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PROCEEDING

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FRAMEWORK OF SELF-ESTEEM, JOB-SEARCH INTENSITY, AND CAREER DECISION-MAKING SELF-EFFICACY FOR GRADUATING STUDENTS: AN APPLICATION OF THE STRUCTURAL EQUATION MODELING

Norida Abdullah & Mohd Tajudin Ninggal

ABSTRACT

The twenty-first century employers' worldwide require work-ready graduates with desired soft-skills. Among the most highly valued soft-skills sought by Malaysian employers from graduates when entering the workforce are interpersonal skills, self-esteem, problem solving and decision-making and positive job orientation. Thus, this research focuses on developing a framework of Self(S), Action(A), and Outcome(O) among graduating students. This research examined the relationships between self-esteem, job-search intensity and career decision-making self-efficacy among students. Data were collected using a self-reported questionnaire. The questionnaire has three sections which assess (i) self-esteem, (ii) job-search intensity and (iii) career decision-making self-efficacy. Overall reliability analyses using Cronbach's Alpha for the content validation of the questionnaire for three constructs. The questionnaire is reliable and valid to measure self-esteem, job-search intensity and career decision-making self-efficacy. Data collected from 678 graduating students were tested with confirmatory factor analysis using AMOS 16.0 to obtain three best-fit measurement models from the three latent variables. Subsequently, the structural equation modeling was applied to test the hypotheses. The results of the study were as follows: (i) evidence of a four-indicators measurement model for self-esteem, (ii) evidence of a six-indicators measurement model for job-search intensity, (iii) evidence of a five-dimension of measurement model for career decision-making self-efficacy, (iv) a strong relationship between self-esteem and career decision-making self-efficacy, (v) a positive relationship between job-search intensity and career decision-making self-efficacy, (vi) a positive relationship between self-esteem and job-search intensity, (vii) evidence for the testing of invariance of a structural model for multigroup analysis, and (viii) a framework of self-esteem, job-search intensity, and career decision-making self-efficacy. Implications of the findings for social work practice, research, theory, policy and education were also discussed.

ABSTRAK

Pada abad ke 21 majikan diseluruh dunia memerlukan graduan yang telah bersedia untuk bekerja dengan kemahiran insaniah yang diinginkan. Di antara kemahiran insaniah yang dikehendaki oleh majikan-majikan di Malaysia kepada graduan bila memasuki pasaran kerja adalah seperti kemahiran interpersonal, estim kendiri, penyelesai masalah serta membuat keputusan, dan kemahiran berorientasikan kerja yang positif. Oleh itu, kajian ini memberi tumpuan untuk membangunkan kerangka kerja berkaitan diri, tindakan dan hasil di kalangan bakal graduan. Kajian ini menganalisis hubungan di antara estim kendiri, keamatan carian kerja dan membuat keputusan kerjaya di kalangan pelajar. Data diperolehi daripada pengedaran soal-selidik kepada pelajar. Soal-selidik yang diedarkan mengandungi tiga bahagian yang mengukur (i) estim kendiri, (ii) keamatan carian kerja, (iii) membuat keputusan kerjaya. Analisis kebolehpercayaan secara keseluruhan menggunakan ujian Cronbach's Alpha untuk kesahan kandungan daripada soal-selidik untuk ketiga-tiga

konstruk. Dapatan menunjukkan soal-selidik yang digunakan adalah boleh dipercayai dan sah untuk digunakan bagi mengukur estim kendiri, keamatan carian kerja dan membuat keputusan kerjaya. Data dikumpul daripada 678 orang bakal graduan dan diuji dengan confirmatory factor analysis menggunakan AMOS 16.0 bagi memperolehi tiga model pengukuran dengan padanan terbaik untuk ketiga-tiga pembolehubah laten. Seterusnya, kaedah permodelan persamaan berstruktur digunakan untuk menguji hipotesis kajian. Keputusan daripada kajian adalah seperti berikut: (i) model pengukuran untuk estim kendiri, (ii) model pengukuran untuk keamatan carian kerja, (iii) model pengukuran untuk membuat keputusan kerjaya, (iv) hubungan yang kuat antara estim kendiri dan membuat keputusan kerjaya, (v) hubungan positif antara keamatan carian kerja dan membuat keputusan kerjaya, (vi) hubungan positif antara estim kendiri dan keamatan carian kerja, (vii) keputusan pengujian penstrukturan model untuk analisa pelbagai kumpulan, dan (viii) satu kerangka kerja berkaitan estim kendiri, keamatan carian kerja, dan membuat keputusan kerjaya. Implikasi terhadap amalan kerja sosial, penyelidikan, teori, polisi dan pendidikan turut dibincangkan.

