

Career Programs and Career Needs as Determinants of Career Effectiveness

Azman Ismail^{1*}, Nurrul Hayati Adnan¹, Wan Aishah Wan Mohd Nowalid²,
Nek Kamal Yeop Yunus³

¹Faculty of Economics & Management, Universiti Kebangsaan Malaysia

²Institut Islam Hadhari, Universiti Kebangsaan Malaysia

³Faculty of Management and Economics, Universiti Pendidikan Sultan Idris
Email: *azisma08@gmail.com

Abstract

Recent literature pertaining on human capital development highlights that career program consists of two salient elements: planning and management. The ability of management to appropriately plan and manage career programs will help to meet employees' career needs, and this situation may lead to enhanced career effectiveness. Although the nature of this relationship is interesting, the role of career needs as an important mediating variable is largely ignored in workplace career development model. Thus, this study was conducted to measure the correlation between career program, career needs and career effectiveness using self-report questionnaires gathered from employees at a Malaysian defense higher learning institution. The outcomes of SmartPLS path model analysis confirmed that fulfillment of career needs does act as an important mediating variable in the relationship between career program and career effectiveness in the organizational sample. Further, this study offers discussion, implications and conclusion.

Keywords Career planning, career management, job satisfaction, commitment with career choice

INTRODUCTION

Career program in organizational context is generally viewed as a crucial human capital management function (Ismail *et al.*, 2013; Wilkens & Nermerich, 2011). It refers to an employer's design and administration of career programs that link employees' interests and capabilities with organizational opportunities, as well as adjustment to current and future organizational changes. This initiative will motivate employees to select occupations or professions that not only due to salaries, but also to enjoy progress in their career paths (Baruch, 2004; Greenhaus *et al.*, 2000; Martin *et al.*, 2001; Theodossiou & Zangelis, 2009). A

review of current literature pertaining to human capital development shows that career program consists of two salient features: career planning and career management (Conger, 2002; Nachbagauer *et al.*, 2002; Post *et al.*, 2007).

Career planning is defined as administrators plan on current career program activities for their employees using proper assessment tools (e.g., vocational counseling, workbooks and/or career resource centre) in order to identify career options and preferences, setting up of development objectives and establishment of action plans to help employees match their interests and capabilities with organizational opportunities (Appelbaum & Shapiro, 2002; Greenhaus *et al.*, 2000; Mondy *et al.*, 2002; Puah & Ananthram, 2006).

Conversely, **career management** is usually defined as administrators continuous monitoring career program activities in order to enable employees to adapt themselves with organizational changes (e.g., turbulent working environment, job stability and security, flexible work practice and multi-skilling) and to achieve higher career ladders in organizations (Greenhaus *et al.*, 2000; Martin *et al.*, 2001; Whymark & Ellis, 1999).

Extant studies in the organizational career program reveal that the ability of administrators to properly plan and manage career programs may have a significant impact on employee outcomes, especially job satisfaction (Wilkins & Nermerich, 2011; Ismail *et al.*, 2013), and commitment with career choice (Ferreira *et al.*, 2007; Hirschi, 2009).

From organizational behavior perspective, **job satisfaction** is normally interpreted as a form of behavior towards work of conditions, employees' judgment and employees process of thoughts regarding with their jobs, facets or aspects (Linz, 2003; Mobley *et al.*, 1978; Weiner, 1982), individuals' positive emotional state, pleasurable feelings and/or attitudes towards job resulting from their appraisals about the extrinsic and intrinsic job characteristics (Appelbaum & Shapiro, 2002; Gregson, 1987; Linz, 2003; McShane & Von Glinow, 2005). On the other hand, **commitment with career choice** is usually interpreted as high level of willingness among individuals who attach, identify and involve in achieving their career goals (Chen *et al.*, 2004; Herr, 2001; Mondy *et al.*, 2002).

Surprisingly, a detailed review of current organizational career literature reveals that effect of career program on career effectiveness is indirectly contributed by meeting employees' career needs. From the perspective of a human capital development, **career needs** is often interpreted as individuals perception that career programs initiated by administrators are beneficial to enhance their career paths in organizations (Chen, Chang & Yeh, 2004; Ismail, Daud & Madrah, 2011; Mondy, Noe & Premeaux, 2002; Puah & Ananthram, 2006). For example, the ability of administrators to appropriately plan and manage career programs based on job needs and expectations will fulfill employees' career needs. Consequently, this may lead to induced positive career effectiveness like job satisfaction (Ismail *et al.*, 2013; Puah & Ananthram, 2006), and commitment with career choice (Andekola, 2011; Ismail *et al.*, 2013).

