

The Influence of Individualism-Collectivism Culture on Career Adaptability Among ICT Professionals in Malaysia

¹Safiah Omar and ²Fauziah Noordin

Universiti Teknologi MARA, Faculty of Business Management, Shah Alam, Malaysia. ²Universiti Teknologi MARA, Centre of Postgraduate and Professional Studies, Faculty of Business Management, Shah Alam, Malaysia.

ARTICLE INFO	ABSTRACT
Article history:	Evidence that career adaptability may prevent intention to leave raised a concern for
Received 30 September 2014	researchers to identify the factors that may have the influence on the particular
Received in revised form	construct. Study on culture in organization specifically in the area of individualism-
17 November 2014	collectivism was chosen for this exploratory study in order to assess the potential
Accepted 25 November 2014	influence that the constructs might have on career adaptability. This research firstly
Available online 13 December 2014	intends to measure the level of both individualism-collectivism culture and career
	adaptability among the ICT professionals. Secondly, to measure the relationship that
Keywords:	might exist between individualism-collectivism culture and career adaptability.
Individualism-Collectivism, Career	Analyses on the level of the constructs found that both individualism-collectivism and
Adaptability, ICT Professionals	career adaptability are moderate. There are positive relationships found between the
	constructs of individualism-collectivism and career adaptability through correlations
	analysis. However, the relationship between vertical collectivism and career
	adaptability was found to be insignificant in the assessment using structural equation
	modeling. Implications of the findings and suggestion for future research are discussed.

© 2014 AENSI Publisher All rights reserved.

To Cite This Article: Safiah Omar and Fauziah Noordin., The Influence of Individualism-Collectivism Culture on Career Adaptability Among ICT Professionals in Malaysia. *Aust. J. Basic & Appl. Sci.*, 8(24): 175-183, 2014

INTRODUCTION

Highest number of employees' turnover was reported among Information and Communication Technologies (ICT) professionals in Malaysia (MEF, 2012). The concerned on the employees' turnover statistic becomes higher when study on job market-demand for ICT industry found declining numbers of the ICT skill availabilities that might contribute in the shortage of skill supplies in the country (JobStreet.com, 2010; MDec & Synovate, 2011). This phenomenon not just appears in Malaysia. A study in Europe found the same disequilibrium of job skills supplies and demand in ICT industry caused by the unparallel growth between the technologies itself and the supplies of skills (McLaughlin *et al.*, 2012). The growth of technologies is too fast whereas the growths of the human skills that are related to the technologies are not growing at the same pace.

A study among students of ICT program in university found that in order for them to survive and complete the program, they need to be adaptable (Van Der Vyver, 2009). This triggered that the skills on adaptability is one of the important elements that is needed in ICT industry. In relation to work-related adaptability, constructs of career adaptability was developed in order to assessed the part of human attributes that is needed in order for the individual to cope with the changes involved in his/her career (Savickas, 2005). Thus, career adaptability is evidence as the key attribute needed for ICT professionals to survive in ICT industry. Furthermore, previous evidence showed that career adaptability is negatively related to intention to leave the organization and intention to leave the ICT career (Omar & Noordin, 2013).

Individualism-collectivism previously studied among managers in Malaysia and were found to be related to career commitment (Noordin, Williams, & Zimmer, 2002) and job satisfaction (Noordin & Jusoff, 2010). Regarded as the single most fruitful dimensions in cross-cultural psychology (Heine, 2010; Oyserman, Coon, & Kemmelmeier, 2002), individualism-collectivism is needed in order to understand individual's work behavior in a particular country especially with various ethnic and religion backgrounds such as Malaysia. Most importantly, the constructs of individualism and collectivism were found to have causal effect on innovation and the long-run growth of an organization (Gorodnichenko & Roland, 2010, 2011b).

This study firstly intended to assess the level of the individualism-collectivism and the various constructs of career adaptability among the ICT professionals in Malaysia. Secondly, this study examined the constructs of

Corresponding Author: Safiah Omar, Faculty of Business Management,	, Universiti Teknologi MARA, Shah Alam, 40450,
Malaysia.	
E-mail omar safiah@gmail.com	

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

career adaptability within the cultural values (individualism-collectivism) that these ICT professionals are holding. Finally, the relationships that might exist between individualism-collectivism and career adaptability were assessed through path analysis using structural equation modelling (SEM).