1.0   INTRODUCTION

The general consensus among Malaysian employers indicates that Malaysian graduates are well trained in their areas of specialization but unfortunately they lack the soft-skills (Nurita, Shaharudin, & Ainon, 2004). The seven significant soft-skills lack by graduates are problem solving and adaptability, interpersonal and ability to work as a team, English language proficiency, information communication and technology, personal organization and time management, leadership, and communication (Gurvinder & Sharan, 2008).

Employers today are looking for graduates with specific skills, knowledge, and ability to be proactive to respond to the problems (Gurvinder & Sharan, 2008). More employers are searching for graduates who are balanced, with good academic achievement and possessing soft-skills such as communication skills, problem solving skills, interpersonal skills and the ability to be flexible (Nurita, Shaharudin & Ainon, 2004). A survey conducted in year 2004 involving 258 Malaysian private sector managers from various functional areas, the top ten soft-skills required to succeed in the twenty-first century workplace are integrity, achievement orientation, ability and willingness to learn, proactive/initiative, teamwork, customer service orientation, being able to work independently, critical thinking skills, self-confidence and interpersonal skills (Ranjit & Normah, 2005). Other research found that top ten qualities employers seek in workers namely, communication skills, initiative/motivation, teamwork skills, interpersonal skills, flexibility/adaptability, analytical skills, computer skills, organizational skills, honesty/integrity and strong work ethic (Morais, 2008).

Based upon the extensive literature review and local research by Ranjit (2009), found that the soft-skills that Malaysian graduates need to enhance their employability in the twenty-first century workplace can be categorized into three major clusters namely, Personal Competence, Interpersonal Competence and Thinking Skills. Other studies (Zuraidah, 2008, Lazaroo, 2008) found that, Malaysian graduates lacked self-confidence, positive attitude, and skills of prepare for job-search. Based on suggestion from Ranjit's (2009) cluster of soft-skills, the current research focus on self-esteem, job-search intensity, and career decision-making self-efficacy as the variables involved in the present research.

Self-esteem has a vast definition by different scholars. For example, Ranjit (2009, p 22) refers self-esteem is an overall evaluation of oneself in either a positive or negative way and believes himself or herself to be competent and worthy of living. Self-esteem is also viewed as a global judgment of the worth or value of the self (Crocker, 2004). Branden (1994, p 27) defined self-esteem is the reputation we acquire with ourselves. It is a personal judgement of worthiness of what an individual thinks and feels about himself, not what others think or feel about that individual. In other words self-esteem is essentially one's overall sense of self-competence and self-worth.

Self-esteem is one of the most widely examined personality variables in job-search research (Saks, 2005). Research shows that individuals with high self-esteem will take more risks in job selection, choose unconventional jobs (Robbins, 2001), and choose challenging careers and jobs (Greenberg, 2002). Meanwhile, individuals with low self-esteem tend to be less successful in their job-searches (Greenberg, 2002). In relation to these two factors, students should have high self-esteem through out the academic session, and they also have to start preliminary seek for jobs in their final stage of their academic studies. A recent study (van der Klaauw & van Vuuren, 2010) related to these two factors found that, students divide their effort between studying and job-search shortly before graduation. Study effort generates higher grades, while search effort increases the probability that an individual starts working immediately after graduation.

Job-search is a process that gathers information about potential job opportunities, generates and evaluates job alternatives, and chooses the most potential and appropriate from the alternatives (Saks, 2005). Job-search intensity also refers to the degree of job-search effort by future job seekers. It entails behaviours that are likely to lead to job interviews and job offers (Blau, 1994). Currently, job-search intensity is defined as the frequency whereby job seekers engage in job-search activities such as preparing a resume or contacting an employment agency (Kanfer et al., 2001). Generally, the concept of job-search intensity has been utilized in several studies as a measure of the frequency of job seeking behaviours (Kulik, 2000; Saks & Ashforth, 2000; Tziner et al., 2004; Vinokur & Schul, 2002; Wanberg, 2000).

When individuals search for viable career alternatives, they make comparison, and then decide one, it involves the process of career decision-making (Gati & Asher, 2001). Decision-making is one of the domains that need to develop by students (Savickas, 1999). Accordingly, decision-making is also one of the three aspects of students' self-development that need to be considered in order to achieve Vision 2020 in Malaysia (Noh & Rafidah Aga, 2007). Decision-making increases if someone has sufficient information about possible career alternatives and is able to project the possible outcomes of different career choices. Furthermore, research has shown that decision-making mediated the relationship between goal-orientation and career concerns (Aharon, et al.,2004), and between personality and career commitment process (Jin et al., 2009).

