EXAMINING THE LEVEL OF CAREER MATURITY AMONG ASIAN FOREIGN STUDENTS IN A PUBLIC UNIVERSITY: GENDER AND ACADEMIC ACHIEVEMENT

Mustafa Tekke
Islamic International University
Malaysia

Dr. Muhammad Faizal A. Ghani
Senior Lecturer
University of Malaya,
Malaysia

ABSTRACT

This study examined the level of career maturity of international students in a public university in Malaysia by analyzing gender and academic grade point average by using the Career Maturity Inventory. Two hundred and twenty nine (Male=106, Female= 123) international students studying in various semesters completed the Career Maturity Inventory and the scores of the female international students on the CMI suggested that they had greater compromising their desires with reality and knowledge about their career. Results indicated that female
students are fairly high in career maturity than male students on the CMI. The results also showed that the higher the career maturity, the higher the grade point average. However, the level of significance is slightly weak; this result should be viewed with caution. These findings suggest that level of career maturity of international students needs to be considered in relation to variables such as culture and academic grade.

**KEY WORDS:** career maturity, international students, compromising of desires with reality and knowledge about career.

Career maturity is an important factor for university students, and is essential to help them choose courses that will prepare them for the world of work. This vital factor is necessary for choosing the right major of study. Gaining occupational information and self-knowledge related to career aspirations can assist them in enhancing their career maturity. To some extent, the degree of career maturity is determined by the readiness of the individual to make informed, age-appropriate career decisions and cope with appropriate career developmental tasks (Savickas, 1984). It holds true for students choosing their studies in a foreign country. Recently, the study of career maturity among foreign students has been given attention in countries highly populated by international
students. Malaysia is one of the recent developing countries that have been chosen by international students.

Main factors that influence international students from the Middle East to choose studying in Malaysia are inexpensive cost of living, streamlined visa procedure and affordable university expenses. The decision to study overseas is one of the most significant and expensive initiatives that students may ever undertake (Mazzarol & Hosie, 1996). Viers (2005) asserted that the rising high cost and long-term visa procedure and strong competition results in the decreasing number of international students. Therefore, there are several factors that influenced international students to choose Malaysia for their studies. However, Zunker (2006) stated that characteristics of career maturity are decisiveness and independence, knowledge of occupational information and planning and decision-making skill. It appears that the reasons foreign students choose Malaysia are unlikely to be career-oriented, as such when international students graduate, they may not find a relevant job in their country and what they studied may not be useful in their country.

Crites (1965) organizes the constructs of career maturity into a career choice process (attitude) and career choice content (competency) which is applicable to Super’s (1996) model. Career choice process includes compromise, decisiveness, independence,
involvement and orientation; career choice content contains goal selection, occupational information, future planning, problem solving and accurate self-appraisal. Additionally, career maturity consists of two dimensions, affective and cognitive (Crites, 1971). The affective dimension is concerned with career choice process, compromising one’s desires with reality, toward career development and the cognitive dimension is representative of career choice content, individual knowledge about career, toward decision-making skill.

Researchers have commented that career maturity may be more carefully differentiated by grade rather than age because of the influence of the education life which is the primary agent of the development of career behavior (Watson & Van Aarde, 1986). However, Powell and Luzzo (1998) demonstrated that there is no relationship between age or grade and level of career maturity. These authors suggested that a uniform program of career development activities at the school to contextual factors, such as occupational opportunity that influences individual choices and exposure to occupational alternative may be more influential in career development than age or grade. Thus, interacting with a changing environment greatly facilitates the career choice of an individual. Additionally, through the view of contextual perspective, engagement in alternative work environments helps an individual shape his career choice.
As for readiness in occupational choice, academic success accelerates this process accordingly. McCaffrey, Miller, and Winston (1984) identified a positive relationship between grade-point average and career maturity which shows to some extent that academic success is correlated with career maturity. This is also supported by Crites’s (1971) theoretical assumption that career maturity facilitates the accomplishment of several developmental tasks; one of them is academic achievement.

Researches have often examined the difference between genders in career maturity. The findings showed that no significant differences existed in males’ and females’ levels of career maturity. Although females obtained significantly higher scores than did males on career maturity measures (Alvi & Khan, 1983; Herr & Enderlein, 1976; Leong, 1991; Luzzo, 1995), other studies (Fouad, 1988; Lee, 2001) have shown that females were higher on some subscales only. However, Achebe (1982), whose study was done in Nigeria, reported that males scored higher than females in career maturity. It may be concluded that the findings on the gender variable related to career maturity on the whole were not consistent.

