

Predictors of Career Indecision Among Malaysian Undergraduate Students

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Abstract

Career indecision refers to the phenomenon where individuals especially students are unable to make decisions about the careers they wish to pursue. Career decisions enable us to label students as being either 'decided' or 'undecided' on their career choices. To a greater extent, career indecision could also invoke the idea of readiness or career maturity in terms of the career developmental tasks they have to complete. The aim of this study was to determine predictive factors of career indecision among Malaysian undergraduates. Data for this study were collected using a self-administered questionnaire. There were 1229 respondents who consisted of undergraduate students from four public universities. The respondents were identified via multistage stratified sampling. The Career Factor Inventory (CFI; Chartrand, Robbins, Morrill & Boggs, 1990) was used to measure career indecision while the My Vocational Situation (MVS; Holland et al., 1980) was used to measure the three core dimensions of career identity namely vocational identity, occupational information and career barriers. The multiple regression analysis indicated that female undergraduates with high academic achievement and low occupational information, and vocational identity were more unlikely to have decided on their career. An understanding of factors contributing to career indecision among university students will provide insights for educators and student personnel in improving the students' career developmental process.

Keywords: Career indecision, career readiness, career maturity, undergraduates

1. Introduction

The skills and qualification requirements in the Malaysian employment market have become increasingly demanding as Malaysia moves into a knowledge-driven economy. According to Malaysian Economic Report (2005), the unemployment rate was at 3.5% in 2004, and 3.8% in 2005. Unemployment among new graduates is a phenomenon that can be found in many countries and it could be caused by several factors such as the slowing rate of economic growth, unexpected shifts in demand from one industry to another and the mismatch between market requirements and the employability of graduates that higher education institutions produce. In Malaysian culture, many youth have great dreams about graduating from high school, attending university, and obtaining a

personally valued and satisfying career. Nevertheless, many face the bleak realities of not finishing university or obtaining the job they want.

One area concerning student's career development is career choices that will relate to one's career decision making. Failure to decide what occupation to seek is known as career indecision. Generally, career indecision is defined as an inability to make decision about the vocation one wishes to pursue (Guay, Senecal, Gauthier, & Fernet, 2003). Thus, career indecision in return reflects student's career readiness or maturity as students that are undecided about their career have trouble with decision making (Hagstrom, Skovholt, & Rivers, 1997; Lucas & Epperson, 1988). Thus, career indecision can be described as a developmental phase through which individuals may pass on their way to reaching a decision. Career indecision may also impinge on other career issues such as choosing a major, making career choices or even unemployment. Sang and Ji (2006) found a systematic association between Korea's youth unemployment and career indecision. As such, management at universities can assess student level of career development by examining students' career indecision (Barnes & Carter, 2002).

According to Niles and Bowsby (2009) students in higher education need to be competent in the career planning process which requires the skills to make decisions and ultimately possess skills required to make career transitions. Research in the field of counseling research suggests that 50% or more of all university students experience career-related problems (Herr, Cramer & Niles, 2004). Career choice is a developmental task of late adolescents which university students face. Therefore, choice of a career may be one of the most important of life's choices. Career concerns faced by first year university students include anxiety for being undecided about a career and also being plagued by the process of career exploration, lack of confidence and uncertainty about an occupation, self assessment and not knowing major strengths and weaknesses, and lack of knowledge of work and what workers do at the workplace. Theoretically, according to career development tasks, final year university students aged 21-23 should have been able to crystallize and specify their career options. It is also pertinent for them to have undergone the career exploration and planning process in trying to match their own personal attributes such as interest, skills, values and personality to the world of work.

2. Previous Research

One of the major tasks students face and have to overcome is the development of their personal and career readiness. Super (1984) introduced the concept of career readiness or career maturity in his career developmental theory and defined it as one's readiness for career decision making. Thus, one's readiness toward a career is a manifestation of one's career maturity. Career readiness or maturity therefore is a continuous development process that can be segmented into a series of stages and tasks. These are orientation toward work, planning, consistency of vocational preference and wisdom of vocational preferences. Together with this process, individuals should increasingly gain the ability and skills to make sound career decisions. Failure to do so results in career indecision.

