

Interlinkages between career development, career needs, career satisfaction and career commitment: Case study of a military-oriented tertiary educational institution in Malaysia

Azman Ismail¹, Nurrul Hayati Adnan¹, Abd Hair Awang², Nazatul Shima Abdul Rani³, Yusof Ismail³

¹Faculty of Economics & Management, Universiti Kebangsaan Malaysia, ²Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, ³Faculty of Economics & Management Sciences, International Islamic University Malaysia

Correspondence: Abd Hair Awang (email: hair@ukm.edu.my)

Abstract

In organizational contexts, career development programmes refer to how employers design and administer career programmes to tie up employees' interests and capabilities with organizational opportunities for current and future organizational adjustment to changes. The programmes motivate employees to choose occupations or professions not only to obtain salaries but also to progress in their career paths. This study was conducted to examine the relationship between career development programmes, perceived career needs, career satisfaction and career commitment in a military-oriented tertiary educational institution in Malaysia. A convenience sampling technique was adopted and questionnaires were administered to 200 employees of this institution's departments/faculties. Semi-structured interviews were also conducted involving four senior HR managers and supporting staff of the institution's human resource department. The SmartPLS path model analysis was employed to test the research hypotheses and outcomes of the test confirmed that perceived career needs did act as an important mediating variable in the relationship between career programmes, career satisfaction and career commitment in the organization.

Keywords: career commitment, career development, career needs, career satisfaction, human resource, SmartPLS path model

Introduction

In an organizational context, career development programme is generally viewed as a critical human capital management function (Ismail et al., 2013; Noe, 2014; Wilkens & Nermerich, 2011) that refers to how employer designs and administers career programmes to tie up employees' interests and capabilities with organizational opportunities for current and future organizational adjustment to changes. The programme will motivate employees to choose occupations or professions not only to obtain salaries, but also to earn a better progress in their career paths (Baruch, 2004; Greenhaus et al., 2000; Martin et al., 2001; Theodossiou & Zangelis A., 2009). A review of current literature pertaining to human capital development shows that career programme consists of two salient features which are career planning and career management (Conger, 2002; Nachbagauer et al., 2002; Post et al., 2007). By definition, career planning involves on going planning of career programme activites for employees using proper assessment tools (e.g., vocational counseling, workbooks and/or career resource centre) in order to identify career options and preferences to set up development objectives and establish action plans to help employees match their interests and capabilities with organizational opportunities (Appelbaum & Shapiro, 2002; Greenhaus et al., 2000; Noe et al., 2014; Puah & Ananthram, 2006). Conversely, career management involves administration of continuous monitoring of career programme activities to enable employees to easily adapt to organizational changes (e.g., turbulent working environment, job stability

and security, flexible work practice and multi skilling) and achieve higher career progress in the organization (Greenhaus et al., 2000; Martin et al., 2001; Whymark & Ellis, 1999).

In-depth studies of the organizational career programme revealed that the ability of administrators to properly plan and manage career programmes may have a significant impact on career outcomes, especially career satisfaction (Wilkens & Nermerich, 2011; Ismail et al., 2013), and career commitment (Ferreira et al., 2007; Hirschi, 2009). From an organizational behavior perspective, career satisfaction is normally interpreted as a form of behavior towards work conditions, employees' judgment, employees process of thoughts on their jobs, facets or aspects (Linz, 2003; Weiner, 1982), individuals' positive emotional state, pleasurable feelings and/or attitudes towards job resulting from their appraisals on the extrinsic and intrinsic job characteristics (Appelbaum & Shapiro, 2002; Gregson, 1987; Linz, 2003; McShane & Von Glinow, 2005). However, career commitment is usually interpreted as high level of willingness to attach, identify and involve in achieving their career goals (Chen et al., 2004; Herr, 2001; Noe et al., 2014).

Interestingly, a detailed review of current organizational career literature reveals that the impact of career programme on career outcomes is indirectly affected by the meeting employees' career needs. From a human capital development perspective, perceived career needs is often interpreted as individuals' perception that career programmes initiated by administrators are beneficial to enhance employee career paths in organizations (Chen et al., 2004; Ismail et al., 2011; Noe et al., 2014; Puah & Ananthram, 2006). The ability of administrators to appropriately plan and manage career programmes based on job needs and expectations will fulfill employees' career needs. Consequently, this may lead to induced positive career outcomes, specifically career satisfaction (Chen et al., 2004; Ismail et al., 2013; Puah & Ananthram, 2006), and career commitment (Adekola, B., 2011; Ismail et al., 2013; Puah & Ananthram, 2006).

