

## Mediating Role of Career Development in the Relationship between Career Program and Personal Outcomes

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### Abstract

This study was conducted primarily to measure the relationship between career program, career development and personal outcomes using self-administered questionnaires gathered from employees who have worked at a Sabah local government in Borneo. The outcomes of testing research hypothesis using a stepwise regression analysis showed two important findings: firstly, relationship between career program (i.e., planning and management) and career development positively and significantly correlated with job satisfaction. Secondly, relationship between career program (i.e., planning and management) and career development positively and significantly correlated with career commitment. Statistically, the result demonstrates that career development does act as an important mediating variable in the relationship between career program and personal outcomes in the career program model of the studied organization. The paper provides discussion, implications and conclusion.

### Peran Pengembangan Karir sebagai Mediator Hubungan antara Program Karir dan Sikap Kerja Individu

#### Abstrak

Penelitian ini dilakukan untuk mengukur hubungan antara program karir, pengembangan karir dan pribadi dengan menggunakan survei yang dikumpulkan dari karyawan yang telah bekerja pada pemerintah daerah Sabah di Kalimantan. Pengujian hipotesis penelitian yang menggunakan analisis regresi bertahap menunjukkan dua penemuan penting: Pertama, hubungan antara program karir (yaitu, perencanaan dan manajemen) dan pengembangan karir memiliki hubungan positif dan signifikan dengan kepuasan kerja. Kedua, hubungan antara program karir (yaitu, perencanaan dan manajemen) dan pengembangan karir menunjukkan hubungan positif dan signifikan dengan komitmen karir. Secara statistik, penemuan ini menunjukkan bahwa pengembangan karir tidak bertindak sebagai variabel mediasi penting dalam hubungan antara program karir dan pengembangan pribadi di dalam model program karir dari organisasi yang dipelajari di dalam penelitian ini. Makalah ini memberikan diskusi, implikasi dan kesimpulan.

*Keywords: career commitment, career development, career program, job satisfaction*

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### 1. Introduction

In a strategic human capital development, career program is often viewed as an important development instrument where it does not only focus on employees'

job, but the whole process, which includes attitude, behavior and the state of affairs related to the work life of employees (Greenhaus, Callanan & Godshalk, 2000; Ismail, Daud & Madrah, 2011; Puah & Ananthram, 2006). Under this perspective, an employer often

designs and administers career programs to enable employees' to match their interests and capabilities with organizational opportunities and easily adapt with current and future organizational changes. If these career programs are properly designed and implemented this may steadily enhance the progression of employees' careers in organizations (Baruch, 2004; Greenhaus *et al.*, 2000; Martin, Romero, Valle & Dolan, 2001).

According to a human resource development perspective, career program has two influential features: career planning and career management (Conger, 2002; Ismail *et al.*, 2011; Nachbagauer & Riedl, 2002). Firstly, career planning is often seen as a first step in career program whereby a management designs and improves continuously career planning using proper assessment tools (e.g., vocational counseling, workbooks and/or career resource center) to identify career options and preferences, set up development objectives and establish action plans to help employees match their interests and capabilities with organizational opportunities (Appelbaum & Shapiro, 2002; Ismail *et al.*, 2011; Mondy, Noe & Premeaux, 2002; Puah & Ananthram, 2006). Secondly, career management is often viewed as a continuous activity whereby management monitors the progression of individual employees in order to easily adapt with organizational changes (e.g., turbulent working environment, job stability and security, flexible work practice and multi skilling) and thus help them advance in the career ladder in organizations (Andekola, 2011; Greenhaus, *et al.*, 2000; Ismail *et al.*, 2011; Martin *et al.*, 2001).

Recent studies in careers highlight that the ability of management to properly plan and manage the progression of employee careers may have a positive impact on career development (Notzer, Ribak, Abramovitz, Ben-Yair, & Yaakobson, 2004; Ferreira, Santos, Fonseca, & Haase, 2007; Hirschi, 2009; Janeiro, 2010). In the context of social contract, many scholars like Greenhaus, Callanan and Godshalk (2000), Herr (2001), Mondy, Noe and Premeaux (2002), Chen, Chang and Yeh (2004), Puah and Ananthram (2006), and Ismail, Daud and Madrah (2011) broadly define career development as employees continuously require the necessarily skills and experience needed (total group of psychological, sociological, educational, physical, economic and chance factors) to improve job performance, add value for current and future job, meet feelings of fulfillment, improve life span well-being, and enable individuals to meet organizational needs and expectations.