However, little research has been conducted in the area of career maturity of international students in Malaysia. Studying in Malaysia is increasingly cited as a popular choice for today’s undergraduate students. This study explored trend, which can assist
EXAMINING THE LEVEL OF CAREER MATURITY AMONG ASIAN FOREIGN STUDENTS IN A PUBLIC UNIVERSITY: GENDER AND ACADEMIC ACHIEVEMENT

Mustafa Tekke and Dr. Muhammad Faizal A. Ghani

www.hopejor.tk

university administrators in both increasing the number of students who are studying in Malaysia and providing accurate information for students who are choosing their career major.

Method

Participants

The subjects of this study consist of 229 International students from the following faculties in a public university in Malaysia: the Faculty of Computer Science and Information Technology (17%), Faculty of Malay Studies (12%), Faculty of Engineering (11.8%), Faculty of Science (10.9%), Faculty of Education (10.9%), Faculty of Business and Accountancy (10.0%), Faculty of Economics and Administration (7.9%), Faculty of Arts and Social Sciences (7.4%), Faculty of Islamic Studies (3.9%), Faculty of Built Environment (3.1%), Faculty of Language and Linguistics (2.2%), Faculty of Medicine (1.3%) and the Sports Centre (0.9%). There were 106 (49.3) male and 123 (53.7%) female students, consisting of 64 (27.9%) Semester 1, 34 (14.8%) Semester 2, 60 (26.2%) Semester 3, 17 (7.4%) Semester 4, 51 (22.3%) Semester 5, 1 (0.4%) Semester 6, 1 (0.4%) Semester 7 and 1 (0.4%) Semester 8. Based on region of origin, there were 85 (37.1%)
from South & Southeast Asia, 66 (28.8%) from Eastern Asia, 52 (22.7%) from Middle East & North Africa and 26 (11.3%) from Africa.

**Instrumentation**

**Career Maturity Inventory-Revised**

The research instrument used in this study was the Career Maturity Inventory-Revised (CMI-R) developed by Crites in 1978 and revised in 1995. CMI is an effective instrument which attempts to identify level of career maturity of international students. Crites (1978a) developed the original Career Maturity Inventory (CMI) to assess career attitudes and competencies of children and adolescents in Grades 6-12. It consisted of an Attitude scale, which had two forms (A2 and B1), and five competence subtests. Savickas (1984) found the CMI Attitude scale to be the most popular of all the career decision-making measures.

Recently, a revised form of CMI was published (Crites, 1995; Crites & Savickas, 1995). The revision was designed with the aims to:

a) Reduce administration and testing time

b) Extend CMI to the adult level, including postsecondary students and employed individuals
c) Eliminate the original Attitude Scale and Competence subscales

d) Prepare the CMI for a variety of scoring and data analysis purposes.

The revised version (Crites & Savickas, 1995) was redesigned to include the additional facet of competencies that are necessary to make a realistic career choice. The revised version includes 25 items for each of the two (Attitude= compromising desires with reality, Competence= knowledge about career) scales.

Porter (1999) reported a Cronbach alpha coefficient of 0.81 on the attitude scale, and a Cronbach alpha coefficient of 0.66 on the competence test. In this study, Cronbach’s alpha was used to analyze the internal consistency of the CMI revised scale (Alpha= 0.81). The test-retest reliability for the Attitude Scale was reported at 0.72, while the internal consistency is reported to range from 0.72 to 0.90.

With regard to validity, numerous empirical studies that support the validity of Attitude Scale Form were cited (Busacca & Taber, 2002; Levinson, Ohler, Caswell, & Kiewra, 1998; Rojewski, Wicklein, & Schell, 1995; Stowe, 1985; Westbrook, Sanford, & Donnelly, 1990). A recent study conducted by Bucassa and Taber (2002) found moderate construct and criterion validity for the CMI (Crites & Savickas, 1995).

**Procedure**
The following materials were delivered by hand to 229 International students: a) the short-form questionnaire b) Career Maturity Inventory. Questionnaires were either collected by hand or collected by the librarian because some students handed over the questionnaires to the librarian off University of Malaya. Most of the participants completed the questionnaire within 45 minutes.