Individualism-Collectivism:

Individualism is defined as "the subordination of the goals of the collectivities to individual goals, and a sense of independence and lack of concern for others" (Hui & Triandis, 1986, p. 245). Individual who adopts high sense of individualism is called an individualist. Individualists tend to awards social status to personal accomplishment. They also want to be stand out particularly in important discoveries, innovations, humanitarian achievements and many other actions for recognition. Whereas, collectivism is a grouping of a diverse array of beliefs and behaviors in terms of the consideration of implications such as cost and benefits of one's own decision and/or actions for other people, sharing of material resources, sharing of non-material resources, susceptibility to social influence, self-presentation and face work, sharing of outcomes, and feeling of involvement in others' lives (Hui & Triandis, 1986). On a similar note, collectivist are interdependent among each other, take action jointly as a group, and thus subscribing to the moralistic values of joint efforts and group rewards. Collectivist also was previously indicated to have high loyalty for the organization in working towards its goals (Noordin & Jusoff, 2010).

Dimensions of individualism-collectivism is argued to be distinguished between horizontal and vertical (Triandis, 1995). Horizontal emphasizes on equality whereas vertical emphasizes on hierarchy. Specifically, horizontal individualism can be constituted as an individual who postulated an autonomous self but see each other as more or less equal whereas vertical individualism also postulated an autonomous self but see each other as different and inequality is expected (Noordin, *et al.*, 2002; Triandis, 1995). Collectivist individual in horizontal dimension see the self as merged with members of an in-group and see each other as similar but for vertical collectivist though they see themselves as the member of an in-group, members are various in terms of status where some might have higher than the others (Triandis, 1995). Malaysia as part of East Asia countries, is often been regards as having high collectivism cultural values (Hofstede, 1980; Hui & Triandis, 1986; Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis, 1995) but recent cross-cultural studies conducted between Malaysian and Australian managers find a slight increase on the vertical individualism dimension (Noordin, 2009; Noordin & Jusoff, 2010; Noordin, *et al.*, 2002). The findings is worth further investigation as whether after more than ten years, the pattern of cultural elements are still the same or have any changes.

Career Adaptability:

Career adaptability is a construct developed based on Donald Super's (Super, 1980) career maturity that was measured in terms of finding the adaptability skills among adolescents (Savickas, 1997). The construct was further examined and improvised as to suits the work conditions among working adults in organizations under the career constructions theory (Savickas, 2005). The development of the theory of career adaptability is in bridging the gap or loopholes that was unexplained in life-span, life-space theory (Savickas, 1997). Career adaptability can be defined as "the attitudes, competencies and behaviors that individuals use in fitting themselves to work that suits them" (Savickas, 2005, p. 45). Career adaptability also is a plan for unforeseen events that involves and individual undertaking in handling changes (Rottinghaus, Day, & Borgen, 2005). In career adaptability, individual deals with adjusting to vocational development tasks, occupational transitions, and personal traumas by solving problems that are usually unfamiliar, often ill-defined, and always complex. It has been suggested that the existence of career adaptability is a key competency in career success generally which enable individuals to effectively implement their self-concepts in occupational roles, thus creating their work lives and building their careers (O'Connel, McNeely, & Hall, 2008).

The development of career construction theory's model of self-regulation for social and developmental with a set of specific attitudes, beliefs, and competencies knows as the ABCs of career construction (Savickas, 2005). These four attributes of attitudes, beliefs, and competencies constitute career adaptability and represent resources for self-cultivation. The adaptive individual is conceptualized as "(a) becoming concerned about the vocational future, (b) taking control of trying to prepare for one's vocational future, (c) displaying curiosity by exploring possible selves and future scenarios, and (d) strengthening to pursue one's aspirations" (Savickas, 2005). The outcomes for constructs of career adaptability is contradicting as it was found to be positively related to intention to leave (Ito & Brotheridge, 2005) as well as negatively related to intention to leave the organization and the career (Omar & Noordin, 2013). However, the factors that can contribute to career adaptability is still lacking in the literature as it is relatively still a developing construct to date (Savickas, 2008). Thus, it is timely for this research to assess on this work attribute of career adaptability where findings can be added in the literature and used as supporting tools in the industry.