Career decision-making includes choices made by individuals about occupations, education, training, and employment. The sequence and number of these decisions will vary among individuals depending on their situations (Kulik, 2000). Career decision-making is one of important career developmental tasks (Savickas, 1997, Whiston & Keller, 2004, Zikic & Klehe, 2006). Career decision-making self-efficacy is specifically refer to individuals feelings of competency in their abilities to self-appraisal, gather occupational information, select career goals, engage in career

planning, and problem solve when difficulties are encountered (Betz & Taylor, 1994 cited in Swanson & D'Achiardi, 2005).

Several studies had investigated variables related to *self-esteem* (Salmero-Aro & Nurmi, 2007; Baumeister et al., 2003; Schaufeli et al., 2002; Betz, 2004; Saks, 2005), *job-search intensity* (Aharon, et al., 2004; Crossley & Stanton, 2005; Brown et al., 2006; Cote, Saks & Zikic, 2006), and *career decision-making* (Feinster-Messinger, 2007; Ennis, 2006; Montgomery, 2006; Crespin, 2006; Foster, 2005; Rowland, 2004). However, there has been little discussion about the relationship of the aforementioned variables. As mentioned by Saks (2005), not every relationship in his model has received the same amount of attention in others research. For example, only one study has investigated networking intensity, and only a select number of predictors and outcome were studied. He also suggested that, any single study would be able to test all of the relationships in the Integrated Self-Regulatory of Job-search, Predictors, Behaviours, and Outcomes model.

As such, the present research focuses three variables; self-esteem (individual differences variable), job-search intensity (job-search behaviour) and career decision-making self-efficacy (outcome predictor) as an indicator to proposed a framework based on self (S), action (A) and outcome (O) among graduating students.

1.1 Problem Statement

In the twenty-first century workplace, a degree is no longer the passport to secure jobs (Mazwin, 2006). Employers are increasingly looking for more than just degree-specific knowledge and hard skills; they want 'work-ready" graduates with desired soft-skills. Employers worldwide have been critical about graduates and their readiness for the world of work (NCIHE, 2009). Similarly, Malaysian employers are generally not happy with the level of soft-skills possessed by graduates entering the workforce. According to them, Malaysian graduates lack self-confidence, communication skills, and strong work ethic and are poor team players (Ranjit, 2009).

Results on the analysis of over 500 graduate recruitment advertisements for the period of June till December 2006, the most highly valued soft-skills sought by Malaysian employers were oral and communication skills, interpersonal skills, ability to work in a team, problem solving and decision-making, leadership, achievement orientation, proactive integrity, self-esteem, enthusiasm, resilience, positive job orientation, ability to work independently, and maturity (Ranjit & A.Wahab, 2009).

Based on the issues related with the graduating students' soft-skills, the current research focuses on developing a framework on self-esteem, job-search intensity and career decision-making self-efficacy, among graduating students. This research examined the relationships between self-esteem, job-search intensity and career decision-making self-efficacy, among students. Moderator variables tested are gender, academic performance, faculty, and residential setting.

1.2 Research Objectives

The specific objectives of the research are as follows:

RO1.   To empirically test the probability of one-factor model for self-esteem (SE).

RO2.   To empirically test the probability of one-factor model for job-search intensity (JSI).

RO3.   To empirically test the probability of a five-factor model for career decision-making self-efficacy (CDMSE).

RO4.   To identify if the self-esteem (SE) influences career decision-making self-efficacy (CDMSE).

RO5.   To identify if the job-search intensity influences career decision-making self-efficacy (CDMSE).

RO6.   To identify if a relationship exists among self-esteem (SE), job-search intensity (JSI) and career decision-making self-efficacy (CDMSE).

RO7.   To examine if the moderator variables (gender-, academic performance-, faculty-, and residential setting-) invariant of the causal structure of the SAO model.

RO8.   To develop a framework of self, action and outcome (SAO) based on self-esteem (SE), job-search intensity (JSI) and career decision-making self-efficacy (CDMSE).

1.3 Research framework

The research framework were based on Saks' (2005) model for the current research with limits the validation process to three profound constructs such as self-esteem, job-search intensity, and career decision-making. The proposed framework takes into consideration the research objectives and questions that were derived from the problem statement.
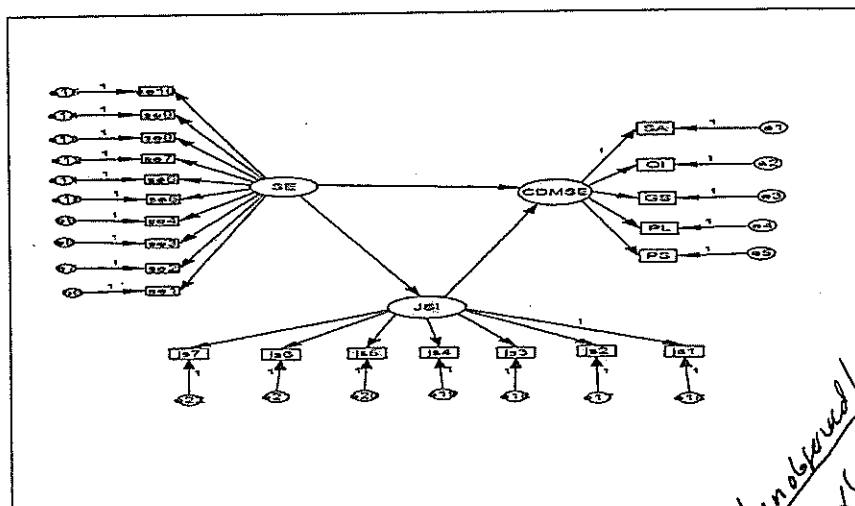

