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The Examination of Career Maturity of Asian Foreign Students Using Crites Career Maturity Inventory

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Abstract- This study examined the level of career maturity of foreign students in a public university in Malaysia by analyzing Crites Career Inventory derived from Holland`s CMI. Two hundred and twenty nine (Male=106, Female= 123) foreign students studying in various semesters completed the Career Maturity Inventory and the scores of the foreign students on the CMI suggested that they had fairly high in career maturity.. ANOVAs indicated that there were no significant group differences in health status, but that there were group differences in career maturity. These findings suggest that level of career maturity of foreign students needs to be considered in relation to variables such as culture and the contextual factors. Results indicated that this result should be viewed with caution.

Index Terms- career maturity, career maturity attitude, career maturity competency, culture, and foreign students

INTRODUCTION

1. CAREER SELECTION OF FOREIGN STUDENTS

As it is widely known, childhood represents the threshold of career development; there are a wide variety measures used in the research of children`s vocational development (Watson & McMahon, 2005). Children potentially actualize in social roles through experiences of childhood while they increase interests, abilities and curiosities. (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Super, 1990, Vondracek, 2001a, Hartung, Porfeli, & Vondracek, 2005).). Yet, structured and packed activities provided by nursing school or child-care centre or might negatively affect on children's career development. As Zinne Foreign students are usually early adult studying overseas. Degree taken in foreign country is more prestigious than local one, hence foreign students move from their countries in order to obtain their degree (Holmes, Hughes, & Julian, 2003). Generally, looking at students flow in the world, United States, United Kingdom and Australia are highly populated by foreign students. Yet, there is a chronic downward trend related to the number of international applicants from the Middle East (i.e. Iran, Iraq and Yemen). Sirat (2008) states that following impact of the September 11 terrorist attack in 2001; the numbers of foreign students from the Middle East are apparently decreasing in the USA, UK, and Australia. Some countries, particularly Malaysia, have been a preferred destination from the Middle East for one decade because they welcome international students. Therefore, Malaysia has become as an important country to pursue their studies, particularly students from the Middle East i.e., Iran, Iraq and Jordan. Since 1996, more Asian foreign students have chosen to pursue their tertiary education in Malaysia. The Ministry of Higher Education in Malaysia was expecting about 100,000 foreign students to take up undergraduate and postgraduate programmes in 2010 **.** But now the Higher Education targets to reach up to the 200,000 by 2020 (MOHE, 2011).Most of these students are from China, Indonesia and Iran countries.

Attending university is the way of preparing for one’s career; the same holds true for foreign students. However, those who are studying abroad need to get more career guidance because suitable tertiary education is either in short supply or unavailable in their home country. However, individuals increasingly gain career maturity through their life span as a part of their developmental process. Career maturity has played a major role in career development of individuals of all ages. It remains 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. Furthermore, few studies have been conducted on foreign students to identify career maturity and planning in Malaysia. This present study aimed to examine the level of career maturity of international students studying in Malaysia, particularly Middle East students.

2. THEORY OF CRITES CAREER MATURITY

Crites' (1965) theory of career maturity, based on Super's (1957) theory of vocational development, is the basis of the CMI, includes Independence in career decision making as a crucial component of career-mature attitudes, along with Compromise, Decisiveness, Involvement, and Orientation. Having more decisiveness, involvement, and independence in career decision making, a greater self-orientation, and more willingness to compromise one's desires with reality are all considered more career-mature (Hardin, Leong, & Osipow, 2001).

In Super's (1996) life-span theory, he defines career maturity as a product of the interaction between the person and the environment. Crites's (1965) model of career maturity organized the constructs of career maturity into a career choice content (competency) and career choice process (attitude) which is applicable to Super's (1996) model. Crites (1965) proposed to clarify the distinction between career choice content and career choice process, which occurs during the career commitment. The content dimension refers to the occupation individuals should enter based on their interests and abilities. Within this dimension, Crites distinguishes between two sub-dimensions: consistency of vocational choice and wisdom of vocational choice. Consistency refers to the development of stability and coherence in an individual's occupational preferences. Wisdom refers to the development of career fit between the person's occupational preferences and interests, abilities, and experiences. The process dimension is categorized into two group factors: career choice attitudes and career choice competencies. Crites defines career choice attitudes as dispositional response tendencies that mediate both choice behaviours and competencies. On the other hand, career choice competencies are defined as a comprehension and problem-solving ability that pertain to vocational decision-making, primarily cognitive processes (Busacca & Taber, 2002). Therefore, in the light of previous research followed by analysis of gender, academic achievement, and academic level (Tekke, 2013; Tekke & Ghani, 2013), but this study is to explore the level of career maturity of Asian culture considering the value of attitude and competency skills. Researcher believe that this research mainly contribute the career planning and counseling for particularly Asian students.

3. METHODOLOGY

3.1Participants

Participants were 223 international students from University Malaya. The sample consisted of 114 female and 109 male students studying different fields had semesters ranging from 1 to 8. Region reported was 85 (37.1%) South & Southeast Asia, 66 (28.8%) Eastern Asia, and 79 (34.0 %) Middle East &Africa.

4. INSTRUMENTATION

4.1Career 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 by Crites & Savickas. 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 .81 on the attitude scale, and a Cronbach alpha coefficient of .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 .72, while the internal consistency is reported to range from .72 to .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).