Within the workplace career program model, most researchers think that career planning, career management, career needs and commitment with career choice are distinct, but strongly interrelated concepts. For example, the

ability of administrators to appropriately plan and manage career programs based on job needs and expectations will help employees to fulfill career needs. As a result, this may lead to enhanced positive career effectiveness, especially job satisfaction and commitment with career choice. Even though the nature of this relationship is fascinating, the role of fulfillment of career needs as an important mediating variable has been ignored in the workplace career research literature (Andekola, 2011; Ismail *et al.*, 2013).

Many scholars argue that this condition is due to preoccupation of the previous studies on the internal properties of career program, employment of a simple correlation analysis method to describe respondent attitudes toward general career program dimensions, and assessment of the degree of association between career program and specific employee outcomes, as well as lack of attention to measure the effect size and nature of the correlation between career program, career needs and career effectiveness in the workplace (Hirschi, 2009; Theodossiou & Zangelisa, 2009; Wilkens & Nermerich, 2011). As a result, these studies have provided insufficient useful findings to assist practitioners in clearly understanding about the complexity of career program and designing strategic action plans that suit with highly competitive organizations in an era of global economy (Andekola, 2011; Ismail *et al.*, 2013). Thus, this situation stimulates the researchers to further discover the nature of the relationship among key variables.

OBJECTIVE OF THE STUDY

This study has four major objectives: first, to measure the relationship between career program and job satisfaction. Second, to measure the relationship between career program and commitment with career choice. Third, to measure the relationship between career program, career needs and job satisfaction. Fourth, to measure the relationship between career planning, career needs and commitment with career choice.

LITERATURE REVIEW

Correlation between Career Program and Career Effectiveness

Analysis of trends in many previous studies shows that researchers have been using an indirect effects model to examine organizational career program based on different samples, such as perceptions of 445 respondents in Portugal (Ferreira *et al.*, 2007), perceptions of 330 Swiss eighth graders in Switzerland (Hirschi, 2009), 5500 household taken from British Household Panel Survey (Theodossiou & Zangelisa, 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 programs had motivated employees to enhance their job satisfaction (Theodossiou & Zangelisa, 2009; Wilkens & Nermerich, 2011; Ismail *et al.*, 2013), and commitment with career choice (Ferreira *et al.*, 2007; Hirschi, 2009). In view of all these, the current study hypothesized that:

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

Correlation between Career Program, Career Needs and Career Effectiveness

In addition, several recent studies were done using an indirect effects model to investigate organizational career program based on different samples, like perceptions of 367 research and development 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 (Andekola, 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 programs (*e.g.*, set up goals and policies) and manage career programs (*e.g.*, monitoring the progression of employees in career paths) based on job needs and expectations had fulfilled employees' career needs. Consequently, it could lead to greater employees' job satisfaction (Chen *et al.*, 2004; Ismail *et al.*, 2013; Puah & Ananthram, 2006), and commitment with career choice (Andekola, 2011; Chen *et al.*, 2004; Ismail *et al.*, 2013; Puah & Ananthram, 2006).

The empirical studies support the underlying fundamentals of motivation theory. For example, 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 explains that job needs as 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 program model reveals that the ability of administrators to appropriately plan and manage career programs based on job needs and expectations (Alderfer, 2002; Herzberg, 1959, 1966; McClelland, 1962) will fulfill employees' career needs. As a result, it may lead to greater job satisfaction (Theodossiou & Zangelisa, 2009; Wilkens & Nermerich, 2011; Ismail *et al.*, 2013) and commitment with career choice (Ferreira *et al.*, 2007; Hirschi, 2009). Therefore, it was hypothesized that.

- H5: Relationship between career planning, career needs will positively impact job satisfaction.
- H6: Relationship between career management, career needs will positively impact job satisfaction.
- H7: Relationship between career planning, career needs will positively impact commitment with career choice.
- H8: Relationship between career management, career needs will positively impact commitment with career choice.