Figure 1   The research framework (Self-Action-Outcome)

As illustrated in Figure 1, there are three unobserved variables also known as latent variables or dependent variables. All three latent variables – Self-Esteem (SE), Job-Search Intensity (JSI) and Career Decision-Making Self-Efficacy (CDMSE) are indicated by ovals or circles. The first latent variable, SE, is assumed to cause variation and covariation between the ten observed variables or indicators represented by boxes on its left, indicated by arrows from the latent SE variable.

The second latent variable is JSI. As a latent or unobserved variable, JSI is also assumed to cause variation and covariation between the seven observed variables or indicators represented by another seven boxes, indicated by arrows coming from the latent JSI variable.

The third and last latent or unobserved variable in the research framework is CDMSE or career decision-making self-efficacy. Another five variables in boxes are indicated by arrows from the latent variable CDMSE. In the same way as the other two latent variables, CDMSE is assumed to cause variation and covariation between the five observed variables or constructs – self-appraisal (SA), occupational information (OI), goal selection (GS), planning (PL) and problem solving (PS) (Betz, Klein & Taylor, 1996).

2.0 METHODS

2.1 Research Participants

The population for this research consisted of final year students from a public university in Malaysia during the 2009/2010 academic session. The sample sizes for this research were 678 final year students and adequate for Structural Equation Modeling (henceforth: SEM) techniques (Kline, 2005, & Byrne, 2010). As mentioned by Kline (2005), path model with 20 parameters should have a minimum sample size of 200 cases and this research met the requirement.

2.2 Research Instruments

The instruments used in this research were the Rosenberg Self-Esteem Scale (henceforth: SE) (Rosenberg, 1965)-used to measure students' global self-esteem, the Job Search Intensity Scale (henceforth: JSI) (Blau, 1994)-is a self-report scale assessing behaviours related to seeking employment, and the Career Decision-Making Self-Efficacy Scale (henceforth: CDMSE) (Betz et al., 1996)-used to measures confidence in accomplishing career-related tasks. Cronbach Alpha for the instruments previously and currently studied as in Table 1.

Table 1 Cronbach Alpha for the instruments used

Inst	Study 1	Study 2	Study 3 (Pre-test)	Current study
SE	0.86 (Raes et al.,2009)	0.85 (Martin-Albo et al., 2007)	0.64	0.69
JSI	0.71 (Wanberg et al.,2000)	0.78 (Graham, 2007)	0.86	0.86
CDMSE	0.94 (Betz et al., 1996)	0.96 (Flores et al., 2006)	0.92	0.93.

2.3 Research Procedure

This research was a survey-based type and participants were recruited using cluster sampling procedure. This procedure often involves a selection of clusters within clusters (example, faculty, class, section) which is also known as multistage sampling. On the selected date the questionnaires were distributed in the class room to the participants. The participants were given 30 minutes to complete the survey.

2.4 Data analysis procedure: Structural Equation Modeling

This research used the classic test to determine the reliability of the instrument, and then SEM to test the validity of the constructs. The study applied a six-stage structural equation modeling using the AMOS (version 18) model-fitting program to test the research hypotheses. The six stages are: (i) defining individual constructs, (ii) developing the overall measurement model, (iii) designing a study to produce empirical data, (iv) assessing the measurement model validity, (v) specifying the structural model and (vi) assessing structural model validity.

Next, the researcher examined the empirical results of the structural equation modeling analysis for the testing of invariance of a structural model for multigroup analysis. The four-step procedure for multigroup analysis has been applied. Step 1-test the adequacy of the model on pooled data, step 2- test the adequacy of the model each sample separately, step 3-test for structural equivalence (configural) invariance across samples simultaneously-creation of baseline model, and step 4-test for metric invariance, at varying degree of stringency: i) equality of loadings, ii) equality of variances & covariances.