Most researchers think that career planning, career management, perceived career needs, career satisfaction and career commitment are strongly interrelated concepts of workplace career programme model. The ability of administrators to appropriately plan and manage career programmes based on job needs and expectations will help employees to fulfill career needs. As a result, it may lead to enhanced positive career outcomes, especially career satisfaction and career commitment. Even though the nature of this relationship is interesting, the role of perceived career needs as an important mediating variable has been ignored in the workplace, career researches (Adekola, 2011; Ismail et al., 2013). Most scholars argued that this condition is due to the previous studies that discussed the internal properties of career programme by employing a simple correlation analysis method to describe respondent attitudes toward dimensions of general career programme, and assess the degree of association between career programme and specific career outcomes, which fail to measure the effect between career programme, perceived career needs and career outcomes in the workplace (Hirschi, 2009; Theodossiou & Zangelis, A., 2009; Wilkens & Nermerich, 2011). Hence, these studies have not provided sufficient useful findings and unable to assist practitioners in clearly understanding the complexity of career programme in order to design strategic action plans that are able to fit with highly volatile organizations in the era of a borderless world (Adekola, B., 2011; Ismail et al., 2013). This stimulates the authors to further discover the true nature of this relationship.

Aim of study

This study has four major objectives: first, to examine the relationship between career programme and career satisfaction. Second, to examine the relationship between career programme and career commitment. Third, to examine the relationship between career programme, perceived career needs and career satisfaction. Finally, to examine the relationship between career planning, perceived career needs and career commitment. The structure of this study highlights five important issues: literature review, research methodology, findings, and discussion and implications as well as conclusion.

Literature review

This section provides theoretical and empirical evidences supporting two major relationships: first, between career programme and career needs; second, between career programme, perceived career needs, career satisfaction and career commitment.

a) Relationship between career programme and career outcomes

Many previous studies examined organizational career development programme using an indirect effects model. They used 445 respondents in Portugal (Ferreira et al., 2007), 330 Swiss eighth graders in Switzerland (Hirschi, 2009), 5500 households taken from British Household Panel Survey (Theodossiou, I., & Zangelis, A., 2009), 620 students from Portuguese school system (Janeiro, 2010), 13 in-depth interviews with workers from knowledge intensive working context (Wilkens & Nermerich, 2011), and 140 employees in a Sabah local government in Borneo (Ismail et al., 2013). The results of these surveys reported two important findings: first, the ability of administrators to properly plan (e.g., set up goals and policies) and manage (e.g., monitoring the progression of employees in career paths) career programmes was found to motivate employees to enhance their career satisfaction (Theodossiou, I., & Zangelis, A. 2009; Wilkens & Nermerich, 2011; Ismail etal., 2013) and career commitment (Ferreira et al., 2007; Hirschi, 2009). Thus, it was hypothesized that:

- H1: Career planning is positively related to career satisfaction
- H2: Career management is positively related to career satisfaction
- H3: Career planning is positively related to career commitment
- H4: Career management is positively related to career commitment

b) Relationship between career programme, perceived career needs and career outcomes

Studies on organizational career programme were using an indirect effects model. They used different samples, such as 367 R&D personnel from Hsinchu Science-based Industrial Park in north Taiwan (Chen et al., 2004), 505 employees of a leading international Singaporean hotel in Singapore (Puah & Ananthram, 2006), employees of Nigerian Banks (Adekola, 2011), and 140 employees in Sabah local government (Ismail et al., 2013). The results of these surveys reported two important findings: first, the ability of administrators to properly plan career programmes (e.g., set up goals and policies) and manage career programmes (e.g., monitoring the progression of employees in career paths) based on perceived career needs and expectations had fulfilled employees' career needs. Consequently, this could lead to greater employees' career satisfaction (Chen et al., 2004; Ismail et al., 2013; Puah & Ananthram, 2006), and higher career commitment (Adekola, B., 2011; Chen et al., 2004; Ismail et al., 2013; Puah & Ananthram, 2006).

Herzberg's (1959,1966) motivator-hygiene theory posits that work characteristics as important factors that enhance individual motivations. While, Alderfer's (2002) Existence, Relatedness and Growth theory explain that perceived career needs are essential factors that enhance individual motivations. Further, McClelland's (1962) learned needs theory highlights that need for achievement, need for affiliation and need for power serve as important predictors of individual motivations. Application of these theories in a career programme model reveals that the ability of administrators is important to appropriately plan and manage career programmes based on career needs and expectations (Alderfer, 2002; Herzberg, 1959,1966; McClelland, 1962) will fulfill employees' career needs. This may lead to greater career satisfaction (Chen et al., 2004; Ismail et al., 2013; Puah & Ananthram, 2006), and career commitment (Adekola, B., 2011; Ismail et al., 2013; Puah & Ananthram, 2006). Therefore, it was hypothesized that:

- H5: Relationship between career planning and perceived career needs gives positive impact on job career satisfaction.
- H6: Relationship between career management, and perceived career needs gives positive impact on career satisfaction.

