

A Comparative Study on Career Maturity of the College Students in Korea and China

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Abstract—This paper study aims to make a comparison of career maturity between Korea and China by questionnaire survey. Based on the Korean version of the Career Attitude Maturity Inventory (CAMI), a Chinese version has been developed. The sampling is 901 college students. The difference of culture not only on the total career attitude score is statistically significant ($t=11.029$, $p<.001$), but also on the sub-factors. Especially in China, female students score lower than male students. It certified the Chinese gender characteristic, and that the constructions of career maturity are similar when tested by factor analysis. This result could further prove that career maturity is bound to the culture.

Keywords:—*Career maturity; Comparative study; Korea; China.*

I. INTRODUCTION

The present study aims at conducting a comparison of career maturity between Korea and China. This kind of study is needed not only by the international field of research, but also by China.

In the international field of research, there is a controversy about whether the career maturity is culture-bound? Caucasian conclusions drawn from those limited samples can be biased toward western- Caucasian individuals and may promote deficient models of career development for individuals from eastern societies (Leong, 1991). Additionally the researchers (Jang, Lim, & Song, 1991; Moracco, 1976; Watson & Van Aarde, 1986) provided evidence that career maturity is culture-bound. On the other hand, some studies (Achebe, 1982; Alvi & Kahn, 1983; Fouad, 1993) have demonstrated cultural universality rather than cultural uniqueness in career maturity.

Although some cross-culture studies have already been down, there is still no conclusion because it is only the comparison between mainland eastern immigrants and Caucasian in western countries and the questionnaire used was developed based on the cultural background of Western Caucasian. This study fills the gaps of comparative study of China and Korea in an Eastern culture. Is the career maturity is culture-bound or the cultural universality is rather than cultural uniqueness in career maturity? In order to find the answer, this comparative study is needed.

In China the comparative study is also eagerly needed. In April 2007, when Tibet implemented a free employment system, China has totally cancelled the unified state plan for job assignment system. Due to the special history, it is quite

late to start research on career maturity. Now, China is just at the beginning stage of this field.

2013 is the hardest year to find a job for the college graduates in China. The career maturity is the most important internal cause to find a job. Nowadays, there is an urgent need for China to research on career maturity, especially comparing to and borrowing from other countries' experiences. If career maturity is bound up with culture, it is more important for China to share the experiences of other country whose culture is similar with China.

Korea is the best county for China to be compared with, as Korea is a leader in theoretical research and practical education. Also because both China and Korea are eastern cultures, they share many similarities. The experiences of Korea will be more useful and more referential. So comparing with Korea has more theoretical significance and practical significance.

II. METHOD

First, in this study we choose the Career Attitude Maturity Inventor (CAMI) which was independently developed by Ki-Hak Lee (1997) with eastern cultural instrument and it has been widely used in Korea.

The CAMI is based on a 5-point Likert scale (1: not at all agree to, 5: extremely agree), and there are five sub-factors of career attitude. These are:

Decisiveness (the extent of firmness about one's preferred orientation toward career); Goal-orientation (the degree to which one prefers self-improvement to realistic interests through one's career); Confidence (the degree of one's faith and sureness of success in the chosen career); Preparation (degree of understanding and planning of one's career choice and degree of involvement in one's career); Independence (the degree of one's independent career decision making).

Reliability of each sub-factor is high. The internal consistency coefficients ranged from .75to .88.(Test by Ki-Hak Lee in 1997).

Second, based on a Korean version of the Career Attitude Maturity Inventory (CAMI), a Chinese version which is parallel to that has been formed. It follows three stages of procedure: translation, back translation, and field study. 28 bilingual college students participated in this bilingual testing. To control the order effect on the participants' responses, the order of the two versions was counterbalanced. Those two versions were administered a week apart. The reliability of Chinese version is tested. The Cronbach's α is .852, and then

MTMM was used to test the validity. Correlations between those two versions for each sub-factor range from .706 to .884. The Chinese version has good convergent validity and discriminant validity. The internal consistency coefficients range from .601 to .806. The total consistency coefficient is .833.

Third, the data was collected. The college students of 1-4 grades from two different cultures (427 from Korea and 474 from the China) were administered the CAMI. The Korean sample was drawn from 8 Universities located in Seoul of Korea (Yonsei University, Korea University, Seoul National University, Sookmyung Women's University, Konkuk University, Seokyeong University, Hanyang University, and Seoul Theological University).