Slaney (1988) noted that career indecision has been used to refer to the problems individuals may have when making career decisions. Guay et al., (2003) postulated that career indecision is one major career-related problem students have to contend with and has been a major focus of vocational research over the last few decades. Swanson and D'Achiardi, (2005) added that this includes the antecedents that may influence or delay they decision on making a career choice Individuals who are undecided often delay the process of making career-related decisions while they acquire additional information about themselves, occupations and the world of work, or the decision-making process. Therefore, knowledge of student's career indecision will help to predict whether they are considered as 'decided' or 'undecided' on their career choices. In line with this, Callanan (2006) suggested that information on student's career indecision helps personnel dealing with students and educators to understand factors that might explain student's inability to choose an occupation or major field of study.

Trusty and Niles (2004) found that relationship exists between career indecision and student's achievement of self-awareness, knowledge of occupations and the development of planning capability. Herr et al., (2004) on the other hand, noted that career indecision was associated with aptitude scores, interests, subject preferences, part-time employment experiences, and engagement in the educational planning process. Naidoo (1998) too provides evidence that career indecision can be influenced by age, ace, and ethnicity, locus of control, socioeconomic status, work salience, and gender.

Jones and Chenery (1980) proposed a career indecision model that theorized career indecision in a three-dimensional construct. The decidedness dimension relates to how committed individuals are to their choice of a career. The comfort dimension connotes the level of satisfaction individuals feel over their career decision status. On the other hand, the last dimension relates to the explanation of why a person could be undecided. These were identified as lack of self-clarity, lack of occupational-educational information, indecisiveness, and career choice salience.

Akos, Konold, and Niles (2004), Barnes and Carter (2002), Hampton (2006), McCoy (2004) and Salami (2008) found no gender differences with regards to career indecision. On one hand, Patton's studies (2001 & 2002) indicated that girls had higher indecision scores as measured by the knowledge score of the Career Development Inventory. On the other hand, a cross-cultural study of British and Chinese International university students by Zhou and Santos (2007) reported that males experienced fewer difficulties than females in career decision-making.

Akos and his colleagues (2004) found a correlation between midyear calculations of Grade-Point Average (GPA) and career indecision and suggested that career indecision might relate to scholastic aptitude, as a cognitive career choice process. Blinne and Johnston (1998) in their three-year longitudinal study found no relationship between academic achievement and career indecision in a college student population. However, study by Gehlert (1992) and Hampton (2006) revealed that career indecision is not related to GPA and mathematics achievement respectively.

Swanson and Woitke (1997) have defined career barriers as "events or condition, within the person or in his or her environment that make career progress difficult" (p. 434). Taylor and Betz (1983) found that students who anticipated more career barriers displayed less confidence in their ability to make career plans and decisions resulting in them being undecided on their career. Patton et al. (2003) found a significant negative relationship between perceived barriers and career development attitude, and a significant positive association between barrier and career indecision.

Thus, the interrelationships between socio-demographic variables and career identity on career indecision among university students examined in this study will offer useful information to better understand their career development needs and concerns. In light of the existing literatures, several studies have reported conflicting result on a relationship between several socio-demographic characteristics and career indecision. Henceforth, this study was carried out due to this inconclusive evidences and the lack of research concerning a possible connection between these variables in the local context.

3. Hypotheses

- H₀₁*: There is no significant relationship between age and career indecision among Malaysian undergraduate students.
- H₀₂*: There is no significant relationship between gender and career indecision among Malaysian undergraduate students.
- H₀₃*: There is no significant relationship between academic achievement and career indecision among Malaysian undergraduate students.
- H₀₄*: There is no significant relationship between working experiences and career indecision among Malaysian undergraduate students.
- H₀₅*: There is no significant relationship between vocational identity and career indecision among Malaysian undergraduate students.