Surprisingly, a thorough investigation in this field reveals that relationship between career program and career development may lead to increased positive personal outcomes, especially job satisfaction (Chen *et al.*, 2004; Puah & Ananthram, 2006) and career commitment (Andekola, 2011; Chen *et al.*, 2004; Puah

& Ananthram, 2006). In an organizational behavior perspective, career commitment is usually defined as individuals able to set up high career goals, and willing to attach, identify and involve in achieving those goals (Chen *et al.*, 2004; Colarelli & Bishop, 1990; Herr, 2001; McDaniels & Gysbers, 1992; Mondy *et al.*, 2002). While, job satisfaction is often defined as a form of attitude towards work related conditions, employees' judgment and their process of thoughts with regards to their jobs, facets or aspects (Linz, 2003; Mobley *et al.*, 1974; Wiener, 1982), individuals' positive emotional state, and pleasurable feelings and/or attitudes towards job resulting from their appraisals about the job (Appelbaum & Shapiro, 2002; Gregson, 1987; Linz, 2003; McShane & Glinow, 2005).

Within an organizational career model, many scholars view that career planning, career management, job satisfaction and career commitment are distinct, but highly interrelated constructs. For example, the ability of management to properly plan and manage the progression of employee careers will upgrade employees' career development. As a result, this may lead to higher job satisfaction (Chen *et al.*, 2004; Puah & Ananthram, 2006) and career commitment (Nachbagauer & Riedl, 2002; Puah & Ananthram, 2006). Although the nature of this relationship has widely been investigated, little is known about the mediating effect of career development in the workplace career models (Jepsen & Dickson 2003, Paul 1996). Many scholars argue that career development has been less emphasized in the previous studies because they have over focused on explaining career program characteristics, using a simple association to assess general employee attitudes toward the types of career program, employing a direct effects model to describe the strength of correlation between career program and personal outcomes, and ignoring the influence of career development in developing the workplace career models (Lee, 2000; Nachbagauer & Riedl, 2002; Puah & Ananthram, 2006). Consequently, these studies have not provided adequate information to be used as guidelines by practitioners in understanding the complexity of career program and formulating strategic action plans to enhance the effectiveness of career programs in agile organizations (Adeloka, 2011; Puah & Ananthram, 2006). Such situation motivates the researchers to fill in the gap of the related literature by quantifying the magnitude and nature of the relationship between career program, career development and personal outcomes. Specifically, the objectives of this study are: firstly, to examine the relationship between career program (i.e., planning and management) and career development. Secondly, to measure the relationship between career program (i.e., planning and management) and job satisfaction. Thirdly, to measure the relationship between career program (i.e., planning and management) and career commitment.

**Literature Review.** Many previous studies used a direct effects model to examine employee's career using different samples, such as 5,387 women during the 5-year period after high school (Astin & Myint, 1971), 427 nursing education administrators (Rawl & Peterson, 1992), 37 female staff nurses and 8 female nurse managers from four acute care hospitals in two northeastern states (Angelini, 1995), 200 nurses in Israeli university and college (Notzer *et al.*, 2004), 445 participants from a 10-year longitudinal study of the educational and occupational socialization in Portugal (Ferreira *et al.*, 2007), 330 Swiss eighth graders (Hirschi, 2009), and 620 students from Portuguese school system (Janeiro, 2010). These studies found that the ability of management to properly plan and manage the progression of employees' career had been important determinants of career development in the organizations (Astin & Myint, 1971; Hirschi, 2009; Janeiro, 2010; Ferreira *et al.*, 2007; Rawl & Peterson, 1992). The preceding development leads to the formulation of two hypotheses:

- H1: There is a positive relationship between career planning and career development  
H2: There is a positive relationship between career management and career development

Several extant studies were done using an indirect effects model to investigate career program based on different samples like 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), and employees of Nigerian Banks (Andekola, 2011). These studies reported that the ability of management to consider individual employee needs in planning and managing the progression of employees' career had strongly increased their career development. As a result, it could lead to enhanced positive personal outcomes, especially job satisfaction (Chen *et al.*, 2004; Puah & Ananthram, 2006) and career commitment (Andekola, 2011; Chen *et al.*, 2004; Puah & Ananthram, 2006).