- H7: Relationship between career planning, career needs gives positive impact on career commitment.
- H8: Relationship between career management and perceived career needs gives positive impact on career commitment.

Methodology

a) Research design

This study employed a cross-sectional research design because the design allows the researchers to integrate the organizational career literature, the unstructured interview, the pilot study and the actual survey for data gathering purposes. As suggested by prominent researchers (Cresswell, 1998; Sekaran, 2000), this method is able to gather accurate, less biased and high quality data for social science research. The location of this study was a defence oriented tertiary educational institution in Malaysia. At the initial stage of this study, survey questionnaire was drafted based on the workplace career programme literature. Semi-structured interviews were conducted involving two experienced HR managers and two experienced supporting staff in the human resource department of a defense oriented tertiary educational insitution. The information gained from the interview method helped the researchers to understand the specific aspects of the subject matter. After that, a pilot study was conducted by discussing the survey questionnaire with the interviewed participants in order to verify the content and format of the questionnaire. Hence, a back translation technique was employed to translate the finalized survey questionnaires into Malay and English versions in order to enhance the validity and reliability of the research instrument (Hulland, 1999; Sekaran, 2000).

b) Measures

The survey questionnaire consisted of four major sections; first, career planning (CPL) with four items and career management (CMG) with three items that were adapted from career programme literature (Hirschi, 2009; Ismail et al., 2013; Janeiro, 2010; Theodossiou & Zangelis, 2009; Wilkens & Nermerich, 2011). The dimensions used to measure CPL are design, goal and interest. While, the dimensions used to measure CMG) are assistance, opportunity and appraisal). Second, perceived career needs (PCN) with three items were adapted from career development support literature (Chen et al., 2004; Herr, 2001; Ismail et al., 2013; Jepsen & Dickson, 2003; Puah & Ananthran, 2006). The dimensions used to measure PCN are expectation and support. Third, career satisfaction (CST) with seven items were adapted from career satisfaction literature (Chen et al., 2004; Hackman & Oldham, 1980; Ismail et al., 2013; Linz, 2003; Nachbagauer & Riedl, 2002). The dimensions used to measure CST are responsibility, recognition, freedom and task variety. Fourth, career commitment (COM) with five items that were adapted from career commitment literature (Chen et al., 2004; Colarelli & Bishop, 1990; Nachbagauer & Riedl, 2002). The dimensions used to measure COM are valuable, inspiration, caring and pride. All these items were measured using a 7-item scale ranging from "strongly disagree/dissatisfied" (1) to "strongly agree/satisfied" (7). This study highlights employee attitudes toward CPL, CMG, PCN, CST and COM whereas demographic variables were only used as control variables.

c) Sample

A convenience sampling technique was employed to distribute 200 survey questionnaires to employees who work in all departments/faculties of the studied organization. The convenient sampling technique was selected because the list of registered employees was not provided to the researchers for confidential reasons, and this condition did not allow the researchers to randomly choose participants in this study. From the survey questionnaire distributed, 92 usable questionnaires were only returned to the researchers,

yielding a 46 percent response rate. The survey questionnaires were answered by participants based on their consent and on voluntarily basis. The number of this sample meets the requirement of probability sampling technique, showing that it can be analyzed using inferential statistics (Sekaran, 2000; Leedy & Omrod, 2005).

d) Data analysis

The statistical package SmartPLS version 2.0 was employed to analyze the survey questionnaire data because it is able to produce latent variable scores, avoid small sample size problems, estimate every complex model with many latent and manifest variables, do away with hassle-stringent assumptions about the distribution of variables and error terms, as well as handle both reflective and formative measurement models (Henseler et al., 2009). The package's confirmatory factor analysis was used to determine the validity and reliability of the instrument and test the hypothesized model. The results of SmartPLS path analysis can demonstrate clearly the important relationship between the independent variable and dependent variable if the value of t statistic larger than 1.96. While, the value of R² is used as an indicator of the overall predictive strength of the model. The value of R² is interpreted according to the specifications: 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998).

Further, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzels et al.'s (2009) global fit measure. This outcome confirms that the PLS path model has better explainatory power in comparison with the baseline values (GoF small=0. 1, GoF medium=0. 25, GoF large=0. 36). If the results of testing hypothesized model are greater than the cutoff value of 0.36 for large effect sizes of R², then they adequately support the PLS path model globally.

Results

a) Respondent characteristics

Referring to Table 1 on respondent characteristics, it showed that the distribution between male and females is dispersed. However, statistics for age (32 years old and below, 72.8%), and length of service (5 years and less, 88%) was skewed toward the lower end of the scales. Whereas, for education at the highest end (Diploma and Degree, 69.5%) and income, the middle range (RM3000 – 1,000, 70.6%) dominates. From the pattern, it showed that most of the respondents can be assumed as young, fresh graduates and at their early career stage because in Malaysia income ranging from RM1,000 – RM3,000 reflect fresh graduate level. In short, the confirming evidence can be seen from the years of service, whereby 88% of the respondents reflect 5 years and less working experience.