- H₀₆*: There is no significant relationship between occupational information and career indecision among Malaysian undergraduate students.
- H₀₇*: There is no significant relationship between career barrier and career indecision among Malaysian undergraduate students.
- H₀₈*: Controlling for gender, academic achievement, working experiences, vocational identity, occupational information and career barrier does not contribute significantly to career indecision among Malaysian undergraduate students

4. Methodology

4.1. Participants and Sampling

The population for the study is undergraduate students in Malaysian universities. A total number of 1440 were targeted. They were first stratified according to the Malaysian public universities. Only university that has all three field of study (science, social science and technical) was randomly selected. The universities identified were Universiti Sains Malaysia (USM), Universiti Malaysia Sabah (UMS), Universiti Malaysia Terengganu (UMT) and Universiti Putra Malaysia (UPM). Then, a faculty or school representing each field of study was selected. Faculty/school administrator chose courses according to year of study that have at least 20 male and 20 female students to conduct the survey.

Permission was sought from the management of the chosen universities to distribute the questionnaires within their faculty or school. Data were collected via pre-tested self-administered questionnaires, which were distributed to the sample in their lecture hall with the assistance of their lecturers. The completed questionnaires were collected on the same day.

4.2. Measures

Academic achievement. Respondent's academic achievement was measured by their stated cumulative grade point average (CGPA). CGPA has been widely used as a standard measure because of its close association with career readiness (Akos et al., 2004; Blinne & Johnston, 1998; Flouri & Buchnan, 2002; Gehlert, 1992; Hampton, 2006).

Career Identity. My Vocational Situation (MVS) was used to measure the degree of confusion regarding career plans (Holland et al., 1980). Comprising of three subscales namely, vocational identity scales (VI), occupational information scales (OI) and career barriers scales (CB) this measure comprised a total of 26 true/false questions. The greater the scores indicated a higher degree of career identity.

Career Indecision Career Factor Inventory (CFI; Chartrand, Robbins, Morrill & Boggs, 1990) was used to measure respondent's indecision that reflects decision and career development needs. The CFI is a 21-item inventory that measures four dimensions of the career decision-making process paired under the classifications of Information Needs and Decision Needs. Under the Information Needs are two different factors; Need for Career Information (NCI; 6 items) and Need for Self-Knowledge (NSK; 4 items). These categories are seen as important elements in the career developmental process. Under the Decision Needs category are two factors on decision making. They are Career Choice Anxiety (CCA; 6 items) which aims to measure the level of apprehension one feels when faced with making a decision and Generalized Indecisiveness (GI; 5 items) which is associated with a broad tendency to measure a respondents' ability to make complex decisions in general. High scores on the total scales indicated high career indecision. Cronbach alpha for this scale was .827.

4.3. Data Analysis

Data were gathered and analyzed using the Statistical Package for the Social Sciences. Both descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (Pearson

Correlation test, *t*-test and multiple regression analysis) were used for the descriptive and hypotheses testing, respectively.

5.0. Findings and discussion

5.1. Demographics Characteristics

Respondents for this study comprised 313 (25.5%) Universiti Putra Malaysia (UPM), 310 (25.2%) Universiti Sains Malaysia (USM), 345 (28.1%) Universiti Malaysia Sabah (UMS) and 258 (21%) Universiti Malaysia Terengganu (UMT) undergraduate students. It comprised of 533 (43.4%) male and 696 (56.6%) female undergraduates. Ethnicity of the respondents were 677 (55.1%) Malays, 379 (30.9%) Chinese, 53 (4.3%) Indians, and 119 (9.7%) of others. The age of the respondents ranged between 18 and 28 years old ($M = 21.65$, $SD = 1.50$).

5.2. Description of Academic Achievement

The mean score was used to classify respondents according to having high ($M + 1 SD$), moderate or low academic achievement ($M - 1 SD$). Large proportions of the respondents (66.2%) were found to have a moderate level of academic achievement ($M = 2.99$, $SD = .446$).

5.3. Description of Vocational Identity, Occupational Information and Career Barrier

The mean score was used to classify respondents into having high or low career identity. A large proportion of the respondents were found to have a high level of vocational identity ($M = 26$, $SD = 3.53$), however the findings noted that attention is needed as most respondents showed as having low occupational information ($M = 4.24$, $SD = .634$) resulting in high career barriers ($M = 4.24$, $SD = .634$).