3.0 RESULTS

Figure 2 presents the empirical results of hypothesized structural relationship model of self-esteem, job-search intensity, and career decision-making self-efficacy as been address in RO4, RO5 and RO6. The hypotheses are tested and the results of the hypothesis tests are concluded as follows:

Hypothesis 16: (RO4)	SE influences the CDMSE- Failed to reject.
Hypothesis 17: (RO5)	JSI influences the CDMSE Failed to reject..
Hypothesis 18: (RO6)	SE influences the JSI. Failed to reject.
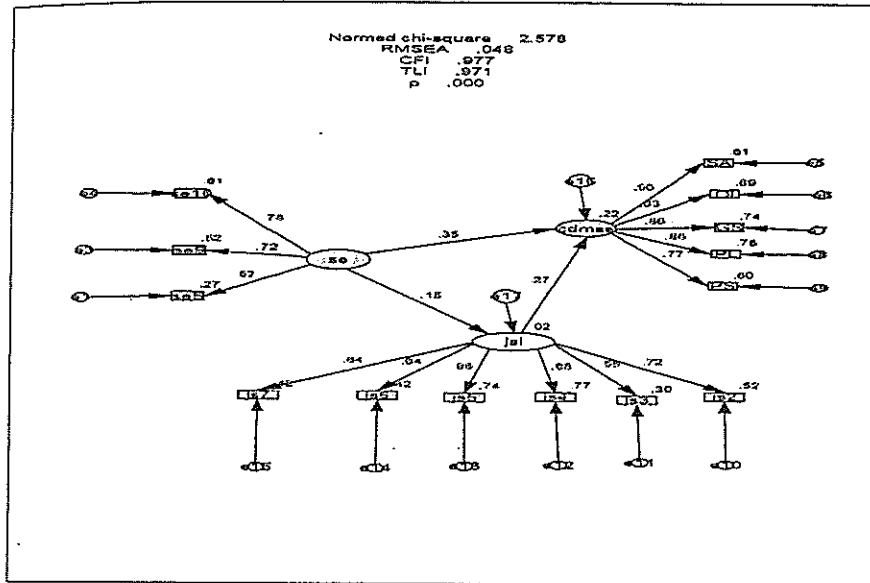
Figure 2 The revised results of the hypothesized structural relationship of the SAO model

The overall fit of the model was adequate with CFI = .977, TLI = .971 and RMSEA = .048. The statistics indicate that the parameters were free from offending estimates, ranging from .52 to .90. The CFI (.977) and TLI (.971) fit indicators exceeded the threshold of .90, indicating a very good fit. The root mean square error of approximation (RMSEA = .048) has met the cut-off point requirement for a reasonable error of approximation. The normed chi-square of 2.578 for a good fit is also met (Hair, et al., 2010). The final fit index indicates that the test failed to reject the hypothesized model. Therefore, the hypothesis testing failed to reject the three statements (Self-Esteem influences the Career Decision-Making Self-Efficacy; Job-Search Intensity influences the Career Decision-Making Self-Efficacy; and Self-Esteem influences the Job-Search Intensity).

To support the investigations to address RO7, the following hypotheses are tested, and the results of the hypotheses tests are concluded as follows:

Hypothesis 19:   Gender moderates the causal structure of the SAO
          model.
          Rejected.
Hypothesis 20:   Academic performance moderates the causal
          structure of the SAO model.
          Rejected.
Hypothesis 21:   Faculty moderates the causal structure of the SAO
          model.
          Rejected.
Hypothesis 22:   Residential setting moderates the causal structure of
          the SAO model.
          Rejected.

Table 2   Summarized Results of Multiple Group modeling

	χ^2	df	$\chi^{2\ Change}$	Critical-Value
Gender				
Unrestricted	309.43	148	17.80	36.12
Constrained	327.23	162		
Acd.Performance				
Unrestricted	305.01	148	18.79	36.12
Constrained	323.79	162		
Faculty				
Unrestricted	516.59	370	90.08	94.47
Constrained	584.18	414		
Ressidential Setting				
Unrestricted	263.31	148	13.25	36.12
Constrained	276.56	162		

Statistically significant at .001

Table 2 shows the summarized results of multiple-group modeling for gender-invariant, academic performance-invariant, faculty-invariant, and residential setting-invariant among respondents. The result shows that critical values (χ^2 value table) more than χ^2 change means that the hypothesized model is a good model.

Self (S)
- Feel much to be proud of self.
- Feel useful at times.
- Think well at all times.

Action (A)
- Prepare / revise resume.
- Read a book or article about getting a job.
- Send a resumes to potential employers.
- Fill out job application.
- Contact an employment agency, executive search firm, or state employment services to locate job openings.
- Use the internet or other computer services to locate job openings.

Outcome (O)

Self-Appraisal (SA)
- Accurately assess ability.
- Determine the ideal job.
- Decide value most in an occupation.
- Figure out what to or not to Sacrifice to achieve career goals.
- Define the type of lifestyle.