Respondent Characteristics	Sub-Profile	Percentage	
Gender	Male	52.2	
	Female	47.8	
	< 27 years old	25.0	
	28 to 32 years old	47.8	
Age	33 to 37 years old	19.6	
	38 to 42 years old	3.3	
	> 43 years old	4.3	
	Degree	30.4	
Education	Diploma	39.1	
	STPM	12.0	
	SPM	18.5	

Table 1. Respondent characteristics

Respondent Characteristics	Sub-Profile	Percentage
	1 to 5 years	88.0
Length of Service	6 to 10 years	8.7
	11 to 15 years	1.1
	16 to 20 years	2.2
	< RM800	4.3
	RM801 to 1000	8.7
	RM1001 to 2000	41.3
Monthly Salary	RM2001 to 3000	29.3
	RM3001 to 4000	9.8
	RM4001 to 5000	5.4
	> RM5000	1.1

Note:

SPM/MCE: Sijil Pelajaran Malaysia/ Malaysia Certificate of Education STPM/HSC: Sijil Tinggi Pelajaran Malaysia/Higher School Certificate

RM: Malaysian Ringgit

b) Validity and reliability of the instrument

A confirmatory factor analysis was employed to determine the validity and reliability of the instrument. Table 2 shows the results of convergent and discriminant validity analyses. All constructs had the values of the average variance extracted (AVE) larger than 0.5, indicating that they met the acceptable standard of convergent validity (Barclay et al., 1995; Fornell & Larcker, 1981; Henseler et al., 2009). All constructs which had the diagonal values of $\sqrt{\text{AVE}}$ greater than the squared correlation with other constructs in off the diagonal, showing that all constructs met the acceptable standard of discriminant validity (Henseler et al., 2009).

Table 2. The results of convergent and discriminant validity analyses

Construct	AVE	CPL	CMG	PCN	CST	COM
CPL	0.6369	0.7981				
CMG	0.7535	0.4548	0.8680			
PCN	0.8037	0.4874	0.6417	0.8965		
CST	0.7747	0.2612	0.7163	0.6114	0.8802	
COM	0.7279	0.3259	0.6382	0.7031	0.6726	0.8532

Table 3 shows the factor loadings and cross loadings for different constructs. The correlation between items and factors had higher loadings than other items in the different constructs. The variables loaded more strongly on their own constructs in the model, exceeding the specified minimum, 0.7 (Chin, 1998; Fornell & Larcker, 1981; Gefen & Straub, 2005). This result showed that the measurement model met the acceptance criterion of validity analysis.

Table 3. The results of factor loadings and cross loadings for different constructs

Construct/Item	CPL	CMG	PCN	CST	COM
CPL					
CPL1	0.705246	0.270745	0.189641	0.273224	0.249775
CPL2	0.811515	0.235951	0.306569	0.210761	0.173536
CPL3	0.903551	0.431009	0.511613	0.233898	0.320134
CPL4	0.758527	0.440893	0.417642	0.161298	0.273426

Construct/Item	CPL	CMG	PCN	CST	COM
CMG					
CMG1	0.299704	0.911775	0.634566	0.718069	0.655678
CMG2	0.310703	0.876647	0.477711	0.640633	0.506582
CMG3	0.583239	0.812739	0.538527	0.494305	0.478791
PCN					_
PCN1	0.435332	0.524414	0.873913	0.501392	0.651305
PCN2	0.432583	0.513031	0.914519	0.488262	0.616808
PCN3	0.441767	0.673467	0.900495	0.640607	0.622959
CST					
CST1	0.368795	0.610461	0.518133	0.852927	0.498362
CST2	0.295576	0.707373	0.496874	0.830439	0.549667
CST3	0.113169	0.569546	0.488538	0.910326	0.615459
CST4	0.239079	0.676942	0.648141	0.908407	0.634028
CST5	0.154204	0.654347	0.520116	0.909349	0.658816
CST6	0.287943	0.586908	0.508719	0.853927	0.581906
CST7	0.152820	0.600544	0.555830	0.892068	0.597717
COM					
COM1	0.173364	0.462839	0.462412	0.536384	0.799364
COM2	0.149198	0.484576	0.492013	0.585224	0.866580
COM3	0.265549	0.620627	0.655604	0.630008	0.926576
COM4	0.429213	0.569554	0.639342	0.567196	0.843706
COM5	0.353219	0.584077	0.758992	0.591195	0.820413

Table 4 shows the results of reliability analysis for the instrument. The composite reliability and Cronbach's Alpha had values greater than 0.8, indicating that the instrument used in this study had high internal consistency (Henseler et al., 2009; Nunally & Benstein, 1994).