Analysis of Data

The mean scores were used to determine whether the international students in public university were high mature or low mature in career. The highest attainable score on the CMI was fifty (50) while the lowest possible score was zero (0) so that the mean score was twenty five (25) which meant that an individual was considered as a career mature individual, if they obtain a score of above 25. With regard to CMI-Attitude and CMI-Competency, the mean scores were used to measure the level of career maturity of foreign students. The highest attainable score in CMI-Attitude and CMI-Competency was twenty five (25); on the contrary, the lowest score was zero (0) so that the mean of scales was twelve (12), hence the score obtained above this mean was considered as a high mature in CMI-Attitude and CMI-Competency and those with scores falling below were considered as low in maturity.
Table I: Mean and Standard Deviation of Foreign Students in the CMI, CMI-Attitude and CMI-Competency

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMI</td>
<td>229</td>
<td>31.32</td>
<td>5.20</td>
</tr>
<tr>
<td>CMI-A</td>
<td>229</td>
<td>15.23</td>
<td>3.29</td>
</tr>
<tr>
<td>CMI-C</td>
<td>229</td>
<td>15.89</td>
<td>3.06</td>
</tr>
</tbody>
</table>

Note: CMI= Career Maturity Inventory, CMI-A= Career Maturity Inventory-Attitude, CMI-C= Career Maturity Inventory-Competency

Table I presents the means and standard deviations of the scores made by all the respondents on the CMI. The total score of respondents had a mean 31.32 with a standard deviation of 5.20 in Career Maturity Inventory (CMI). As shown in Table I, the mean of total group of respondents was 15.23 with standard deviation of 3.29 in CMI-Attitude. With respect to CMI-Competency, the total group of respondents had a mean of 15.89 with a standard deviation of 3.06. Based on the data in Table I, it can be inferred that international students who are studying in University of Malaya are slightly above the mean in Career Maturity.

The t-test analysis indicated there are significant differences between male and female students with respect to level of career maturity, $t(227) = .000$, $p < .05$. An
examination of the results presented in Table I shows that females (M = 32.43) tended to be more career mature than male students (M = 30.03).

**Table II: CMI and Sub-factor Scores by Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>CMI</th>
<th>CMI-A</th>
<th>CMI-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>30.03(5.15)</td>
<td>14.51(3.23)</td>
<td>15.40(2.93)</td>
</tr>
<tr>
<td>Female</td>
<td>32.43(5.01)</td>
<td>15.84(3.24)</td>
<td>16.31(3.11)</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, Note. CMI= career maturity inventory, CMI-A = Career maturity inventory-Attitude, CMI-C= career maturity inventory-competency, Standard deviations are reported in parentheses.

With respect to Career maturity attitude, Table II revealed that there is a significant difference in the career maturity attitude between male and female, \( t(227) = .002, p<.05 \). The data in Table II shows that female students (M = 15.84) are more mature with regard to the compromising of desires with reality towards career than male students (M = 14.51).

As for Career maturity competency, the \( t \)-test analysis indicates there is a significant difference in the identification of the knowledge about career between the respondents of different gender groups \( t(227) = .024, p<.05 \). Findings for the CMI-Competency scale revealed that female students (M = 16.31) tend to have more knowledge about the career they would like to be in career than male students (M = 15.40).
In this study, there were sixty four missing cases for grade point average because respondents studying in the first Semester did not express the grade point average and this may negatively affect the result. Crites (1971) supported the study findings that there is a strong relationship between grade point average and career maturity. As shown in Table III, there is a significant association between two variables. The calculated $r = .207$, $p= .008$, suggests a moderately positive correlation between variables.

**Table III: Association between CMI and Sub-factors and Academic Achievement**

<table>
<thead>
<tr>
<th></th>
<th>CMI</th>
<th>CMI-A</th>
<th>CMI-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>$R$</td>
<td>.207(*)</td>
<td>.209(*)</td>
</tr>
<tr>
<td>Achievement</td>
<td>$r$ sig.</td>
<td>.008</td>
<td>.007</td>
</tr>
</tbody>
</table>

* Correlation is significant at the .05 level (2-tailed). Note. CMI= career maturity inventory, CMI-A = Career maturity inventory- Attitude, CMI-C= career maturity inventory-competency.

Based on the data in Table III, it can be inferred that the higher the grade point average, the higher the level of career maturity displayed by International undergraduate students who are studying in the different majors.
As revealed that in Table III, there is a significant relationship between grade point average and career maturity attitude with respect to the compromising of desires with reality towards career. Correlation coefficient value $r = .209$, $p = .007$ suggests that grade point average and career maturity attitude are significantly associated. Further examination shows that the level of association between the two variables is moderate in career maturity attitude.