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

Individualism-Collectivism and Career Adaptability:

Individualism-collectivism cultural values are often studied in cross-cultural psychology (Gorodnichenko & Roland, 2011b; Heine, 2008, 2010; Hofstede, 1980, 1984; Noordin & Jusoff, 2010; Noordin, *et al.*, 2002; Oyserman, *et al.*, 2002; Triandis, 1995). Studies on career adaptability found contradict results with intention to leave where positive and negative relationships were found in two different studies (Ito & Brotheridge, 2005; Omar & Noordin, 2013). The two studies conducted were both from different counterparts of the continents where the first study conducted in Europe whereas the second study was conducted in East Asia. This perhaps due to the existence of different cultural values that might influence on the differences among the findings in the analyses conducted. It was noted previously that study on career constructions in different countries should be carefully assessed accordingly because each country has its own cultural elements (Pope, Musa, Singaravelu, Bringaze, & Russell, 2002). Furthermore, it is suggested that the cognitive thinking skills among individualist (often holds among Westerners) and collectivist (often holds among East Asians) are different (Gorodnichenko & Roland, 2011a). It was indicated in the same study that individualist thinking is towards analytical whereas collectivist is more towards holistic. The two forms of thinking (analytical and holistic) lead to different styles of reasoning which might have influence on individual's work behavior, specifically for this study with regards to career adaptability.

In ICT industry, the work nature is consistently changing where it requires individual whom are flexible and able to adapt to the continuous technological upgrading along the career line (Gallivan, 2004; Hom, Leong, & Golubovich, 2010; Van Der Vyver, 2009). On similar notes, Euro-Americans (individualist) are depicted as self-oriented and promoting their own goals (Triandis, 1995), emphasizing private identity (Hui & Triandis, 1986), and focusing on internal abilities, thoughts and feelings (Markus & Kitayama, 1991). East Asians (collectivist) emphasize on collective identity (Hui & Triandis, 1986), and stressing on the importance of external public roles and relatives (Markus & Kitayama, 1991). In other words, decision making by collectivist often based on other people's perceptions in the in-group that is deemed to be appropriate and/or relevant within the in-group situation. Individualist on the other hand made the decision based on internal choices less dependent on the social interpretation.

With regards to the constructs in career adaptability, individualist is expected to be more adaptable than collectivist. This is based on the findings that individualism has positive relationships with innovation and deemed to be more flexible whereas collectivism provides strong psychological support networks to deal with depression and stronger protection from social rejection (Gorodnichenko & Roland, 2011a). Individualist see the self as stable and the world is malleable which made him/her engage to change the world in order to achieve goals, whereas collectivist see the self as malleable and the world is stable which made him/her adjust themselves to the surrounding world in working towards achieving goals (Gorodnichenko & Roland, 2011a, 2011b). The expectation that individualist should be more adaptable in their career is also evident from the analytical thinking skills that they are holding which very much related towards innovation, ideas generation, confidence in own abilities, and having intellectual directions (Schwartz, 2006). Collectivist is expected to have lower career adaptability because of the association for having status quo, which is related to resistance to change (Gorodnichenko & Roland, 2011a; Schwartz, 2006). Study on individualism-collectivism is important because behaviors of individuals, groups, and institutions within cultures are enacted from the degree of values and beliefs held by members of cultures to which that is viewed as legitimate, acceptable and effective (Hofstede, 1980; Triandis, 1995). Assessment on individual's work behavior can be understood by looking through the elements of culture influences.

MATERIALS AND METHODS

Quantitative research approach is used in this study. This study approach is chosen in order to describe the trends and/or explain the relationship among variables and it able to answer the research problem objectively and unbiased (Cresswell, 2005). The main instrument used is self-administered questionnaire. It is suggested that questionnaire survey is suitable in explaining attitudes, values, beliefs and perceptions of the informants (Whyte, 1972).

Study Samples:

There were 303 samples of ICT professionals from various ICT organizations. The organizations were chosen from the list of 'World Class Status' organizations obtained from Multimedia Super Corridor (MSC). The list provided from MSC is one of the available lists of existing ICT organizations in Malaysia that can be publicly obtained from its website. Among the 85 listed companies, only 15 organizations agreed to participate in the research. The study samples consist of 59% male and 41% female. There were 63% of whom holding bachelor degree, 18.6% with master degree, and 1.7% are holding professional courses certification. Malay ethnic respondents are the majority (61.9%), followed by Chinese (25.2%), Indian (11.3%), and others (1.7%).

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

The 'others' category are mostly from the East Malaysian's ethnic such as Kadazan, Bidayuh, Iban, Melanau, and etc.

Assessment Instruments:

The assessment instrument used for individualism-collectivism measured the horizontal and vertical aspects of the cultural dimensions (Singelis, *et al.*, 1995). This instrument is deemed to be important in order to distinguish between equality and hierarchy aspects in individualism and collectivism. The instrument comprises of 32-items and the scale used was from 1 to 7 indicating the agreement of respondents on the related items. Scale 1 indicated the highest level of disagreement where 7 indicated the highest level of the agreement toward the particular items. Example of the items is "I like my privacy". The reliabilities (Cronbach's Alpha) ranged from 0.77 to 0.86.