Table 4. Composite Reliability and Cronbach's Alpha

Construct	Composite Reliability	Cronbach Alpha
CPL	0.874339	0.817777
CMG	0.901457	0.835871
CST	0.924669	0.877953
COM	0.960065	0.951342

Analysis of the constructs

Table 5 presents the results of Pearson correlation analysis and descriptive statistics. The mean values of the variables range between 5.0 and 5.8, signifying that the levels of career planning, career management, perceived career needs, career satisfaction and career commitment ranging from high (4) to highest (7). The correlation coefficients for the relationship between the independent variable (i.e., career planning and career management) and the mediating variable (i.e., perceived career needs), and the relationship between the mediating variable (i.e., perceived career needs) and the dependent variable (i.e., career satisfaction and career commitment) were less than 0.90, showing that the data were not affected by serious collinearity problem (Hair et al., 1998). Further, these statistical results confirm that the constructs used in this study met the acceptable standards of validity and reliability analyses.

Construct	Mean	Standard Deviation		Pearson Correlation Analysis			
			1	2	3	4	5
1. CPL		5.8 0.73	1				
2. CMG		5.2 1.08	.44**	1			
3. PCN		5.1 1.26		.63**	1		
4. CST		5.1 1.24	.27**	.71**	.61**	1	
5. COM	4	5.0 1.26	.32**	.63**	.70**	.68**	1

Table 5. Pearson correlation analysis and descriptive statistics

Note: Significant at **p<0.01

Reliability estimation for all constructs is shown in a diagonal

Outcomes of testing hypotheses 1 and 2

Figure 1 presents the results of SmartPLS path model analysis. In terms of explanatory model, the inclusion of CPL and CMG in the model analysis had explained 53 percent of the variance in CST. Specifically, the outcomes of testing research hypothesis showed two important findings: first, CPL is positively and insignificantly correlated with CST (β =-0.01; t=0.09), therefore H1 was not supported. Second, CMG is positively and significantly correlated with CST (β =0.73; t=10.66), therefore H2 was supported. Overall, this result confirms that career planning does not act as an important predictor of career satisfaction whereas career management does act as an important predictor of career satisfaction in the studied organization.

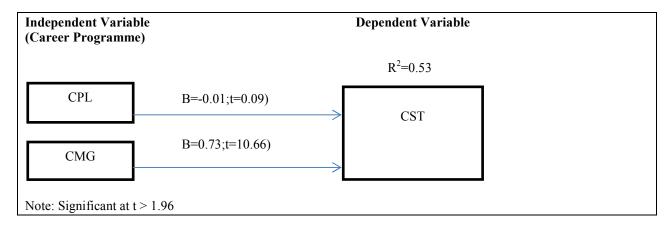


Figure 1. Outcomes of SmartPLS Path Model Analysis

In order to determine a global fit of PLS path modeling, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: GoF=SQRT{MEAN (Communality of Endogenous) $x \in \mathbb{R}^2$ (R²)}=0.38, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R². It therefore provides adequate support to validate the PLS model globally (Wetzel et al., 2009).

Outcomes of testing hypotheses 3 and 4

Figure 2 presents the results of SmartPLS path model analysis. In terms of explanatory model, the inclusion of CPL and CMG in the model analysis had explained 53 percent of the variance in COM. Specifically, the outcomes of testing research hypothesis showed two important findings: first, CPL positively and insignificantly correlated with COM (β =0.06; t=0.54), therefore H3 was not supported. Second, CMG positively and significantly correlated with COM (β =0.61; t=8.46), therefore H4 was supported. In sum, this result confirms that career planning does not act as an important predictor of

career commitment, but career management does act as an important predictor of career commitment in the studied organization.

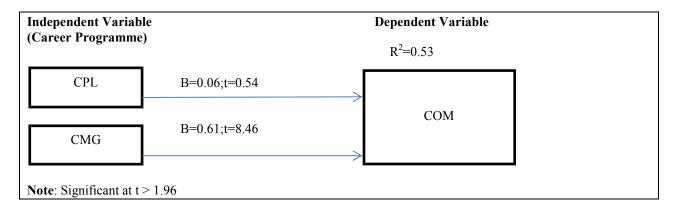


Figure 2. Outcomes of SmartPLS Path Model Analysis

In order to determine a global fit PLS path modeling, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: GoF=SQRT{MEAN (Communality of Endogenous) x MEAN (R²)}=0.40, indicating that it exceeds the cutoff value of 0.36 for large effect sizes of R². It also provides adequate support to validate the PLS model globally (Wetzel et al., 2009).