Table III illustrates that there is a significant relationship between grade point average and career maturity competency with regard to identifying the knowledge about career of respondent in career maturity competency. In this study, the calculated $r = .190$, $p = .015$ is representing weak positive correlation between the two variables; for the level of career maturity the grade point average may not be main factor to increase the knowledge about career.

The result can be interpreted in this study that although there is a significant difference between variables, international students who have high grade point average may tend to exhibit low career maturity competency, particularly in knowledge about career (Table III).
Discussion

The purpose of this study was to identify the level of career maturity among foreign students based on the following variables: gender and grade point average. Given this purpose, the present study explored the level of career maturity with attention to gender and grade point average. The findings were as follows;

The mean scores indicated that international female students displayed significantly higher career maturity than international male students. Given career maturity theory and that past and present research has demonstrated an empirical relation between gender and career maturity, it was hypothesized that career maturity among females would be higher than among males. The findings indicated that although males scored lower on career maturity, but this gender difference was not linked to gender differences on career maturity attitude and career maturity competency. However, the results indicated that gender differences in career maturity attitude and competence were not strong. Therefore, it can be interpreted that although international undergraduate males scored lower on career maturity, they are similar in compromising of desires with reality and knowledgeable with
their career compared to international undergraduate females but not as efficacious in their perceived ability to engage in the career decision-making process.

Thus, research should continue to explore the implications of lower career maturity among international undergraduate males on career maturity. Findings conclude that although international undergraduate males score lower on career maturity, they may have a different career decision making style that does not lead to negative career outcomes. They may have different ways of compromising of desires with reality and knowledge about career.

The correlation score \((r = .207)\) indicates a moderate relationship between grade point average and career maturity level of international undergraduate students. Grade point average would have a significant and positive relationship to career maturity. The result of this study supports Kelly and Cobb’s (1991) study which proposed that career maturity levels are correlated with higher academic achievement. It was interpreted based on calculated \(r\) value \((r = .207)\) of grade point average and revealed that international undergraduate students who had higher grade point average might have higher career maturity.

In the theoretical assumption of Crites (1971), career maturity facilitates several developmental tasks, one of which is academic achievement. However, in this study the
correlation between grade point average and career maturity level was moderate which indicates that grade point average would not be a salient factor to identify the level of career maturity. Hence, it was suggested that other variables such as gender, socioeconomic status and parental influence and ethnicity mean cultural factors may play a role in changing the level of career maturity.

It was also found that the correlation ($r = .209$) between grade point average and career maturity attitude was moderate and slightly higher compared to career maturity score which indicates that there is a significant relationship in career maturity attitude, means to have compromising of desires with reality, subjective reactions, and dispositions that a student has toward making a career choice. It supports the findings by McCaffrey et al. (1984) that grade point average positively correlated with career maturity attitude.

The findings of this study revealed that career maturity competency level is weakly correlated with grade point average ($r = .190$). This means that knowledge about major is weak in relation to career maturity level. Further study is needed to examine the relationship between career maturity competency and grade point average.
Although the correlation between two variables is significant and positive, the calculated correlation score does not show a strong relationship, but a moderate one, so the variable of grade point average for international students in Malaysia may not be viewed as the best predictor of actual career maturity. Therefore, culture and academic grade should be examined in further study.

In conclusion, female students scored higher in career maturity than did male undergraduate students. However, this did not imply that male undergraduate students did not compromise their desires with reality about career and had no knowledge about their career. In addition, the results indicated that there is a significant relationship between grade point average and level of career maturity. Further investigation is however required on how strong the grade point average is associated with the level of career maturity. With regard to counseling implications, counselors should be careful not to take a deficit view of grade point average because of moderate correlation between career maturity and grade point average, if they do not result in negative vocational outcomes. In order to obtain more comprehensive information related to level of undergraduate international students, the comparative investigation with international student studying in western countries needs to be conducted.
References


Mustafa Tekke and Dr. Muhammad Faizal A. Ghani

EXAMINING THE LEVEL OF CAREER MATURITY AMONG ASIAN FOREIGN STUDENTS IN A PUBLIC UNIVERSITY: GENDER AND ACADEMIC ACHIEVEMENT

McGraw-Hill.


EXAMINING THE LEVEL OF CAREER MATURITY AMONG ASIAN FOREIGN STUDENTS IN A PUBLIC UNIVERSITY: GENDER AND ACADEMIC ACHIEVEMENT

Mustafa Tekke and Dr. Muhammad Faizal A. Ghani

