights about E-recruitment adoption among Chinese job-seekers. However, there are also some limitations that could be improved in future research. First, the study only included two factors associated with personal perception elements. A more comprehensive study involving other factors such as internet stress, and frequency of internet use may provide a more comprehensive information about the antecedents of E-recruitment adoption. Secondly, this study only collected data from some graduates in the university using cross-sectional approach, which has several limitations that include lack of predictability value. Future study may

utilized longitudinal approach using more samples gathered all across China.

Conclusions and Implications

Personal perceptions have an impact on individual behavior as confirmed by this study. Perceptions on ease of use and usefulness of E-recruitment lead to behavioral intention to use E-recruitment through the internet, and these causal relationships are strengthened by both outcome expectation and self-efficacy on using the internet. These findings have several practical contributions. First, the finding that perceived ease of use can attract applicants to engage in E-recruitment give a valuable insight on the attractiveness of simplicity and user-friendly E-recruitment designs or applications. In other words, HR managers who want to attract applicants to apply online have to design their websites in manner that they can be easily understood and used. Second, the finding that perceived usefulness also encourage E-recruitment adoption provide a significant insight on the importance of projecting a useful or helpful features in the recruitment websites. In conclusion, the results of the study remind organizations to pay attention on the content of their E-recruitment carefully to attract more potential employee to adopt it.

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