Likewise, the Chinese sample was from 4 Universities from the capital of China. They are China University of Petroleum (Beijing), China University of Geosciences(Beijing), Beijing Institute of Technology University and North China Electric Power University.901 effective Career Attitude Maturity Inventories were taken back. Among them, Korea had 427 Career Attitude Maturity Inventories, and China had 474. The constitution of sampling sees Table 1.

TABLE I. THE NUMBER OF SAMPLING'S GENDER AND GRADE

Gender	Chinese Students' Grade				Korean Students' Grade				Total
	1	2	3	4	1	2	3	4	
Male	30	33	113	74	26	52	92	74	494
Female	52	21	98	53	17	38	67	61	407
Total	82	54	211	127	43	90	159	135	901

Finally, in order to analyze the data, the program WINDOWS SPSS 12.0 was used in this study t-test, Pearson Correlation, ANOVA, and Factor analysis were used.

III. RESULTS AND CONCLUSIONS

A. The Difference of Career Maturity Between the Two Countries

TABLE II. T-TEST FOR THE CHINESE AND THE KOREAN STUDENTS' CAREER MATURITY

Sub-factor	Nationality	N	Mean	SD	t
Decisiveness	China	474	3.2065	.69442	-4.821***
	Korea	427	3.4415	.76823	
Preparation	China	474	3.6082	.58548	-7.673***
	Korea	427	3.8848	.48492	
Independence	China	474	3.2909	.59798	10.730*
	Korea	427	3.7041	.55324	
Goal-Orientation	China	474	2.9201	.54493	-8.021***
	Korea	427	3.2491	.68409	
Confidence	China	474	3.2620	.55789	-4.351***
	Korea	427	3.4267	.57754	
Total	China	474	3.2576	.37701	11.029*
	Korea	427	3.5412	.39474	

***p<.001

The difference between the two countries on the total career attitude score is statistically significant ($t=11.029$, $p<.001$), and it turns out that Korean students are more mature than Chinese students. In addition, there are significant differences between two samples in each five subscales, so that Korean students score higher than Chinese ones for Independence ($t=10.730$, $p<.001$), Goal-orientation ($t=8.021$, $p<.001$), Preparation

($t=7.673$, $p<.001$), Decisiveness ($t=4.821$, $p<.001$), Confidence ($t=4.351$, $p<.001$). This conclusion lays the foundation for China to learn from Korean practical experience of career education.

B. The Gender Difference

It is found that female students scored higher than male students in Korean, but it was the opposite in China, female students scored lower than male students. (It is shown in table 3). Gender differences are also examined for each sub-factor of the CAMI. Also, it is very different between Korea and China, and the differences are statistically significant. In Korea, female students scored higher for goal-orientation ($t=4.461$, $p<.001$), preparation ($t=4.513$, $p<.001$) and Confidence ($t=4.030$, $p<.001$). In China male students are higher for independence ($t=3.148$, $p<.01$). It is showed in table 4.

TABLE III. T-TEST OF GENDER DIFFERENCE IN OVERALL CAREER MATURITY

Nationality	Gender	Mean	Standard deviation	N	T
China	male	3.2811	.35754	250	1.43
	female	3.2313	.39677	224	
	Total	3.2576	.37701	474	
Korea	male	3.5188	.40817	244	-1.356
	female	3.5711	.37512	183	
	Total	3.5412	.39474	427	
Total	male	3.3985	.40105	494	-1.483
	female	3.3841	.42212	407	
	Total	3.3920	.41054	901	

TABLE IV. T-TEST OF GENDER DIFFERENCE IN SUB-FACTORS

Variable		China		Korea	
		Male	Female	Male	Female
Decisiveness	Mean	3.22	3.19	3.43	3.46
	t	0.35			-0.47
Preparation	Mean	3.62	3.60	3.80	4.00
	t	0.34			-4.51***
Independence	Mean	3.37	3.20	3.73	3.67
	t	3.15**			0.96
Goal-Orientation	Mean	2.90	2.94	3.12	3.42
	t	-0.91			-4.46***
Confidence	Mean	3.30	3.22	3.52	3.30
	t	1.60			4.03***

p<.01, *p<.001

Furthermore, in order to find which effect is more important, the analysis of variance (ANOVA) is used. In order to explore which effect is more important in the level of career maturity between Korea and China, all 4 years students were explored by a 2(culture: Korean and China)×2(sex: male and female) analysis of variance (ANOVA). The result is shown in table5. It is found that the main effect is culture($F=124.767$, $p<.001$). Moreover, ANOVA reveals that interactions are statistically significant between culture and gender at the overall career maturity. ($F=3.893$, $p<.05$)China is different from Korea in international research results (Hesser, 1981; Lokan,Boss & Patsula, 1982; Neely &Johnson, 1981). It means it's the Chinese characteristic of career maturity.