Outcomes of testing hypotheses 5 and 6

Figure 3 presents the results of SmartPLS path model analysis. In terms of explanatory model, the inclusion of CPL and CMG in the model analysis had explained 38 percent of the variance in CST. Specifically, the outcomes of testing research hypothesis showed that the relationship career programme (i.e., CPL and CMG) and PCN was positively and significantly correlated with CST (β =0.61; t=7.62), therefore H5 and H6 were fully supported. In sum, this result confirms that perceived career needs does act as an important mediating variable in the relationship between career programme and career satisfaction in the organizational sample.

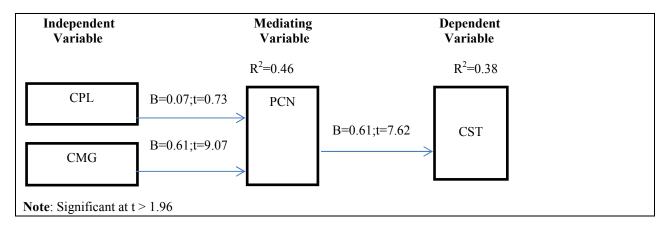


Figure 3. Outcomes of SmartPLS Path Model Analysis

In order to determine a global fit PLS path modeling, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: GoF=SQRT{MEAN (Communality of Endogenous) x MEAN (R²)}=0.53, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R². It also provides adequate support to validate the PLS model globally (Wetzel et al., 2009).

Outcomes of testing hypotheses 7 and 8

Figure 4 presents the results of SmartPLS path model analysis. In terms of explanatory model, the inclusion of career planning and career management in the model analysis had explained 49 percent of the variance in career commitment. Specifically, the outcomes of testing, research hypothesis showed that the relationship between career programme (i.e., CPL and CMG) and PCN was positively and significantly correlated with COM (β =0. 70; t=11.63), therefore H7 and H8 were fully supported. In sum, this result confirms that perceived career needs does act as an important mediating variable in the relationship between career programme and career commitment in the organizational sample.

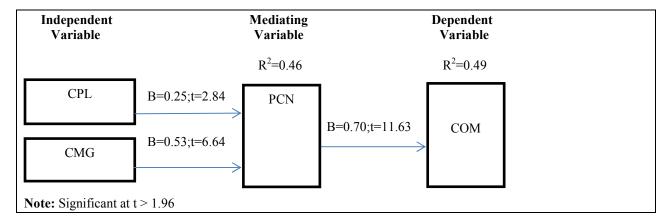


Figure 4. Outcomes of SmartPLS Path Model Analysis

In order to determine a global fit PLS path modeling, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: GoF=SQRT{MEAN (Communality of Endogenous) x MEAN (R²)}=0.60, indicating that it exceeds the cutoff value of 0.36 for large effect sizes of R². It also provides adequate support to validate the PLS model globally (Wetzel et al., 2009).

Discussion and implications

In the context of this study, the majority of the respondents perceives that the levels of career planning (CPL), career management (CMG), perceived career needs (PCN), career satisfaction (CST) and career commitment (COM) are high. This situation posits that the ability of administrators to appropriately plan and manage career programmes based on job needs and expectations have fulfilled employees' career needs. As a result, it may lead to greater career satisfaction and career commitment in the organization. One of the significant contributions of this study, is that it confirmed that perceived career needs played important roles as a critical mediating variable in the relationship between career programme (career planning and career management) and career outcomes (career satisfaction and career commitment) in the organization.

This study provides three important implications: theoretical contribution, efficacy of research methodology, and practical contribution. In terms of theoretical contribution, the results of this research revealed two important findings; first, linking career programme (i.e., planning and management) to perceived career needs has been an important predictor of career satisfaction in the studied organization. This result also has supported and extended empirical studies by Chen et al. (2004), Puah and Ananthram (2006) and Ismail et al, 2013. Second, linking career programme (i.e., planning and management) to perceived career needs has been an important predictor of career commitment in the studied organization. This result also has supported and broadened empirical studies by Chen et al. (2004), Puah and Ananthram (2006), Adekola (2011), and Ismail et al, (2013). With respect to the efficiency of research

methodology, the survey questionnaires used in this study have satisfactorily met the criteria of validity and reliability analyses. This may lead to produce accurate and reliable research findings.

Concerning practical contributions, the findings of this study may be used as useful recommendations by administrators to strengthen the management of career programmes in organizations. In order to achieve this objective, management needs to pay attention on the following aspects: first, senior administrators should be encouraged to coach and mentor junior managers, executives and supervisors in using the right ways to meet their organizational key performance indicators. Second, in house training content and methods should be updated in order to enhance employees' new competencies in achieving their job goals. Third, performance appraisal should be appropriely designed to measure employee performance and provide adequate reward for competent employees. Finally, recruitment and selection policies should be oriented to find talented candidates to fulfil critical and important management positions, and their expertises may be used to enhance employees' career advancemence. If organizations heavily consider these suggestions it may motivate employees to support workplace career goals.