Occupational Information (OI)
- Find information in the library about occupations interested in.
- Find out employment trends for an occupation over the next ten years.
- Find out the average yearly earning of people in an occupation.
- Talk with a person already employed in the field interested in.
- Find information about graduate and professional schools.

Goal Selection (GS)
- Select one major from a list of majors considering.
- Select one occupation from a list of potential occupations considering.
- Choose a career that will fit preferred lifestyle.
- Make a career decision and then not worry whether it was right or wrong.
- Choose a major or career that will fit interests.

Planning (PL)
- Make a plan of goals for the next five years.
- Determine the steps needed to take to complete successfully a chosen major.
- Prepare a good resume.
- Identify employers, firms, and institutions relevant to career possibilities.
- Manage successfully the job interview process.

Problem Solving (PS)
- Determine the steps to take if having academic trouble with an aspect of a chosen major.
- Persistently work at a major or career goal even when getting frustrated.
- Change majors if the first choice is not liked.
- Change occupations if not satisfied with the one you entered.
- Identify some reasonable major or career alternatives if unable to get the first choice.
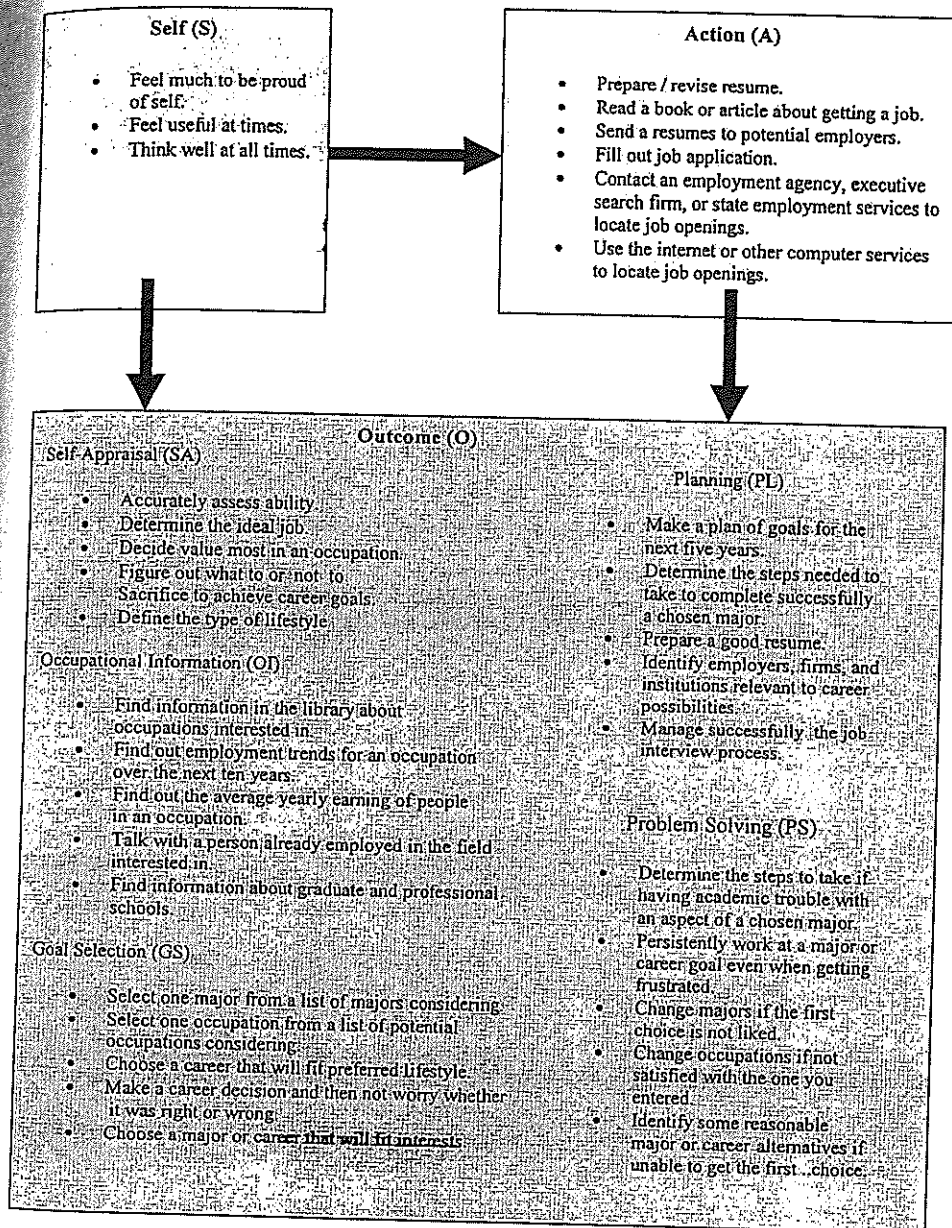
Figure 3 Self-Action-Outcome (SAO) Framework of self-esteem, job-search intensity and career decision-making self-efficacy.