Career adaptability measure (Savickas, 2008) is chosen because it has been thoroughly assessed in various countries representing United States, European countries, and Australia. The Scale is 1-7, where 1 representing 'very not strong' and 7 representing 'strongest'. The measurement comprised of four dimensions which are career concern, career control, career curiosity, and career confidence. Example of the item for career adaptability is "looking for opportunities to grow as a person". The Cronbach's Alpha for this measurement ranged from 0.82 to 0.89.

Analyses:

The data collected were assessed using Statistical Package for Social Sciences (SPSS) version 20 and the Analysis of Moment Structure (AMOS) version 18. SPSS is used in order to determine the descriptive statistics and the correlations analysis. This is where the level of individualism-collectivism and career adaptability of ICT professionals can be assessed. Correlation analysis is used in order to find the association that might exist between the constructs of individualism-collectivism with the constructs of career adaptability. The used of AMOS is to conduct structural equation modeling (SEM) in order to find whether the relationships between individualism-collectivism constructs are related to the constructs of career adaptability. SEM is chosen because it provides beta (β) coefficients of existing relationships, covariance, as well as the fit indices that is unable to be obtained if by only using SPSS alone. SEM also has the availability to analyze a set of latent variables (measurement of unobserved constructs with its indicators of observed constructs) that mostly alternative analysis unable to do (Byrne, 2010). Thus, the analyses chosen are deemed to be sufficient for this study in order to answer the main objectives which are to assess the level of the individualism-collectivism and the various constructs of career adaptability among the ICT professionals in Malaysia, to examined the constructs of career adaptability within the cultural values (individualism-collectivism) that these ICT professionals are holding, and the assessment of structural equation modeling for the relationships that might exist between individualism-collectivism with career adaptability.

Results:

Descriptive Statistics:

Descriptive analysis was conducted in order to assess the level of individualism-collectivism among the ICT professionals. Referring to Table 1, vertical collectivism scored the highest among the four individualism-collectivism constructs where the mean value is 5.33 (SD= 0.83). Item "children should feel honored if their parents received a distinguished award" (M= 5.43; SD= 1.0) contributed to the highest mean value for vertical collectivism construct. Horizontal individualism (M= 4.88; SD= 0.89) scored higher mean than vertical individualism (M= 4.74; SD= 0.94).

In horizontal individualism, item "I like my privacy" scored the highest where the mean value is 4.95 (SD= 1.1). Item "It is important that I do my job better than others" (M= 4.82; SD= 1.1) contributed to the highest mean for vertical individualism. The results show that the ICT professionals are reclining towards collectivism cultural dimension.

Table 1: Means Score for Indiv	vidualism-Collectivism
--------------------------------	------------------------

Items	Mean	SD
Horizontal Individualism		
One should live one's life independently of others	4.82	1.071
I like my privacy	4.95	1.123
What happens to me is my own doing	4.87	1.103
Total	4.88	0.895
Vertical Individualism		
Without competition, it is not possible to have a good society	4.69	1.282
It is important that I do my job better than others	4.82	1.102
I enjoy working in situations involving competition with others	4.70	1.112
Total	4.74	0.937

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

Horizontal Collectivism		
If a co-worker gets a prize, I would feel proud	5.26	1.095
If a relative were in financial difficulty, I would help within my means	5.30	1.116
I like sharing little things with my neighbors	5.21	1.124
Total	5.26	0.877
Vertical Collectivism		
Before taking a major trip, I consult with most members of my family and many friends	5.38	1.121
I usually sacrifice my self-interest for the benefit of my group	5.17	1.120
Children should feel honored if their parents receive a distinguished award	5.43	1.033
Total	5.33	0.837

Note: 1.00 – 3.99 = low; 4.00 – 4.99 = low-moderate; 5.00-5.99 = moderate-high; 6.00 – 7.00 = high

In Table 2, the scores for career curiosity (M= 5.14; SD= 0.97) and career confidence (M= 5.13; SD= 0.95) are almost equal. Item "investigation options before making a choice" (M= 5.40; SD= 1.1) contributed to the highest mean value for career curiosity. In career confidence "taking care to do things well" has highest mean value for the construct where the mean is 5.13 (SD= 1.1). The third highest mean construct for career adaptability is career control (M= 5.05; SD=0.98) where item "counting on myself" scored the highest mean (M=5.13; SD= 1.15). The item with the highest mean for career concern is "planning how to achieve my goals" (M= 4.97; SD= 1.17). The total mean scores for all four constructs are almost similar and fall within the moderate group level. Although career curiosity scores the highest but it is only 0.01 different higher than career confidence. These show that the ICT professionals are both curious and confidence about their own career.