Conclusion

This study tested a conceptual schema based on the workplace career programme research literature. The measurement scale used in this study satisfactorily met the standards of validity and reliability analyses. The results of SmartPLS path model analysis showed that linking career programme (i.e., planning and management) to perceived career needs was significantly correlated with career satisfaction and career commitment, therefore H5, H6, H7 and H8 were fully supported. This result demonstrates that the willingness of administrators to properly plan and manage career programmes based on job needs and expectations will help employees to fulfil career needs, which in turn, may lead to greater career satisfaction and career commitment in the studied organization. Thus, current research and practice in the human capital development models need to consider career planning and career management as critical success factors of the workplace career programme domain for the young workforce in Malaysia in general. Hence, this research further suggests that the capability of administrators to appropriately plan and manage career programmes based on job needs and expectations will induce subsequent positive attitudinal and behavioral outcomes (e.g., proactive, performance, fairness, trust and ethics). These positive outcomes in turn may lead to sustained and enhanced organizational performance in a highly volatile and ever changing business environment.

This study has certain limitations: first, the data was only taken using a cross-sectional research design where it did not reflect detail developmental issues in the studied population. Second, this study only examined the correlation between latent variables and the results of this study could not specify the correlation between specific dimensions for the independent variable, mediating variable, and dependent variable. Third, this study only focused on two dimensions of workplace career namely planning and management. Fourth, This study only emphasisis on two career outcomes that is career satisfaction and career commitment. Finally, the sample for this study was taken using a convenience sampling technique in a government owned university. The above limitations may decrease the ability to generalize the results of this study to other organizational settings.

There are a number of suggestions to strength future research in this area: first, the organizational and personal characteristics should be further explored in measuring the effectiveness of workplace career programme. If organizational and personal characteristics are used in research (e.g., type of organization, sex, age and position), this may provide significant viewpoints for understanding the individual differences and similarities that affect career outcomes. Second, longitudinal studies should be used as an alternative to cross-sectional research design because it able to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Third, the findings of this study may produce better results if the study is carried out in more than one organization. Fourth, other important dimensions of career programme such as personal learning, career appraisal and

career training should be considered, because they have been widely recognized as important determinants of career outcomes (Gong et al., 2014; Konga et al., 2011).

Fifth, as an extension of career needs, other theoretical constructs of mediating variable such as career choice, professional adaptation and mentoring are important dimensions that should be considered, because they have been widely recognized as important links between career programme and career outcomes (Gong et al., 2014; Halperin & Mashiach-Eizenberg, 2014). Finally, besides career satisfaction and career commitment, other attitudinal and behavioral outcome constructs that are found to be important in the workplace career research literature need to be examined, such as proactive behaviour and career development (Crant, 2000; Gong et al., 2014). The importance of these issues needs to be further elaborated in future research.

References

- Adekola B (2011) Career planning and career management as correlates for career development and job satisfaction: A case study of Nigerian bank employees. *Australian Journal of Business and Management Research* 1(2), 100-112.
- Alderfer CP (2002) Existence, relatedness, and growth: Human needs in organizational settings. Free Press, New York.
- Appelbaum SH, Shapiro BT (2002) Career management in information technology: A case study. *Career Development International* 7(3), 142-158.
- Barclay DW, Higgins CA, Thompson RL (1995) The partial least squares (PLS) approach to causal modeling: Personal computer adaptation and use an illustration. *Technology Studies* 1(2), 285-324.
- Baruch Y (2004) Transforming careers: From linear to multidirectional career paths-organizational and individual perspectives. *Career Development International* **9**(1), 58-73.
- Chen TY, Chang PL, Yeh CW (2004) A study of career needs, career development programmes, job satisfaction and the turnover intentions of R&D personnel. *Career Development* International **9**(4), 424-437.
- Chin WW (1998) The Partial Least Squares approach to Structural Equation Modelling. In: Hoyle RH (eds) *Statistical strategies for small sample research*, pp.307-341. Sage Publication, Inc., California.
- Colarelli SM, Bishop RC (1990) Commitment with career choice-functions, correlates and management. *Group & Organization Studies* **15**(2), 158-176.
- Conger S (2002) Fostering career a development culture: Reflections on the roles of managers, employees and supervisors. *Career Development International* **7**(6), 371-375.
- Crant JM (2000) Proactive Behavior in Organizations. *Journal of Managemen*, **26**(3), 435-462.
- Cresswell JW (1998) Qualitative inquiry and research design: Choosing among five traditions. SAGE publications, London.
- Fornell C, Larker DF (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* **18**(1), 39-50.
- Ferreira JA, Santos E, Fonseca AC, Haase RF (2007) Early predictors of career development: A 10-year follow-up study. *Journal of Vocational Behavior* **70**(1), 61-77.
- Gefen D, Straub D (2005) A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communication of the Association for Information Systems* **16**, 91–109.
- Gong RW, Chen SY, Yang ML (2014) Career outcome of employees: The mediating effect of mentoring. *Social Behavior & Personality: An International Journal* **42**(3), 487-501.
- Greenhaus JG, Callanan GA, Godshalk VM (2000) Career management. The Drydent Press, New York.
- Gregson T (1987) Factor analysis of multiple-choice format for job satisfaction. *Psychological Reports*, **61**, 747 50.
- Hackman JR, Oldham GR (1980) Work design. Addison-Wesley, Reading, MA.
- Hair JF, Anderson RE, Tatham RL, Black WC (1998) *Multivariate data analysis*. Prentice Hall International, Inc., New Jersey.