METHODOLOGY

This study employed a cross-sectional research design because the latter permits the researchers to integrate the organizational career literature, the unstructured interview, the pilot study and the actual survey as a main procedure to gather data. As suggested by prominent researchers (Cresswell, 1998; Sekaran, 2000), this set of methods is able to gather accurate, less bias and high quality data in social science research. The location of this study was a defense-oriented tertiary educational institution in Malaysia. At the initial stage of this study, survey questionnaire was drafted based on the workplace career program literature. Next, the semi-structured interview was conducted involving two experienced human resource managers and two experienced supporting staff in the human resource department of the organization. The information gained from the interview method helped the researchers to understand the features and nature of career planning, career management, career needs, job satisfaction, and commitment with career choice, as well as the correlation between such variables in the context of this study. 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 for an actual study. Subsequently, a back translation technique was employed to translate the survey questionnaires into Malay and English versions in order to enhance the validity and reliability of the research instrument (Hulland, 1999; Wright, 1996).

The survey questionnaire consisted of four major sections: first, career planning had four items; career management had three items that were adapted from career program literature (Hirschi, 2009; Ismail *et al.*, 2013; Janeiro, 2010; Theodossiou & Zangelis, 2009; Wilkens & Nermerich, 2011). The dimensions used to measure career planning are design, goal and interest. While, the dimensions used to measure career management are assistance, opportunity and appraisal. Second, career needs had three items that 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 career needs are expectation and support. Third, job satisfaction had seven items that were adapted from job satisfaction literature (Chen *et al.*, 2004; Hackman & Oldham, 1980; Ismail *et al.*, 2013; Linz, 2003; Nachbagauer & Riedl, 2002). The dimensions used to measure job

satisfaction are responsibility, recognition, freedom, and task variety. Fourth, commitment with career choice had five items that were adapted from career commitment literature (Chen *et al.*, 2004; Colarelli & Bishop, 1990; Nachbagauer & Riedl, 2002).

The dimensions used to measure commitment with career choice are valuable, inspiration, caring and pride. All these items were measured using a seven-item scale ranging from “strongly disagree/dissatisfied” (1) to “strongly agree/satisfied” (7). This study highlights employee attitudes toward career program, career needs and career effectiveness, thus demographic variables were only used as controlling variables.

A convenient sampling technique was employed to distribute 200 survey questionnaires to employees in all departments/faculties of the studied organization. This sampling technique was selected because the institution could not provide the list of registered employees 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, only 92 usable questionnaires were returned to the researchers, yielding a 46 percent response rate. Despite this, the sample size allows the researchers to use parametric statistical tests. The survey questionnaires were answered by participants based on their consent and a 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).

Further, the Smart PLS version 2.0 was recommended by Henseler *et al.*, (2009), and Ringle *et al.*, (2013) to assess the psychometric of survey questionnaire data and test the research hypotheses. This statistical package is very useful because it able to produce latent variable scores, avoids small sample size problems, estimate every complex model with many latent and manifest variables, 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).

RESULTS

Sample profile reveals that mostrespondent characteristics were males (52.2 percent), aged between 28 to 32 years old (47.8 percent), diploma holders (39.1), employees who have served from 1 to 5 years (88 percent), and employees who have monthly salaries from RM1001 to RM2000 (41.3 percent).

Table 1 Participant characteristics (N=92)

Participant Characteristics	Sub-Profile	Percentage
Gender	Male	52.2
	Female	47.8

Continue... (Table 1)

Age	< 27 years old	25.0
	28 to 32 years old	47.8
	33 to 37 years old	19.6
	38 to 42 years old	3.3
	> 43 years old	4.3
Education	Degree	30.4
	Diploma	39.1
	Higher School Certificate	12.0
	Malaysia Certificate of Education	18.5
Length of Service	1 to 5 years	88.0
	6 to 10 years	8.7
	11 to 15 years	1.1
	16 to 20 years	2.2
Monthly Salary	< RM800	4.3
	RM801 to 1000	8.7
	RM1001 to 2000	41.3
	RM2001 to 3000	29.3
	RM3001 to 4000	9.8
	RM4001 to 5000	5.4
	> RM5000	1.1