Table 2: Means Score for Career Adaptability

Items	Mean	SD
Career Concern	Wiedin	50
Becoming aware of the educational and vocational choices that I must make	4.94	1.06
Planning how to achieve my goals	4.97	1.17
Concerned about my career	4.53	1.39
Total	4.95	1.00
Career Control	Mean	SD
Making decision by myself	5.01	1.07
Taking responsibility for my actions	5.00	1.13
Counting on myself	5.13	1.15
Total	5.05	.976
Career Curiosity	Mean	SD
Looking for opportunities to grow as a person	5.13	1.15
Investigation options before making a choice	5.40	1.11
Becoming curious about new opportunities	5.16	1.12
Total	5.14	.974
Career Confidence	Mean	SD
Taking care to do things well	5.13	1.13
Learning new skills	5.11	1.22
Working up to my ability	5.11	1.10
Total	5.13	.950

Note: 1.00 – 3.99 = low; 4.00 – 4.99 = low-moderate; 5.00-5.99 = moderate-high; 6.00 – 7.00 = high

Correlation Analysis:

Correlation analysis was conducted in order to find the relationship (if any) between the constructs of individualism-collectivism with the constructs of career adaptability. All individualism-collectivism constructs have positive relationships with the constructs of career adaptability significant at level 0.01.

Variable	1	2	3	4	5	6	7	8
1. Horizontal Individualism	1							
2. Vertical Individualism	.365**	1						
3. Horizontal Collectivism	.169**	010	1					
4. Vertical Collectivism	.264**	.166**	.484**	1				
5. Career Concern	.435**	.320**	.318**	.322**	1			
6. Career Control	.470**	.259**	.289**	.259**	.739**	1		
7. Career Curiosity	.412**	.304**	.263**	.212**	.694**	.739**	1	
8. Career Confidence	.438**	.291**	.313**	.236**	.693**	.781**	.766**	1

Table 3: Correlation Analysis for Individualism-Collectivism and Career Adaptability

Note: ** Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

Relationship between horizontal individualism and career control scored the highest where r = 0.470 (p ≤ 0.01). The remaining constructs of individualism-collectivism scored high relationship with career concern. The lowest correlation is found between vertical collectivism and career curiosity (r= 0.212; p ≤ 0.01).

Structural Equation Modelling (SEM):

In order to assess whether the relationship between individualism-collectivism and career adaptability is significant, path testing was conducted using structural equation modelling (SEM). Prior to structural equation modelling, confirmatory factor analyses (CFA) were conducted for both individualism-collectivism constructs and career adaptability constructs. Absolute fit and incremental fit indices were obtained. Chi-square (X2) to test the exact model fit, chi-square/degree of freedom (X2/df), and the room mean square error mean of approximation (RMSEA) were generated under absolute fit indices. Incremental fit indices used are comparative fit index (CFI), normative fit index (NFI), and goodness fit index (GFI). The fit indices obtained from the analyses are within the good fit cut-off values (Bollen, 1989; Browne & Cudeck, 1993; Hoyle, 1995) represented in Table 4.

Table 4: Confirmatory Factor Analyses (CFA)

Dimensions	X^2	X ² /df	CFI	GFI	NFI	RMSEA	Result		
Dimensions		(≤5)	(≥ 0.9)	(≥0.9)	(≥0.9)	(≤0.08)			
Individualism-Collectivism	98.58	2.05	0.95	0.95	090	0.059	Good Fit		
Career Adaptability	89.69	1.87	0.98	0.95	0.96	0.054	Good Fit		

Path testing using SEM is presented in Figure 1. The constructs of individualism-collectivism is assessed whether they have any significant relationships with the constructs of career adaptability. The chi-square is 380.28 ($p \le 0.001$), chi-square/df is 1.598, CFI is 0.960, GFI is 0.909, NFI is 0.900, and RMSEA is 0.044. The fit indices show good model fit is achieved between the constructs. Table 5 shows the result on path testing. The path between vertical collectivism and career adaptability is found to be not significant ($p \ge 0.05$). Horizontal individualism and horizontal collectivism have positive relationships with career adaptability significant at $p \le 0.001$. Horizontal individualism has the highest beta (β) coefficient weight (β = 0.455; $p \le 0.001$) follows by horizontal collectivism (β = 0.374; $p \le 0.001$). Vertical individualism has the lowest positive significant relationship with career adaptability where the β is 0.186 ($p \le 0.01$). In career adaptability, career control has the highest β value (0.964). The squared multiple correlations for career adaptability are 0.45. This indicates that the constructs of individualism-collectivism explained 45% variance of career adaptability.