The studies gained strong support from the notion of motivation theory. For example, Herzberg's (1966) motivator-hygiene theory states that recognition,

achievement, possibility of growth, advancement, responsibility and work itself are important factors that enhance individuals' satisfaction. Besides that, Alderfer's (1972) Existence, Relatedness and Growth theory posits that personal achievement is an important element that drives individual actions. In addition, McClelland's (1962) learned needs theory addresses that need for achievement may reinforce individuals' behavior. Thus, Hall and Associates's (1986) working model of organizational career development reveals that career plan and management are important catalysts for developing individuals' career satisfactions and may induce positive career outcomes. According to the notion of these theories, career development is affected by several motivational factors, such as work characteristics (Herzberg, 1959, 1966), individuals' needs from their job (Alderfer, 1972), and individuals learn needs from their job (McClelland, 1962). Application of these theories in a career program model shows that the capability of managers to properly plan and manage career programs based on employee needs (e.g., job characteristics, personal growth, personal achievement and career satisfaction) will strongly enhance individuals' career development. Consequently, this may lead to an increased career commitment (Chen *et al.*, 2004; Greenhaus, *et al.* 2000; Hall & Associates, 1986; Puah & Ananthram, 2006), and job satisfaction (Chen *et al.*, 2004; Puah & Ananthram, 2006).

The above literature has been used as the platform to develop a conceptual framework for this study as shown in Figure 1.

Based on the framework, it can be hypothesized that:

- H3: Relationship between career planning and career development will positively impact job satisfaction.  
H4: Relationship between career management and career development will positively impact job satisfaction.  
H5: Relationship between career planning and career development will positively impact career commitment  
H6: Relationship between career management and career development will positively impact career commitment

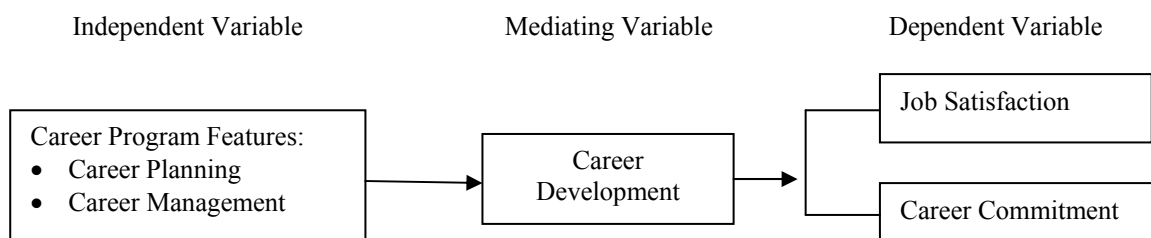


Figure 1. Conceptual Framework

## 2. Methods

**Research Design.** This study used a cross-sectional research design, which allowed the researchers to integrate the workplace career literature, the semi-structured interview, the pilot study and the actual survey as a main procedure to gather data for this study. The use of such methods may decrease the weaknesses of a single research method and increase the ability to gather accurate, less biased and high quality data (Cresswell, 1998; Sekaran, 2000). The location of this study was a Malaysian local government in Borneo Island. For confidential reasons, the name of this organization was kept anonymous. At the initial stage of this study, the researchers had designed interview questions which were related to career program, career development, job satisfaction and career commitment. After that, semi structured interviews were conducted involving two experienced employees, namely one executive officer and one assistant administrative officer. These officers were chosen because they had good knowledge about the workplace career program and been working for more than 10 years. Information gathered from this interview helped the researchers to obtain insights into the features and nature of career planning, career management, career development, job satisfaction and career commitment, as well as the relationship between such variables in the studied organization. Next, the information gathered from the interviews was transcribed, categorized according to the research variables and compared with the literature review. The outcomes of triangulation process were used as a guideline to develop the content and format of the survey questionnaire for a pilot study. Hence, a pilot study was conducted by discussing the items in survey questionnaire with the above participants in order to verify the content and format of the final version of the survey. Before sending the questionnaires to participants, back translation technique was employed to translate the survey questionnaire in Malay and English languages in order to increase the validity and reliability of the survey instrument (Cresswell, 1998; Sekaran, 2000).