- Henseler J, Ringle CH, Sinkovics RR (2009) The use of partial least squares path modeling in international marketing. *New Challenges to International Marketing Advances in International Marketing* **20**, 277-319.
- Herr EL (2001) Career development and its practice: A historical perspective. The Career Development Quarterly 49(3), 196-211.
- Herzberg F (1966) Work and the nature of man. World Publishing Company, Cleveland.
- Herzberg F, Mausner B, Snyderman B (1959) The motivation to work. Wiley, New York.
- Hirschi A (2009) Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior* **74**(2), 145-155.
- Hulland J (1999) Use of Partial Least Square (PLS) in strategic management research: A Review of four recent studies. *Strategic Management Journal* **20** (2), 195-204.
- Ismail A, Daud NG, Madrah H (2011) Relationship between career programme characteristics and job satisfaction in a city based local authority. Scientific Annals of the "Alexandru Ioan Cuza" University of Iasi, *Economic Sciences section The Romanian Economic Journal* LVIII, 269-280.
- Ismail A, Madrah H, Aminudin N, Ismail Y (2013) Mediating role of career development in the relationship between career programme and personal outcomes. *Makara, Seri Sosio Humaniora*, **17**(1), 43-54.
- Janeiro IN (2010) Motivational dynamics in the development of career attitudes among adolescents. Journal of Vocational Behavior **76**(2), 170-177.
- Jepsen DA, Dickson GL (2003) Continuity in life span career development: Career exploration as a precursor to career establishment. *Career Development Quarterly* **51**(3), 217-233.
- Konga H, Cheung C, Song H (2011) Hotel career management in China: Developing a measurement scale. *International Journal of Hospitality Management* **30**, 112–118.
- Leedy PD, Ormrod JE (2005) Practical research: Planning and design. Prentice Hall, Upper Saddle River, NJ.
- Linz SJ (2003) Job satisfaction among Russians workers. *International Journal of Manpower* **24**(6), 626-652.
- Martin AF, Romero FP, Valle CR, Dolan SL (2001) Corporate business Strategy, career management and recruitment: Do Spanish firms adhere to contingency model? *Career Development International*, **6**(3), 149-155.
- McClelland DC (1962) Business Drive and National Achievement. *Harvard Business Review*, July-August, 99–112.
- McShane SL, Von Glinow MA (2005) Organizational behavior. McGraw Hill, New York.
- Nachbagauer AGM, Riedl G (2002) Effects of concepts of career plateaus on performance, work satisfaction and commitment. *International Journal of Manpower* **23**(8), 716-733.
- Noe RA (2014) Employee training and development. McGraw-Hills Education, Singapore.
- Noe RA, Hollenbeck JH, Gerthartm B, Wright PM (2014) Fundamentals of human resource management. McGraw-Hill International Edition, New York.
- Nunally JC, Bernstein IH (1994) Psychometric theory. McGraw-Hill, New York.
- Post SC, Koch CR, Roberts CC (2007) Raising the bar: Addressing Job satisfaction through the development of an achievement-based career advancement programme. ADA FNCE 2007 Food & Nutrition Conference & Expo, A88.
- Puah A, Ananthram S (2006) Exploring the antecedents and outcomes of career development initiatives: Empirical evidence from Singaporean employees. *Research and Practice in Human Resource Management* **14**(1), 112-142.
- Sekaran U (2000) Research methods for bussiness: A skill building approach. John Wiley & Sons, Inc., New York.
- Theodossiou I, Zangelis A (2009) Career prospects and tenure-job satisfaction profiles: Evidence from panel data. *The Journal of Socio-Economics* **38**, 648-657.
- Whymark K, Ellis S (1999) Whose career is it anyway? Option for career management in flatter organization structures. *Career Development International* **4**(2), 117-120.

- Weiner Y (1982) Commitment in organizations: A normative view. *Academy of Management Review* 7, 418–428.
- Wetzels M, Odekerken-Schroder G., van Oppen C (2009) Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly* **33**(1), 177-195.
- Wilkens U, Nermerich D (2011) Love it, change it, or leave it understanding highly-skilled flexible workers' job satisfaction from a psychological contract perspective. *Management Revue* **22**(1), 65-84.