Table 5: Regression Weight for Structural Equation Modelling

Path	Estimate	S.E.	C.R.	β	Р
Horizontal Individualism→Career Adaptability	.416	.075	5.569	.455	***
Vertical Individualism→Career Adaptability	.159	.059	2.677	.186	.007
Horizontal Collectivism→Career Adaptability	.566	.140	4.059	.374	***
Vertical Collectivism→Career Adaptability	101	.075	-1.349	115	.177
Career Adaptability→Career Control	1.000			.964	
Career Adaptability→Career Curiosity	1.087	.080	13.615	.914	***
Career Adaptability→Career Confidence	1.038	.078	13.380	.927	***
Career Adaptability→Career Concern	1.103	.086	12.897	.838	***

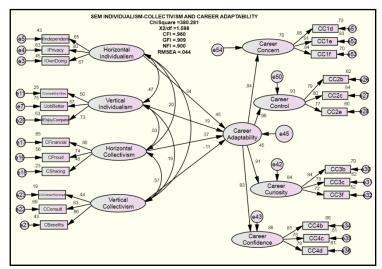


Fig. 1: Structural Equation Modelling

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

Discussion:

The aims of this study to assess the level of individualism-collectivism and career adaptability as well as to investigate the relationships (if any) between the two constructs are met through the uses of descriptive statistics, correlations analysis, and structural equation modelling. The study begin by reviewing employees' turnover issues in Malaysia within ICT industry (MEF, 2012) and the understanding of the particular work nature where being adaptable in the career was found to be one of the paramount skills needed (Van Der Vyver, 2009). Research in career adaptability is still lacking especially in Malaysia specifically in ICT industry, but recent study found that the constructs have negative relationships with intention to leave both the organization and the career (Omar & Noordin, 2013) that may contribute to retention strategies for the industry.

Results from the analyses in this study found that horizontal individualism, vertical individualism, horizontal collectivism, vertical collectivism, career concern, career control, career curiosity, and career confidence among the ICT professionals are all at moderate levels. Vertical collectivism has the highest level score within individualism-collectivism constructs whereas vertical individualism was the lowest. Current means score for horizontal individualism, horizontal individualism, and vertical collectivism were slightly lower than those obtained among Malaysian managers in previous studies (Noordin, 2009; Noordin & Jusoff, 2010). However, there is an increase for vertical collectivism where previous mean among managers was 4.92 (Noordin & Jusoff, 2010) and current mean score among ICT professionals is 5.24. Malaysian managers previously were found to be highly horizontal collectivist whereas current ICT professionals have almost balance collectivistic for both horizontally and vertically. Current results found that the ICT professionals have almost the same time. On a similar note, the ICT processionals are expecting to work in an in-group but there also understanding that the members of the in-group can have the same and/or different status.

The analyses also indicate that the existences of individualism among the ICT professionals are at moderate level though they are lower than those collectivism dimensions. Culturally, Malaysia has been known as highly collectivist (Hofstede, 1980) but there is shifts happening in the long run with the steady growths of current economic and education at 5.5 percent average and the dramatic poverty reductions from 49.3 percent in 1970 to 1.7 percent in 2012 (WorldBank, 2014). Cultural values has been associated with the environmental conditions (Triandis & Suh, 2002) where with the economic growth as such in Malaysia can potentially contributing in the cultural values shifting that is believe to be happening among Malaysians. In career adaptability, career curiosity scored the highest and career concern was the lowest. Career curiosity is associated with the person who explores and actively finding information that relate to his/her career development. The score for all four constructs of career adaptability are not far from each other. This indicates that ICT professionals in Malaysia are moderately adaptable in their career.

Importantly, this study found that there is an association between cultural values and career adaptability. Among all, vertical collectivism was found to be non-significant with career adaptability through structural equation modelling analysis. It was expected earlier that individualist should have connection with being adaptable because its relatedness with innovation and long-term growth (Gorodnichenko & Roland, 2011b). Adaptability is akin to flexibility and part of parcel contributing towards idea generations that moving towards innovation

By going into the depth analysis on the relationship existed among individualism-collectivism with career adaptability, it was found the horizontal constructs of these cultural values have higher β coefficient values compare to those in vertical dimensions. This determines that individual who beliefs in equality are more adaptable compare to those who emphasize on hierarchy. The sums of beliefs in equality, whether that individual merged in the in-group or vice versa, make them more invulnerable towards surviving their career growths in the long run.