5.4. Description of Career Indecision

Respondents were categorized into high and low in their career indecision based on the mean score. The majority of respondents reported a high level of career indecision ($M = 71.95$, $SD = 9.66$). The findings one the hand reported a high need of career information (NCI; $M = 20.10$, $SD = 3.31$), high need for self knowledge (NSK; $M = 20.66$, $SD = 3.38$), high career choice anxiety (CCA; $M = 16.76$, $SD = 4.47$) and high generalized indecisiveness (GI; $M = 14.43$, $SD = 3.42$). Overall, as compared to previous studies which used the CFI as a measure of career indecision across a diverse-background of respondents, the current study yielded a relatively high CFI total scores and high scores in the 4-CFI subscales scores (Akos et al., 2004; Kahn, Nauta, Gailbreath, Tipps & Chartrand; 2002; Simon & Tovar, 2004; Tokar, Withrow, Hall & Moradi, 2003). For the purpose of the study, thus only the composite score will be used in the major analyses.

5.5. Hypotheses Testing

5.5.1. H₀₁

There is no significant relationship between age and career indecision among Malaysian undergraduates. Interestingly, the results of this study also found no significant relationship between age and career indecision among Malaysian undergraduates ($r = -.029$, $p > .05$) and was therefore in accord with Hampton's (2006) study of career decision in China.

5.5.2. H₀₂

There is no significant relationship between gender and career indecision among Malaysian undergraduates. By placing gender as a dichotomous variable (1= male), findings of the study suggest that gender was significantly correlated with career indecision ($r = -.156$, $p \leq .05$). In addition, the *t*-test

analysis revealed a significant difference of career readiness among male and female undergraduates [$t(1159) = 5.39, p \leq .001$]. Female undergraduates showed higher career indecision when compared to male undergraduate students. This has validated Patton's studies of different needs toward career development knowledge between male and female (Patton & Creed, 2001; 2002, Patton et al., 2004). The results in this study however conflicts those found by Akos et al. (2004), Barnes and Carter (2002), Hampton (2006), and McCoy (2004). They found no difference of career indecision across gender.

5.5.3. H₀₃

There is no significant relationship between academic achievement and career indecision among Malaysian undergraduates. The Pearson correlation test indicated that academic achievement was significantly correlated to career indecision among undergraduates ($r = .071, p \leq .05$). This indicates that undergraduate students with higher academic achievement have higher career indecision or are less ready for a career as they are still undecided. Findings from this study yielded similar results to a prior study (Westbrook & Sloan, 2006). The correlation between CGPA and career readiness also suggested that career indecision measures relate to career choice (Akos et al., 2004).

5.5.4. H₀₄

There is no significant relationship between working experiences and career indecision among Malaysian undergraduates. The results from the Pearson correlation test reported a significant relationship between working experiences (1 = No working experiences) and career indecision among Malaysian undergraduates ($r = .076, p \leq .01$). Results of the present study are therefore consistent with past studies. From the social learning context, Westbrook et al. (1990) and Herr et al. (2004) also identified that part-time employment experiences have been associated with the career aspirations.

5.5.5. H₀₅

There is no significant relationship between vocational identity and career indecision among Malaysian undergraduates. The findings provide evidence that vocational identity was significantly correlated with career indecision among Malaysian undergraduates ($r = -.339, p \leq .01$). Henceforth, the present study concurs with Hirschi and Lage's study (2007) of 358 Swiss students' vocational identity as a direct measure for career-choice readiness attitude reflected in career decision making.

5.5.6. H₀₆

There is no significant relationship between occupational information and career indecision among Malaysian undergraduates. Occupational information was significantly correlated with career indecision among Malaysian undergraduates ($r = -.223, p \leq .01$). Those who have a lot of information pertaining to occupation and career are more decided on their career choices and this is reflected in effective career decision making. The findings of the present study are therefore in line with Naidoo's study (1998) of interrelatedness of occupational information-seeking behaviors and career maturity. Naidoo used structural equation modeling obtained from responses of 288 African-American students.

5.5.7. H₀₇

There is no significant relationship between career barrier and career indecision among Malaysian undergraduates. Remarkably, the finding from the Pearson correlation test indicated that career barrier and career indecision was significantly correlated among Malaysian undergraduate students ($r = -.199, p \leq .01$). The finding from this study is similar to the study by Patton et al. (2003), where perceived barriers were negatively associated with career development attitude.