The outcomes of confirmatory factor analysis were shown in Tables 2 and 3. Table 2 shows the results of convergent and discriminant validity analyses. All constructs had the values of 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). In addition, all constructs had the diagonal values of $\sqrt{\text{AVE}}$ were greater than the squared correlation with other constructs in off 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	Career Planning	Career Management	Career Needs	Career Satisfaction	Commitment With Career Choice
Career Planning	0.6369	0.7981				
Career Management	0.7535	0.4548	0.8680			
Career Needs	0.8037	0.4874	0.6417	0.8965		

Continue... (Table 2)

Job Satisfaction	0.7747	0.2612	0.7163	0.6114	0.8802	
Commitment with Career Choice	0.7279	0.3259	0.6382	0.7031	0.6726	0.8532

Table 3 shows the validity and reliability of 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 shows that the measurement model met the acceptable criterion of validity analysis. While, the composite reliability and Cronbach's Alpha for all constructs had values greater than 0.8, signifying that the instrument had high internal consistency (Henseler *et al.*, 2009; Nunally & Benstein, 1994).

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

Construct/Item	Career Planning	Career Management	Career Needs	Job Satisfaction	Commitment With Career Choice	Composite Reliability	Cronbach Alpha
<u>Career Planning</u>							
CRP1	0.705246	0.270745	0.189641	0.273224	0.249775	0.874339	0.817777
CRP2	0.811515	0.235951	0.306569	0.210761	0.173536		
CRP3	0.903551	0.431009	0.511613	0.233898	0.320134		
CRP4	0.758527	0.440893	0.417642	0.161298	0.273426		
<u>Career Management</u>							
CRM1	0.299704	0.911767	0.634566	0.718069	0.655678	0.901457	0.835871

Continue... (Table 3)

CRM2	0.310703	0.876647	0.477711	0.640633	0.506582	0.924669	0.877953
CRM3	0.583239	0.812739	0.538527	0.494305	0.478791		
<u>Career Needs</u>							
CND1	0.435332	0.524414	0.873913	0.501392	0.651305		
CND2	0.432583	0.513031	0.914519	0.488262	0.616808		
CND3	0.441767	0.673467	0.900495	0.640607	0.622959		
<u>Job Satisfaction</u>							
JOS1	0.368795	0.610461	0.518133	0.852927	0.498362	0.960065	0.951342
JOS2	0.295576	0.707373	0.496874	0.830439	0.549667		
JOS3	0.113169	0.569546	0.488538	0.910326	0.615459		
JOS4	0.239079	0.676942	0.648141	0.908407	0.634028		
JOS5	0.154204	0.654347	0.520116	0.909349	0.658816		
JOS6	0.287943	0.586908	0.508719	0.853927	0.581906		
JOS7	0.152820	0.600544	0.555830	0.892068	0.597717		
<u>Commitment with Career Choice</u>							
CWC1	0.173364	0.462839	0.462412	0.536384	0.799364	0.929460	0.908270
CWC2	0.149198	0.484576	0.492013	0.585224	0.866580		
CWC3	0.265549	0.620627	0.655604	0.630008	0.926576		
CWC4	0.429213	0.569554	0.639342	0.567196	0.843706		
CWC5	0.353219	0.584077	0.758992	0.591195	0.820413		

Analysis of the Constructs

Table 4 presents the results of Pearson correlation analysis and descriptive statistics. The mean values for the variables are between 5.0 and 5.8, signifying that the levels of career planning, career management, career needs, job satisfaction and commitment with career choice 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.*, career needs), and the relationship between the independent variable (*i.e.*, career planning and career management) and the dependent variable (*i.e.*, job satisfaction and commitment with career choice) were less than 0.90, showing that the data were not affected by serious collinearity problem (Hair *et al.*, 1998). All constructs had the r values equal with 1 (as shown in the diagonal), indicating that the constructs met the acceptable criterion of reliability analysis. Further, these statistical results confirm that the constructs used in this study met the acceptable standards of validity and reliability analyses.