Horizontal individualist focus on expressing uniqueness and establishing the capability to be successfully self-reliant (Triandis & Singelis, 1998). It was found that competition that often been emphasized in vertical constructs is not related to individualism (Oyserman, *et al.*, 2002). This shows that emphasizing on winning alone is not strong enough to support the ability to grow in career development. For horizontal collectivist, they tend to focus in sociability and interdependence with others (Triandis, 1995). The emphasizing to connect with each other in working towards achieving goals somehow related to improving the parts of being concern, having sense of control, expecting curiosity, and increase confidence in their career journey.

The reason why vertical collectivism is not related to career adaptability can be inferred to the existence of authority influences that can minimize and/sacrifice one's own personal goals (Triandis & Singelis, 1998) that won't help in the development along the areas for career constructions of individual. Furthermore, depending too much on the in-group either socially and/or at work until certain extends could produce high status quo which hinder certain changes to be implemented in the organization. For this particular study, the status quo develop on the sideline building walls that block any career improvement that an individual's need.

Conclusion:

This study found that the elements of cultural values are related to career adaptability among ICT professionals in Malaysia. Although Malaysia is regarded as a highly collectivist country, moderate aspects of individualism were also found. From the findings, ICT organizations are suggested to take considerations on cultural aspects as to further improve the adaptability level among their professionals' employees. The specific area of personnel development is in horizontal individualism and collectivism aspects of the employees where the former is related to being self-reliant where the latter referred to high spirit of team works. These two parts of cultural values can promote flexibility, idea generations, innovations, and eventually to improve organizational performances. Further research is suggested to provide further analysis on the differences of cultural perspectives and career adaptability in other industries and/or professions. This is important as the need for researchers to identify whether there would be any other shifts of cultural perspectives among Malaysian as well as the empirical evidences on the connection that they might have with career adaptability.

REFERENCES

Bollen, K.A., 1989. Structural equations with latent variables. New York: Wiley.

Browne, M.W., and R. Cudeck, 1993. Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Nebury Park, CA: Sage.

Byrne, B.M., 2010. Structural equation modeling with AMOS: basic concepts, applications, and programming (2nd ed.). New York: Taylor & Francis Group.

Cresswell, J.W., 2005. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (2nd ed.). New Jersey, Ohio: Prentice Hall.

Gallivan, M., 2004. Examining IT Professionals' Adaptation to Technological Change: The Influence of Gender and Personal Attributes. *The DATA BASE for Advances in Information Systems*, 35(3): 28-49.

Gorodnichenko, Y., and G. Roland, 2010. Culture, Institutions and the Weatlh of Nations. CEPR Discussion Paper No 8013.

Gorodnichenko, Y., and G. Roland, 2011a. Understanding the Individualism-Collectivism Cleavage and its Effects: Lesson from Cultural Psychology. Paper presented at the XVIth Congress of the International Economic Association.

Gorodnichenko, Y., and G. Roland, 2011b. Which Dimensions of Culture Matter for Long-Run Growth? American Economic Review Papers and Proceedings, 101(3): 492-498.

Heine, S.J., 2008. Cultural Psychology. W.W: Norton & Company

Heine, S.J., 2010. Cultural Psychology. In S. T. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp. 1423-1465).

Hofstede, G., 1980. Culture's Consequences. Beverly Hills, CA: Sage Publications.

Hofstede, G., 1984. Culture's Consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Hom, P.W., F.T.L. Leong and J. Golubovich, 2010. Insights from Vocational and Career Developmental Theories: Their Potential Contributions for Advancing The Understanding of Employee Turnover. In H. Liao, J. J. Martocchio & Joshi (Eds.), *Research in Personnel and Human Resources Management.*, 29: 115-165: Emerald Group Publishing Limited.

Hoyle, R.H., 1995. The structural equation modeling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 1-15). Thousan Oaks, CA: Sage.

Hui, H.C., and H. Triandis, 1986. Individualism-Collectivism: A Study of Cross-Cultural Researchers. Journal of Cross-cultural Psychology, 17(2): 225-248. doi: 10.1177/0022002186017002006

Ito, J.K., and C.M. Brotheridge, 2005. Does Supporting Employees' Career Adaptability Lead to Commitment, Turnover or Both? Human Resource Management., 44(1): 5-19.

JobStreet.com., 2010. Malaysian ICT Job Market: Meeting Tomorrow's Needs *Innovative Malaysia: ICT* Accelerating change and performance in Government & Businesses. Malaysia: JobStreet.com.