TABLE V. THE RESULTS OF GENDER AND CULTURE EFFECT

Variable	SS	df	F
Nationality	18.504	1	124.767***
Gender	.000	1	.002
Nationality*Gender	.577	1	3.893*
Error	133.031	897	
Total	10518.284	901	

*p<.05, ***p<.001

C. The Difference in the Structure of Career Maturity Between the Two Cultures.

TABLE VI. ROTATED FACTOR MATRIX

item	factor1 PR.	factor2 CO.	factor 3DE.	factor 4IN.	factor 5GO.
V43	.573	-.065	-.063	.002	.021
V42	.546	.178	.101	.019	-.139
V13	.522	.188	-.004	.031	-.020
V34	.515	-.116	.115	-.098	.031
V36	.515	-.011	.112	.098	.058
V33	.491	.232	.060	-.048	-.095
V30	.485	-.018	.139	.165	.056
V47	.468	-.258	-.090	-.164	-.015
V9	.447	-.046	.279	-.040	.059
V17	-.439	.005	.015	.080	.066
V29	.417	-.153	.239	-.054	.110
V23	.393	.217	-.054	.043	-.196
V24	.375	.016	.136	-.046	-.079
V20	.354	.034	.100	.254	.109
V40	.339	.072	.174	.110	.021
V4	.318	.026	.279	-.046	-.097
V35	.251	-.017	.060	.031	.158
V12	-.220	.058	.139	.208	.216
V14	.137	.104	-.028	.002	.002
V38	-.020	.639	.025	.095	.022
V8	.028	.610	.014	.107	.108
V18	.189	.558	.089	.130	.104
V3	.063	.502	.205	.086	.131
V26	.113	.482	.480	.121	.168
V21	-.014	.426	.355	.193	.195
V46	.049	.422	.150	.159	.141
V28	-.166	.376	.163	.134	.020
V31	.370	.067	.659	-.031	-.055
V1	.306	.044	.640	.016	-.007
V41	-.206	.396	.607	.072	.205
V11	.166	.172	.540	-.007	-.125
V45	.067	.418	.472	.171	.160
V16	-.072	.302	.438	.176	.262
V6	-.068	.156	.225	.174	.120
V19	.141	-.005	.204	.099	-.122
V15	-.068	.101	.150	.630	.085
V44	.011	.177	.021	.612	.044
V10	.014	.059	-.039	.588	.073
V5	.028	.176	.028	.579	.022
V25	.134	.305	.155	.418	.249
V39	.191	-.188	.041	-.232	-.192
V27	.157	.083	.022	.094	.569
V22	.112	.194	.105	.012	.493
V2	-.048	.084	-.072	.073	.418
V7	.148	.157	.069	.317	.364
V32	-.272	-.016	-.106	.016	.360
V37	-.155	.160	.092	.117	.347

Factor structure of the Chinese version of the CAMI was examined. The items of CAMI were 47. the sampling of Chinese students was 474. It met the requirement that the number of sampling should 5 times more than the items of scale. Bartlett-test was significant statistically. $\chi^2 = 6111.669$,

df = 1081, p < .001, KMO = 0.834. The factor analysis is fit to use.

Using eigenvalues and the proportion of cumulative variance in principal axis factoring, the number of factors was decided. As it is shown in table 6, 14.32 of 47 items were located in the factors which are identical to those of the Korean version of CAMI. For another 15 items, 11 of them were singled out the first factor to the same factors as those of the Korean version. So except the first factor, other four factors are successfully combined. Further, internal consistency coefficients were .81 for Decisiveness, .66 for Goal-orientation, .68 for Confidence, .60 for Preparation, and .71 for Independence. In addition, correlations between total career maturity and each sub-factor were .79 for Decisiveness, .46 for Goal-orientation, .72 for Confidence, .45 for Preparation, and .71 for Independence. Finally, the range of inter-correlations between sub-factors was from .15 to .40. These results suggest that factor structure of career maturity is similar across Korean and Chinese college students. However some small parts of factor combining is different.

China and Korea are similar in maturity structure, although there is just a small part of relative difference. This result could prove that career maturity is bound to culture. China and Korea both belong to an oriental culture, the cultural is similar, and so it leads to the result of similar structure. However in order to move forward a single step, the further investigation recommends multi-national comparative studies, such as: comparative studies among Korea, China and the United States.

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