Table 4 Pearson correlation analysis and descriptive statistics

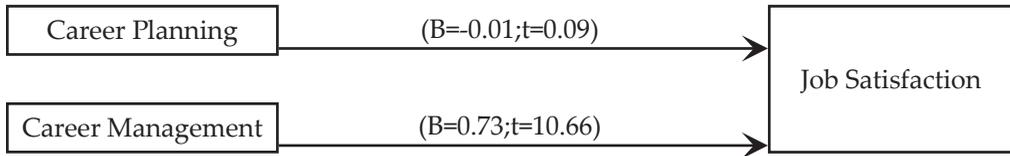
Construct	Mean	Standard Deviation	Pearson Correlation Analysis				
			1	2	3	4	5
1. Career Planning	5.8	.73	1				
2. Career Management	5.2	1.08	.44**	1			
3. Career Needs	5.1	1.26	.45**	.63**	1		
4. Job Satisfaction	5.1	1.24	.27**	.71**	.61**	1	
5. Commitment with Career Choice	5.0	1.26	.32**	.63**	.70**	.68**	1

Note: Significant at **p<0.01

Outcomes of Testing Hypotheses 1 and 2

Figure 1 presents the results of SmartPLS path model analysis. The value of R² is used as an indicator of the overall predictive strength of the model. It is interpreted as follows: 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998). In terms of explanatory power, the inclusion of career planning and career management in the model analysis had explained 53 percent of the variance in job satisfaction. Specifically, the outcomes of testing research hypothesis showed two important findings: first, career planning positively and insignificantly correlated with job satisfaction ($\beta=-0.01$; $t=0.09$), therefore H1 was not supported. Second, career management positively and significantly correlated with job satisfaction ($\beta=0.73$; $t=10.66$), therefore H2 was supported. Overall, this result confirms that career planning does not act as an important predictor of job satisfaction, while career management does act as an important predictor of job satisfaction in the studied organization.

R²=0.53



Note: Significant at $t > 1.96$

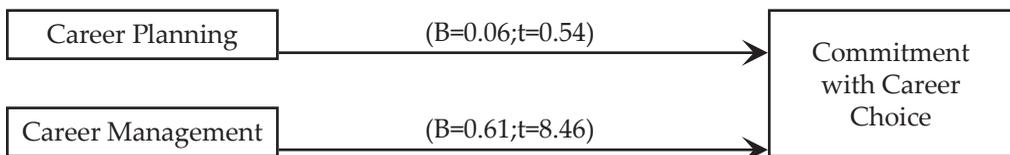
Figure 1 Outcomes of SmartPLS path model analysis

Further, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzel *et al.*'s (2009) global fit measure guideline as follows: $GoF = \sqrt{\{MEAN (Communality of Endogenous) \times MEAN (R^2)\}}$. The results of GoF test will be used to explain power of the SmartPLS path model in comparison with the baseline values (GoF small=0.1, GoF medium=0.25, GoF large=0.36). In this study, the value of GoF was 0.38, showing that it exceeds the cut-off value of 0.36 for large effect sizes of R². This result 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. The value of R² is used as an indicator of the overall predictive strength of the model. It is considered as follows; 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998). In terms of explanatory power, the inclusion of career planning and career management in the model analysis had explained 53 percent of the variance in job satisfaction. Specifically, the outcomes of testing research hypothesis showed two important findings: first, career planning positively and insignificantly correlated with commitment with career choice ($\beta=0.04$; $t=0.67$), therefore H3 was not supported. Second, career management positively and significantly correlated with commitment with career choice ($\beta=0.61$; $t=8.46$), therefore H4 was supported. In short, this result confirms that career planning does not act as an important predictor of commitment with career choice, while career management does act as an important predictor of commitment with career choice in the studied organization.