Markus, H., and S. Kitayama, 1991. Culture and Self: Implications for COgnitions, Emotions and Motivation. Psychological Review, 98: 224-255.

McLaughlin, S., M. Sherry, M. Carcary, C. O'Brien, F. Fanning, D. Teodorakis, *et al.* 2012. e-Skills and ICT Professionalism: Fostering the ICT Profession in Europe (pp. 1-375). Europe: Innovation Value Institute (IVI) and Council of European Professional Informatics Societies (CEPIS).

MDec, and Synovate, 2011. MSC Malaysia Talent Supply-Demand Study 2010 - 2013. In M. D. Corporation (Ed.), *MSC Malaysia HR Networking Session 2011*. Kuala Lumpur: MSC Malaysia.

MEF., 2012. Malaysian Employers Federation *The MEF salary and fringe benefits survey for executive* 2012. Kuala Lumpur: Malaysian Employers Federation.

Australian Journal of Basic and Applied Sciences, 8(24) Special 2014, Pages: 175-183

Noordin, F., 2009. Individualism-Collectivism: A Tale of Two Countries. Problems and Perspectives in Management, 7(2): 36-45.

Noordin, F., and K. Jusoff, 2010. Individualism-collectivism and Job Satisfaction between Malaysia and Australia. International Journal of Educational Management, 24(2): 159-174. doi: 10.1108/09513541011020963

Noordin, F., T. Williams and C. Zimmer, 2002. Career Commitment in Collectivist and Individualist Cultures: A Comparative Study. International Journal of Human Resource Management 13(1): 35-54.

O'Connel, D., E. McNeely and D. Hall, 2008. Unpacking Personal Adaptability at Work. Journal of Leadership & Organizational Studies, 14(3): 248.

Omar, S., and F. Noordin, 2013. Career Adaptability and Intention to Leave among ICT Professionals: An Exploratory Study. The Turkish Online Journal of Educational Technology, 12(4): 11-18.

Oyserman, D., H.M. Coon and M. Kemmelmeier, 2002. Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analyses. Psychological Bulletin, 128: 3-72. doi: 10.1037//0033-2909.128.1.3

Pope, M., M. Musa, H. Singaravelu, T. Bringaze and M. Russell, 2002. From Colonialism to Ultranationalism: History and development of career counselling in Malaysia. *Career Development Quarterly*.

Rottinghaus, P.J., S.X. Day and F.H. Borgen, 2005. The Career Futures Inventor: A Measure of Career-related Adaptability and Optimism. Journal of Career Assessment, 13: 3-24.

Savickas, M.L., 1997. Career Adaptability: An Integrative Construct for Life-Span, Life-Space Theory. The Career Development Quarterly, 45(3): 247-259.

Savickas, M.L., 2005. The Theory and Practice of Career Construction. In S. D. Brown & R. W. Lent (Eds.), *Career Development and Counselling: Putting Theory and Research to Work* (pp. 42-70). Hoboken, NJ: John Wiley & Sons.

Savickas, M.L., 2008. Life-design International Research Group: Career Adaptability Project. Berlin: Humboldt Universitat.

Schwartz, S.H., 2006. A Theory of Cultural Value Orientations: Explication and Applications. Comparative Sociology, 5(2-3): 137-182.

Singelis, T.M., H. Triandis, D.P.S. Bhawuk and M.J. Gelfand, 1995. Horizontal and Vertical Dimensions of Individualism and Collectivism: A Theoretical and Measurement Refinement. *Cross-Cultural Research*, 29(3), 240-275. doi: 10.1177/106939719502900302

Super, D.E., 1980. A Ife-Span, Life-Space Approach to Career Development. Journal of Vocational Behavior, 16: 282-298.

Triandis, H., 1995. Individualism and Collectivism. Boulder, CO: Westview.

Triandis, H., and T.M. Singelis, 1998. Training to recognize individual differences in collectivism and individualism within culture. International Journal of Intercultural Relations, 22(1): 35-47.

Triandis, H., and E. Suh, 2002. Cultural Influences on Personality. Annual Review of Psychology, 53: 133-160.

Van Der Vyver, G., 2009. The Search for the Adaptable ICT Student. Journal of Information Technology Education, 8: 19-28.

Whyte, W.F., 1972. Strategies of research. In Turner, Filley & House (Eds.), *Studies in managerial process and organizational behavior*. Glenview, Illinois: Scott Foresman and Company.

WorldBank, 2014. Malaysia Overview. (26 April 2014). Retrieved from http://www.worldbank.org/en/country/malaysia/overview