**Measures.** The survey questionnaire has 3 sections: first, career planning had 4 items and career management had 4 that were adapted from career program literature (Baruch, 2004; Desimone *et al.*, 2002; Granrose & Portwood, 1987; Greenhaus *et al.*, 2000; Martin *et al.*, 2001; Whymark & Ellis, 1998). Second, career development had 6 items that were adapted from career development literature (Chen *et al.*, 2004; Hall & Associates, 1986; Herr, 2001; Jepsen & Dickson, 2003; Paul, 1996; Puah & Ananthran, 2006). Third, job satisfaction had 8 items that were adapted from the job satisfaction literature (Chen *et al.*, 2004; Knoop, 1993; Linz, 2003; Nachbagauer & Riedl, 2002). Finally, career commitment had 7 items that were

adapted from career program literature (Chen, 2004; Colarelli & Bishop, 1990; Nachbagauer & Riedl, 2002). These items were measured using a 7-item scale ranging from “strongly disagree/dissatisfied” (1) to “strongly agree/satisfied” (7). Demographic variables were used as controlling variables because this study focused on employee attitudes.

**Sample.** The population for this study is 1147 employees who have worked in the studied organization. In the first step of data collection procedure, the researchers had obtained permission from the HR manager to conduct this study, and sought his advice on the rules for distributing survey questionnaires in his organization. Considering the constraints of organization rules, the duration of this study and budget, 250 survey questionnaires were distributed using a convenient sampling technique to employees through the contact persons (e.g., secretary of department heads, assistant managers and/or human resource manager) in the organization. This sampling technique was employed in this study because the HR manager could not give the list of employees to the researchers for confidential reasons and this situation did not allow the researchers to choose participants randomly from the population. Of the number, 140 usable questionnaires were returned to the researchers, yielding a 56 percent response rate. The survey questions were answered by participants on their consent. Since this sample exceeds the minimum sample of 30 participants as required by probability sampling technique, it may be analyzed using inferential statistics (Sekaran, 2000; Leedy & Ormrod, 2005).

**Data Analysis.** The Statistical Package for Social Science (SPSS) version 18.0 was used to analyze the data. Firstly, exploratory factor analysis was used to assess the validity and reliability of measurement scales (Hair *et al.*, 1998; Nunally & Bernstein, 1994). Relying on the guidelines set up by Hair *et al.* (1998), and Nunally and Bernstein (1994), a factor analysis with direct oblimin rotation was first done for all items that represented each research variable, and this was followed by other tests: Kaiser-Mayer-Olkin Test (KMO), Bartlett's test of sphericity, eigenvalue, variance explained and Cronbach alpha. These statistics were useful to determine the acceptable standards of validity and reliability analyses for the measurement scales before testing research hypotheses. Secondly, Pearson correlation analysis and descriptive statistics were conducted to analyze the validity and reliability of the constructs (Tabachnick *et al.*, 2001; Yaacob, 2008). Finally, a stepwise regression analysis was undertaken to test the mediating hypothesis because it can assess the magnitude of each independent variable, and vary the mediating variable in the relationship between many independent variables and one dependent variable (Baron & Kenny, 1986; Foster, Stine, & Waterman,

1998). According to Baron and Kenny (1986), the mediating variable can be clearly determined when a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variable(s) into the analysis (Wong, Hui & Law, 1995). In this regression analysis, standardized coefficients (standardized beta) were used for all analyses.

### 3. Results and Discussion

**Participant Characteristics.** Table 1 shows that majority of the participants were female (57.1 percent), aged between 26 to 35 years old (42.9 percent),

SPM/MCE holders (43.2), have served for more than 21 years (25.2 percent), and belonged to non-management group (82.1 percent).

**Validity and Reliability Analyses.** The exploratory factor analysis was employed to assess the psychometric properties of survey questionnaire data. Table 2 shows the results of validity and reliability analyses for measurement scale. The original survey questionnaires consisted of 23 items, which were related to five variables: career planning (4 items), career management (4 items), career development (6 items), job satisfaction (8 items) and career commitment (7 items). The factor analysis with varimax rotation was done for all

**Table 1. Participant Characteristics (n=140)**

Participant Characteristics	Sub-Profile	Percentage
Gender	Male	42.9
	Female	57.1
Age	18-25	12.9
	26-35	42.9
	36-45	28.6
	>46	15.7
Education	Master Degree	1.4
	Bachelor Degree	10.1
	Diploma	22.3
	STPM/HSC	6.5
	SPM/MCE	43.2
	SRP/LCE/PMR	16.5
Length of Service	<1 year	7.2
	1-5 year	24.5
	6-10 year	19.4
	11-15 year	15.8
	16-20 year	7.9
	>21 year	25.2
	Management	17.9
	Non-management	82.1

Note:

SRP/LCE/PMR : *Sijil Rendah Pelajaran Malaysia*/Lower Certificate of Education/Penilaian Menengah Rendah  
SPM/MCE : *Sijil Pelajaran Malaysia*/Malaysia Certificate of Education  
STPM/HSC : *Sijil Tinggi Pelajaran Malaysia*/Higher School Certificate