R²=0.53



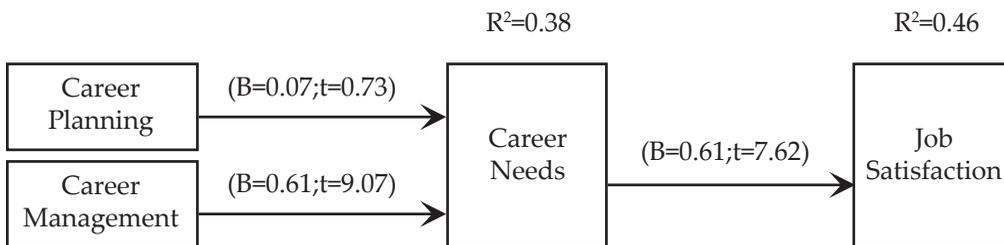
Note: Significant at $t > 1.96$

Figure 2 Outcomes of SmartPLS path model analysis

Hence, 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 guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2\text{)}}$. The results of GoF test will be used to explain power of the SmartPLS path model in comparison with the baseline values (GoF small=0.1, GoF medium=0.25, GoF large=0.36). In this study, the value of GoF was 0.40, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R^2 . This result 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. The value of R^2 is used as an indicator of the overall predictive strength of the model. It is viewed as follows: 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998). In terms of explanatory power, the inclusion of career planning and career management in the model analysis had explained 38 percent of the variance in job satisfaction. Specifically, the outcomes of testing research hypothesis showed two important findings: first, relationship between career planning and career needs was positively and insignificantly correlated with job satisfaction ($\beta=0.07$; $t=0.73$), therefore H5 was supported. Second, relationship between career management and career needs was positively and significantly correlated with job satisfaction ($\beta=0.61$; $t=9.07$), therefore H6 was supported. In sum, this result confirms that fulfillment of career needs does act as an important mediating variable in the relationship between career program and job satisfaction.



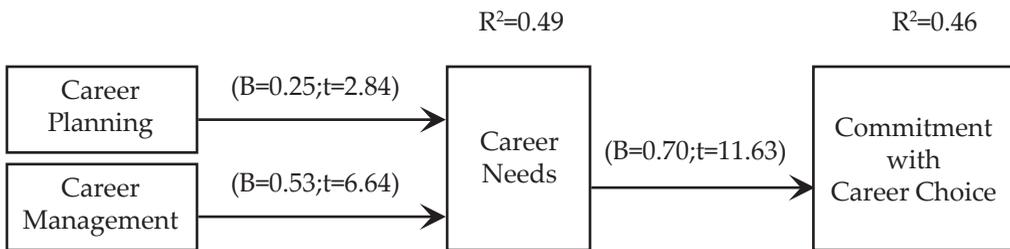
Note: Significant at $t > 1.96$

Figure 3 Outcomes of SmartplsPath model analysis

Besides, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzels *et al.*, (2009) global fit measure guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2\text{)}}$. The results of GoF test will be used to explain power of the SmartPLS path model in comparison with the baseline values (GoF small=0.1, GoF medium=0.25, GoF large=0.36). In this study, the value of GoF was 0.36, showing that it meets the cut-off value of 0.36 for large effect sizes of R^2 . This result 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. The value of R^2 is used as an indicator of the overall predictive strength of the model. It is considered as follows; 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998). In terms of explanatory power, the inclusion of career planning and career management in the model analysis had explained 49 percent of the variance in commitment with career choice. Specifically, the outcomes of testing research hypothesis showed two important findings: first, relationship between career planning and career needs was positively and significantly correlated with commitment with career choice ($\beta=0.70;t=11.63$), therefore H7 was supported. Second, relationship between career management and career needs was positively and significantly correlated with commitment with career choice ($\beta=0.70;t=11.63$), therefore H8 was supported.



Note: Significant at $t > 1.96$

Figure 4 Outcomes of SmartPLS path model analysis

Further, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzels *et al.*, (2009) global fit measure guideline as follows: $GoF = \sqrt{\{MEAN (Communality of Endogenous) \times MEAN (R^2)\}}$. The results of GoF test will be used to explain power of the SmartPLS path model in comparison with the baseline values ($GoF_{small}=0.1$, $GoF_{medium}=0.25$, $GoF_{large}=0.36$). In this study, the value of GoF was 0.36, showing that it exceeds the cut-off value of 0.60 for large effect sizes of R^2 . This result provides adequate support to validate the PLS model globally (Wetzel *et al.*, 2009).

DISCUSSION

This study confirms that career needs does not act as an important mediating variable between career program and career effectiveness in the organizational sample. In the context of this study, majority of the respondents perceive that the levels of career planning, career management, career needs, job satisfaction and commitment with career choice are high. This situation posits that the ability of administrators to appropriately plan and manage career programs based on job needs and expectations have fulfilled employees' career needs. As a result, this may lead to greater job satisfaction and commitment with career choice in the organization.

This study provides three important implications: theoretical contribution, robustness of research methodology, and practical contribution. In terms of theoretical contribution, the results of this research reveal that linking career program (*i.e.*, planning and management) to career needs has been an important predictor of job satisfaction and commitment with career choice in the studied organization. Hence, the findings also supported and extended workplace career studies by contemporary scholars like Ferreira *et al.*, (2007), Hirschi (2009), Theodossiou and Zangelisa (2009), Wilkens and Nermerich (2011), and Ismail *et al.*, (2013).