The main purpose of this research is to develop a framework of self, action and outcome as mentioned in RO8. A SAO framework is developed as shown in Figure 3, The items for Self (S) indicated three statements related to attitude toward self, feeling about self and thinking about self. The items for Action (A) show that six items related to resume preparation, job-search information, send a resumes to potential employers, filling out job application, contacting relevance agency, and using of computer services to locate for job. The Outcome (O) components show that twenty five statements related to the five sub-scales. The sub-scales involved are Self-Appraisal, Occupational Information, Goal Selection, Career Planning, and Problem Solving.

Self-Appraisal refers to the confidence one has for assessing and making career related-decisions. *Occupational Information* refers to the ability to find job information. *Goal Selection* refers to the confidence in deciding upon a major, occupation, or career. *Career Planning* refers to the ability to make career plans. Finally,*Problem Solving* refers to the confidence to face and to solve career-related problems.

4.0 DISCUSSION, IMPLICATION, AND SUGGESTION

4.1 Discussion

The findings of the present research have expanded the knowledge on relationship among self-esteem, job-search intensity, and career decision-making self-efficacy among graduating students. The results indicate that self-esteem is strongly related to the career decision-making self-efficacy in which the respondents participated. Previous research found the relationship between adolescents' global self-esteem and career indecision (Emmanuelle, 2009), the relationship between personality and career decision-making self-efficacy (Ganske & Ashby, 2007, and Jin et al. 2009), the association between career planning with self-efficacy, goals, and personality (Rogers et al. 2008), and personality related with career-decision-making difficulties (Saka & Gati, 2007). Findings of this research also support the idea of the pyramid of information processing domains in the Cognitive Information Processing theory by Sampson et al. (2004). In this theory the process involved with the problem solving and decision-making (decision-making skills domain) as a development of the self-knowledge and occupational knowledge (knowledge domain) over the life of the individual.

Self-esteem and job-search intensity appeared to be correlated, but at a lesser degree. Self-esteem is one of the most widely examined personality variables in job-search research (Saks, 2005). This finding is similar to the findings gathered from other researchers (Blau, 1994, Kanfer et al., 2001, Aharon et al., 2004, Crossley & Stanton, 2005) which is self-esteem (personality) is positively related to job search intensity (job-search behaviour). In this research self-esteem is examined to be correlated with job-search intensity.

Another purpose of the study is to examine the relationship between the job-search intensity and career decision-making self-efficacy. The results indicate that the job-search intensity have a significant relationship with career decision-making self-efficacy. This finding supports the study done by Saks (2005). Previous studies found that job-search intensity also related with employment status at the end of the term in graduating college students (Tziner et al., 2004, Saks & Ashford, 1999, Wanberg et al., 1999, Kanfer et al. 2001). Other studies show that students decrease their job-

search intensity between early in their search and graduation and then increase their search between graduation and 3 months later (Saks & Ashforth, 2000). Furthermore, Cote et al. (2006) in their study found that job-search clarity predicted job-search intensity, which led to interviews, offers, and employment. The finding of the research affirms the study done by others researchers and shows that there is a significant relationship between job-search intensity and career decision-making self-efficacy.

Results of multiple groups modeling from table 2 show that the difference in the chi-square values between the unrestricted model and the constrained model do not produce a poorer-fit model. The path coefficients do not vary significantly across gender (male and female), academic performance (high academic and low academic), faculty (FEE, FMCE, FICT, FECE, and FME) and residential setting (rural and urban). It is justifiable then to conclude that gender, academic performance, faculty and residential setting are not a moderating variable to influence SAO framework.

4.2 Implication

Finding from this study can be divided into theoretical and practical implication. Based on the theoretical implication, the finding of this research support the Cognitive Information Processing (henceforth, CIP) theory, the Social Cognitive Career Theory (henceforth, SCCT), and affirm An Integrated Self-Regulatory Model of Job-Search.

First, the finding of self-esteem related to career decision-making support the idea of the CIP theory by Sampson et al. (2004). In this theory the process involved with the problem solving and decision-making (decision-making skills domain) as a development of the self-knowledge and occupational knowledge (knowledge domain) over the life of the individual.

Second, the three constructs in this research are similar to the three primary domains interaction in the SCCT. For example,, self-esteem is similar to self-efficacy, job-search intensity is similar to the personal goals, and career decision making self-efficacy is similar to outcome expectations in the SCCT. The SCCT theory describes the career development as a complex interaction between an individual, behaviour and performance efforts. In career development, the SCCT defines the three primary domains as self-efficacy beliefs, outcome expectations, and personal goals.