5. DATA ANALYSIS

The focus of this study was to examine the level of career maturity of foreign students using Crites Career Maturity Inventory. First, descriptive statistic was calculated to test the career maturity. Finally, analysis of variance (ANOVA) was used to explore differences between the four different Asian cultures in terms of career maturity (CMI). Given the number of analyses compared to the sample size, ANOVA result was considered to be significant level only at the $p<.05$ for this study.

6. RESULT

Table 1 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 1, 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 1, it can be inferred that international students are slightly above the mean in Career Maturity.

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

Table 1

Mean and Standard Deviation of Foreign Students in the CMI, CMI-Attitude and CMI-Competency Comparison between Faculties based on Regions

Scale	N	M	SD
CMI	229	31.32	5.20
CMI-A	229	15.23	3.29
CMI-C	229	15.89	3.06

ANOVAs indicated the four different cultural groups did not significantly differ in terms of demographics, but that there were group differences in career maturity. However, an ANOVA indicated that the groups differed at the $p< .01$ level for CMI (see Table II) as follows:

ANOVA analysis results for the relationship between the faculties and regions presented in Table II reveals that the only significant relationship reported was between the dependent variable career maturity and faculty.

As see in Table 2, the results of the two-way ANOVA revealed statistically significant main effects for faculty, $F (1, 401) = 3.197$, $p < .001$, $\eta 2 = .17$. However, there was no statistically significant main effect for region, $F (1, 401) = 0.861$ $p < .001$ $\eta 2 = .080$, and for the interaction between faculty and region, $F (1, 401) = .039$, $p= .115$. This interaction is shown in Table 2. Due to the statistically significant difference, simple effects were computed separately for faculty. There were statistically significant differences found between faculties presenting as typical and diagnosed with different faculties, $M =35.571$ and $SD = .889$, $p < .005$ (see Table 3).

Table 2
Career Maturity: Two-Way ANOVA of Faculty, Region, and Faculty and Region

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1584.337[a]	35	45.267	2.170	.001	.289
Intercept	39586.705	1	39586.705	1897.554	.000	.910
Faculty	**800.361**	**12**	**66.697**	**3.197**	**.000**	**.170**
Country	157.161	4	39.290	1.883	.115	.039
Faculty * Country	341.455	19	17.971	.861	.631	.080
Error	3901.188	187	20.862			
Total	222151.000	223				
Corrected Total	5485.525	222				

a. R Squared = .289 (Adjusted R Squared = .156)

Table 3
Career Maturity and Means and Standard Deviations of Faculties based on Regions

Faculty of Respondent	Home Country	Mean	Std. Error
Arts and Social Sciences	Eastern Asia	31.500	1.487
	South and Southeast Asia	30.400	1.487
	Middle East and North Africa	33.500	3.325
Science	Eastern Asia	30.615	1.304
	South and Southeast Asia	30.143	1.257
	Middle East and North Africa	30.033	.859
Computer Science and IT	Eastern Asia	28.250	1.357
	South and Southeast Asia	34.833	1.920
	Middle East and North Africa	30.095	1.026
Business and Accountancy	Eastern Asia	30.000	1.257
	South and Southeast Asia	33.091	1.418
	Middle East and North Africa	30.067	1.214
Malay Studies	Eastern Asia	.[a]	.
	South and Southeast Asia	35.571	.889
	Middle East and North Africa	.[a]	.
Education	Eastern Asia	30.250	1.176
	South and Southeast Asia	30.167	1.357
	Middle East and North Africa	31.400	2.103

a. This factor is not observed.

DISCUSSION

Theoretically, this study has implications for the validity of the career maturity construct for international undergraduate students. The results of this study show that career maturity appears to be a useful construct for international undergraduate students, particularly for international students from Asia. However, it remains questionable whether high career maturity transforms positive vocational outcomes in Asian culture. Although finding is high career maturity among international undergraduate students, career development theories need to take into account the differential values and experiences that exist for ethnic groups and how these values and experiences impact career development. Research should continue to examine whether the career maturity construct is appropriate for diverse populations.

Researchers might also examine how international students from Asian regions themselves experience the career choice and decision-making process, in order to determine how they conceptualise "career maturity" within their culture. Lastly, researchers should keep in mind that studies in general, based on predominantly international students in Malaysia from Asia are likely to result in a non-traditional sample, thus possibly decreasing their generalizability to international students in Malaysia from Asia, who tends to maintain traditional cultural values. The results (i.e., ANOVAs) indicate the individuals from the different culture from Asian countries particularly studying Malay language i.e. Singaporean students have significantly higher career maturity from other cultures in Asia (see Table III). This is not surprising as choosing a career to pursue does not necessarily guarantee career maturity, as other factors are likely more important in determining level of career maturity (e.g., socioeconomic status, life style, social support, etc.)

With regard to counselling implications, person's using CMI-R and other career development inventories should be cognizant that the inventories may not address or incorporate the salient cultural perspectives, making it difficult to ascertain the meaning of the results for culturally different persons. Career counsellors should be aware of the challenges that Asian students encounter in their career development and look to provide culturally appropriate counselling to address these issues.

IMPLICATIONS FOR FURTHER RESEARCH

A similar study which utilizes international undergraduate students from other universities, which are highly populated by international students in Malaysia, will yield a study with greater external validity. That is to say, a similar study involving undergraduate students being representative of various university settings would yield more generalizable information regarding the identification of level of career maturity. Including other variables not addressed in this study such as education levels of parents, socioeconomic background and so forth would allow further insight into variables possibly contributing to career maturity. Also, inclusion of international participants from Western countries will provide the comparative cultural understanding in the level of career maturity.

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