With respect to the robustness of research methodology, the survey questionnaires used in this study have satisfactorily met the criteria of validity and reliability analyses. This may contribute towards accurate and reliable research findings. Further, regarding practical contributions, the findings of this study may be used as supporting evidence by management to improve the administration of career programs in organizations. In order to emphasize this objective, management needs to pay attention on the following aspects: first, management should update career training content and methods order to enhance the awareness of employees in planning and managing their future careers. Second, management should disseminate information about the advantages and consequences of engaging in the workplace career program to increase employees' understanding and involvement. Third, participative decision making should be encouraged in order to tap employees' bright ideas that may help management to design and administer career programs that match the various job categories.

Finally, the level of pay based on performance should be revised in order to attract, retain and motivate high performers continuously support their organizational strategic missions. If these suggestions are considered seriously they may increase employees' support and trust to organizational career strategy and goals a reality.

CONCLUSION

This study tested a theoretical framework based on the workplace career program research literature. The instrument used in this study satisfactorily met the standards of validity and reliability analyses. The results of SmartPLS path model analysis showed that integrating career program (*i.e.*, planning and management) with career needs was significantly correlated with job satisfaction and commitment with career choice; therefore the result lent full support to H5, H6, H7 and H8. This result also demonstrates that the willingness of administrators to properly plan and manage career programs based on job needs and expectations will help employees to fulfil career needs.

Consequently, this may lead to greater job satisfaction and commitment with career choice in the studied organization. This finding also is consistent with and extends previous studies mostly published in Western and non-Western organizational settings. 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 program domain. Hence, this research further suggests that the capability of administrators to appropriately plan and manage career programs based on job needs and expectations will induce subsequent positive attitudinal and behavioral outcomes (*e.g.*, proactive, performance, fairness, trust and ethics). Therefore, these positive outcomes may lead to sustained and enhanced organizational performance in an era of global competition.

The conclusion drawn from the results of this study should consider the following limitations. Firstly, the data was only taken once during the time frame of this study; therefore it did not capture developmental issues such as intra-individual change and restrictions of making inference to participants and/or causal connections between variables of interest. Secondly, this study only examines the relationship between latent variables and the conclusions drawn do not specify the relationship between specific indicators for the independent variable, mediating variable, and dependent variable. Thirdly, this study only focuses on particular elements of the workplace career and neglects other important elements (*e.g.*, career path and management support). Fourthly, other career outcomes (*e.g.*, performance, turnover, leadership, fairness, and ethics) that are significant for organizations and employees are not discussed in this study. Fifthly, although a substantial amount of variance in dependent measures explained by the significant predictors is identified, there are still a number of unexplainable factors that can be incorporated to identify the causal relationship between variables and their relative explanatory power (Tabachnick *et al.*, 2001). Finally, the sample for this study was taken using a convenient sampling technique in a single government organization. These limitations may decrease the ability to generalize the results of this study to other organizational settings.

The conceptual and methodological limitations of this study need to be considered when designing future research. Firstly, the organizational and personal characteristics that act as a potential variable and can affect the effectiveness of workplace career should be further discovered. If organizational and personal characteristics are used in research, this may provide meaningful perspectives for understanding the individual differences and similarities that affect training outcomes. Secondly, the weaknesses of cross-sectional research design may be overcome if longitudinal studies are used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Thirdly, the findings of this study may produce different results if the study is carried out in more than one organization. Fourthly, as an extension of career development, other theoretical constructs of career development - such as individual talent, the readiness to acquire necessary knowledge, up-to-date skills, new abilities, and positive attitudes, and the motivation to transfer knowledge, skills, abilities, and positive attitudes in the workplace - are important components that should be considered, because they have been widely recognized as important

links between career programme and personal outcomes. Fifthly, besides job satisfaction and perceived career development support, other personal outcome constructs that are found to be important in the workplace career research literature need to be examined, such as career performance, job stress, trust, and ethics. The importance of these issues needs to be further discussed in future studies.