Lastly, this finding also affirm job-search model that integrates the key variables in the job-search process and shows the links among the job-search outcomes by Saks (2005). Similarly with the finding of this research, self-esteem (individual differences variables) as a predictors and predict job-search intensity (job-search behaviour) and directly related with career decision-making self-efficacy (job-search outcome and employment outcome - other outcome predictors). As mentioned by Saks in his study that not every relationship in the model has received the same amount of attention in the previous research. The results of the current finding can be concluded as a new addition and confirmation to the model.

The results of the research have highlighted several invaluable contributions and implications for professionals, and particularly practitioners. The main practical contribution of this study for practitioners is to bring to their attention the relationship among self-esteem, job-search intensity and career decision-making self-efficacy.

The results are useful in helping the transition process of students from university to work. Such information could lead to an improvement in planning and policy-making for the development of a more effective and efficient counselling and career guidance system in the university settings. Practitioners such as guidance counselors are to guide students develop attitude beliefs, students' psychological development and prepare them for the work world. This involves the development of their personality, thinking, behaviour and emotion.

4.3 Suggestion

Based on treasure study report (2007) by the Ministry of Higher Education Malaysia (MoHEM) stated that only 23.5% of the students sought help from the guidance and counselling services centre, and only 39.9% of the students sought help related to career guidance.

This report seemed to indicate that there was something lacking either with the guidance and counselling services centre or graduating students. As a controller policy maker, the MoHEM can make it mandatory for all graduating students to go through the process of career guidance in preparing them for the world of work. At the same time it is possible to make it compulsory for universities to offer courses or programmes for the career guidance centre related to help prepare student readiness for the careers available.

Career counsellors can assist through training workshops and provided with tools, manuals, annual labour supply/demand report. Alumni mentorship programmes can be created to link students with successful alumni working in a career field of similar interest. Online community portal can include an interactive website for posting questions and answers to facilitate collaboration among career counsellors, students, new graduates and employers.

It is imperative for policy makers at faculty or centre level to scrutinize the contents in educational institutions. Curricula with psychology and soft skills will go a long way in building student confidence in dealing with the environment of work. Hopefully, issues pertaining to students soft-skills and confidence level as reported in the UNESCO report(2007) as well as feedback from CEO of large corporations (Lazaroo, 2008, Zuraidah, 2008, and Faridah, 2008) can be covered.

This research was conducted at one particular university for the graduating students; thus, the results may not hold good to be generalized for graduating students from other universities. Future researchers should also involve respondents from other universities with different niche studies. A comparative study with different types of academic background among respondents could elicit results that would be beneficial to the further understanding of this research topic.

The present research is focused on the relationship of self-esteem, job-search intensity and career decision-making self-efficacy. Furthermore, it would be interesting to investigate other variables involved in self categories (e.g. conscientiousness, extraversion perceived control, ability and employment commitment), job-search behaviour (e.g. job information sources, job-search effort, assertive job-seeking behaviour and networking intensity) and the linking of the predictors' variables with the outcome variables (e.g. self-presentation skills, job interview and job-offers) for future studies as suggested by Saks (2005) in his model.

In this research, the ratio of respondents based on the three main ethnic groups in Malaysia (i.e., Malay, Chinese and Indian) did not meet the criteria to do the structural invariance analysis across groups of ethnicity. For future research, a multiple group modeling based on ethnic groups can be done if the ratio of ethnic is equivalent. Should there be such a request, then a multiple group modeling based on the ethnic ratio of respondents will bring about a well planned purposive study.

The self, action and outcome (SAO) framework is the ultimate finding from the current research. This framework is a good-fit model based on structural equation modeling analysis. For future research, this model can be tested again to prove the validity of a good-fit model with different respondents and locations.

The current research used the self-report methodology without any external corroboration, thus, the findings are limited to what have been included in the self-report measures. Future research needs to address this limitation. Longitudinal studies using self-report measures combined with other research methods, including qualitative methods (e.g., interviewing, observations), would be likely to reveal more outcomes that may be useful in understanding students' self-esteem, job-search intensity, and career decision-making process of young adults.

Another limitation of this research is the lack of studies related to job-search intensity in career literature. There are more studies related to job-search behaviour (e.g., job-search intention, job-search clarity) than to job-search intensity. Future researchers can include other job-search behaviours instead of job-search intensity alone. The findings from this research can be concluded as a contribution to knowledge on research related to job-search intensity among students.

5.0 CONCLUSION

In conclusion, this research examined the relationship between self-esteem, job-search intensity and career decision-making self-efficacy among graduating students. The findings show that there are significant relationships between self-esteem and career decision-making self-efficacy, between self-esteem and job-search intensity, and between job-search intensity and career decision-making self-efficacy. Self-esteem and job-search intensity have a mediating effect on career decision-making self-efficacy. At the end of the research a framework of Self-Action-Outcome (SAO) was develop as shown in Figure 3.

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