5.5.8. H₀₈

Controlling for gender, academic achievement, working experiences, vocational identity, occupational information and career barrier does not contribute significantly to career indecision among Malaysian

undergraduates. The multiple regression analysis was computed in order to determine which factors are able to uniquely predict career indecision among Malaysian undergraduates. The variables included in the regression model were limited to those that were significant at the bivariate levels: gender, academic achievement, working experiences, vocational identity, occupational information and career barrier. The rationale of this step was to select significant variables to enter the regression model and, to decrease the possibility of making a Type I error caused by large number of predictors (Munro, 2001). The multiple regression analysis found that gender (Male = 1; $B = -.105$), academic achievement ($B = .086$), vocational identity ($B = -.264$) and occupational information ($B = -.142$) to be the predictors of career indecision. In other words, female undergraduates with high academic achievement and low occupational information, and low vocational identity were more likely to be undecided on their career. More specifically, vocational identity ($B = -.264$) was the strongest predictor of career indecision.

Table 1: Mean, Standard Deviation, and Inter-correlation matrix of Measures

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	21.65	1.50	-	.047	-.012	-.220**	.048	.096**	.016	-.029
2. Gender	1.57	.496	-		.058**	.152**	-.075**	-.145**	-.055	-.156**
3. CGPA	2.99	.446	-			-.079**	.000	.076**	.121**	.071**
4. WE	1.26	.441	-				-.060*	-.085**	-.038	.076**
5. VI	26	3.53	-					.214**	.454**	-.339**
6. OI	4.24	.634	-						.125**	-.223**
7. CB	6.51	1.17	-							-.199**
8. CI	71.95	9.66	-							

Note.: CGPA = Cumulative Grade Point Average, WE = Working Experiences, VI = Vocational Identity, OI = Occupational Information, CB = Career Barrier, CI = Career Indecision
 * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Collectively, these variables explained 16% ($F = 34.42$, $R^2 = .16$, $p \leq .01$) of the variance for career indecision among Malaysian undergraduate students (see Table 2). As such, this present study will provide vital insights to both the educators and career counseling practitioners in enhancing student’s career developmental process.

Table 2: Summary of Multiple Regression Analysis Predicting Career Indecision among Malaysian Undergraduate Students

Variables	Standardized Coefficients <i>B</i>	<i>T</i>	Sig.
Gender	-.105	3.62	.000***
CGPA	.086	3	.003**
VI	-.264	-8.15	.000***
OI	-.142	-4.83	.000***
$R^2 = .16$ $F = 34.42^*$			

Note.: CGPA = Cumulative Grade Point Average, VI = Vocational Identity, OI = Occupational
 * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

6.0. Summary and Concluding Remarks

This study found that academic achievement is related to career readiness. However, the relationship is very weak. The results point out that undergraduate students with higher academic achievement have higher career indecision scores and are more undecided. Undergraduates with higher academic achievement also feel a greater need for career information and self-knowledge. On the other hand, higher achievers are also more anxious about their career choices as most of them have not decided on their career options.

The present study revealed that male undergraduate students were more decided on their career choices when compared to female undergraduate students. Generally, male respondents experienced fewer difficulties than female respondents in career decision-making (Zhou & Santos, 2007). As for female undergraduates, they are more indecisive or undecided in the sense that they are less risk seeking (Powell & Ansic, 1997). Often, females are also more influenced by subjective norms and perceived-behavioral control (Venkatesh et al., 2000). For them, interdependence was also associated significantly with vocational commitment (Hardin, Varghese, Tran & Carlson, 2006).

This is therefore an important indication to educators as they need to address issues of higher needs amongst females. The inability to decide what career to pursue among females would mean they need to be provided more information before they are able to make their career decision. This includes ways of getting the information that could assist them to make better-informed decisions.

Evidently, career guidance offered in university must meet the occupational information's needs of students at various stages of their career development. Major approaches to deliver career guidance i.e. courses, workshops and seminars that offer structured group experiences in career planning, job-access skills and decision making; group counseling activities; individual counseling; placement programs, and automated placement services are necessary. In sum, substantial occupational information is an essential component of career development to help undergraduates make appropriate career life planning and decision making-which in turn could enhance their vocational identity. Taken together, the understanding of factors which contribute to career indecision among university students will provide insights for educators in improving the career developmental process.

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