REFERENCES

- Alderfer, Clayton P. (2002). *Existence, relatedness, and growth: Human needs in organizational settings*. New York: Free Press.
- Andekola, 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.
- Appelbaum, S.H., & Shapiro, B.T. (2002). Career management in information technology: A case study. *Career Development International*, 7(3), 142-158.
- Barclay, D.W., Higgins, C.A., & Thompson, R.L. (1995). The partial least squares (PLS) approach to causal modeling: personal computer adaptation and use an illustration, *Technology Studies*, 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, T.Y., Chang, P.L., & Yeh, C.W. (2004). A study of career needs, career development programs, job satisfaction and the turnover intentions of R&D personnel. *Career Development International*, 9(4), 424-437.
- Chin, W.W. (1998). The partial least squares approach to structural equation modelling, In Hoyle, R.H. (Eds.) *Statistical strategies for small sample research* (307-341). California: Sage Publication, Inc.
- Colarelli, S.M., & Bishop, R.C. (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.
- Cresswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: SAGE Publications.
- Ferreira, J.A., Santos, E., Fonseca, A.C., & Haase, R.F. (2007). Early predictors of career development: A 10-year follow-up study. *Journal of Vocational Behavior*, 70 (1), 61-77.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- 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.
- Greenhaus, J.G., Callanan, G.A., & Godshalk, V.M. (2000). *Career management*. New York: The Drydent Press.
- Gregson, T. (1987). Factor analysis of multiple-choice format for job satisfaction. *Psychological Reports*, 61, 747 - 50.
- Hackman, J. R. & Oldham, G. R. (1980). *Work design*. Reading, MA: Addison-Wesley.

- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1998). *Multivariate data analysis*. New Jersey: Prentice Hall International, Inc.
- Henseler, J., Ringle, C.H., & Sinkovics, R.R. (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. (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*. Cleveland. World Publishing Company.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. New York: Wiley.
- 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, N.G., & Madrah H. (2011). Relationship between career program 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 program and personal outcomes. *Makara, Seri SosioHumaniora*, 17(1), 43-54.
- Janeiro, I.N. (2010). Motivational dynamics in the development of career attitudes among adolescents. *Journal of Vocational Behavior*, 76(2), 170-177
- Jepsen, D.A., & Dickson, G.L. (2003). Continuity in life span career development: Career exploration as a precursor to career establishment. *Career Development Quarterly*, 51(3), 217-233.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design*. Upper Saddle River, NJ: Prentice Hall.
- Linz, S.J. (2003). Job satisfaction among Russians workers. *International Journal of Manpower*, 24(6), 626-652.
- Martin, A.F., Romero, F.P., Valle, C.R., & Dolan, S.L. (2001). Corporate business Strategy, career management and recruitment: Do Spanish firms adhere to contingency model? *Career Development International*, 6(3), 149-155.
- McClelland, David C. (1962). Business drive and national achievement. *Harvard Business Review*, July-August, 99-112.
- McShane, S.L., & Von Glinow, M.A. (2005). *Organizational behavior*. New York: McGraw Hill.
- Mobley. (1978). *Organizational behavior and human performance*, 34. University of Virginia
- Mondy, R.W., Noe, R.M. & Premeaux, S.R. (2002). *Human resources management*. New Jersey: Pearson Education, Inc., Upper Saddle River.
- Nachbagauer, A.G.M. & Riedl, G. (2002). Effects of concepts of career plateaus on performance, work satisfaction and commitment. *International Journal of Manpower*, 23(8), 716-733.
- Nunally, J.C. & Bernstein, I.H. (1994). *Psychometric theory*. New York: McGraw-Hill.
- Post, S.C., Koch, C.R., & Roberts, C.C. (2007). Raising the bar: Addressing job satisfaction through the development of an achievement-based career advancement program. *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.

- Ringle, C.M., Sarstedt, M., Schlittgen, R. & Taylor, C.R. (2013). PLS path modeling and evolutionary segmentation. *Journal of Business Research*, 66, 1318-1324.
- Sekaran, U. (2000). *Research methods for bussiness: A skill building approach*. New York: John Wiley & Sins, Inc.
- Theodossiou, I., &Zangelis, A. (2009). Career prospects and tenure-job satisfaction profiles: Evidence from panel data. *The Journal of Socio-Economics*, 38, 648-657.
- 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 illustrations. *MIS Quarterly*, 33(1), 177-195.
- 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.
- 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 Review*, 22 (1), 65-84.
- Wright, B. D. (1996). Comparing rasch measurement and factor analysis. *Structural Equation Modeling*, 3(1), 3-24.