**Table 2. The Results of Validity and Reliability Analyses for the Measurement Scale**

Measure	Item	Factor Loading	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha
Career Planning	4	0.66 - 0.86	0.75	228.65, $p=.000$	2.66	66.58	0.80
Career Management	4	0.40 - 0.80	0.77	156.62, $p=.000$	2.44	61.08	0.79
Career Development	6	0.51 - 0.71	0.83	283.16, $p=.000$	3.28	54.67	0.83
Job Satisfaction	8	0.53 - 0.90	0.87	612.60, $p=.000$	4.59	57.39	0.89
Career Commitment	7	0.60 - 0.73	0.802	387.03, $p=.000$	3.737	53.381	0.8485

**Table 3. Pearson Correlation Analysis and Descriptive Statistics**

Variables	Mean	Standard Deviation	Pearson Correlation (r)				
			1	2	3	4	5
1. Career Planning	6.1	0.62	(1)				
2. Career Management	5.3	0.86	0.53**	(1)			
3. Career Development	5.3	0.94	0.29**	0.48**	(1)		
4. Job Satisfaction	5.3	0.92	0.18*	0.30**	0.65**	(1)	
5. Career Commitment	5.7	0.71	0.31**	0.28**	0.46**	0.43**	(1)

Note: Significant at \* $p < 0.05$ ; \*\* $p < 0.01$  Reliability Estimation is shown in a diagonal

variables. After that, Kaiser-Mayer-Olkin Test (KMO) which is a measure of sampling adequacy was conducted for each variable. Relying on Hair *et al.* (1998) and Nunally and Bernstein's (1994) guideline, these statistical analyses showed that (1) the value of factor analysis for all items that represent each research variable was 0.4 and more, indicating the items satisfactorily met the acceptable standard of validity analysis, (2) all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6, and were significant in Bartlett's test of sphericity, (3) all research variables had eigen-values larger than 1 and variance explained greater than 45 percent, (4) the items for each research variable exceeded factor loadings of 0.40 (Hair *et al.*, 1998), and (5) all research variables exceeded the acceptable standard of reliability analysis of 0.70 (Nunally & Bernstein, 1994). These statistical analyses confirmed that the measurement scales met the acceptable standards of validity and reliability analyses as shown in Table 2.

**Analysis of the Constructs.** Table 3 shows the results of Pearson correlation analysis and descriptive statistics. The mean values for the variables are between 5.3 and 6.1, signifying the levels of career planning, career management, and career development ranging from high (4) to highest level (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 development), and the relationship between the mediating variable (i.e., career development) and the dependent variable (i.e., job satisfaction and career commitment) were less than 0.90, indicating that the data were not affected by serious collinearity problem (Hair *et al.*, 1998). These statistical results further confirmed that the measurement scales satisfactorily met the standards of validity and reliability analyses as shown in Table 3.

**Outcomes of Testing Hypotheses 1 and 2.** As described in Table 3, the outcomes of Pearson correlation

analysis showed two important findings: firstly, career planning positively and significantly correlated with career development ( $r=0.28, p<0.01$ ), therefore H1 was supported. Secondly, career management positively and significantly correlated with career commitment ( $r=0.46, p<0.01$ ), therefore H2 was supported. In sum, the result demonstrates that the ability of management to appropriately plan and manage the progression of employee careers have increased employees' career development in the organizational sample.

**Outcomes of Testing Hypotheses 3 and 4.** Table 4 shows that the results of Stepwise regression analysis were summarized into three major steps. Step 1 showed that the respondent characteristics were found not to be significant predictors of job satisfaction, accounting for 21 percent of variance in the dependent variable. Step 2 displayed that career planning insignificantly correlated with job satisfaction ( $\beta=0.22, p>0.05$ ) whereas career management positively and significantly correlated with job satisfaction ( $\beta=0.28, p<0.01$ ). The inclusion of these variables in this step had explained 35 percent of the variance in the dependent variable. The inclusion of career development in Step 3 of the process reveals that career development is a mediating variable for the relationship between the workplace career (i.e., career planning and career management) and job satisfaction ( $\beta=0.68, p<0.001$ ), therefore H1 and H2 were fully supported. This relationship explains that before the

inclusion of career development in Step 2, career planning ( $\beta=0.22, p>0.05$ ) was found to be insignificantly correlated with job satisfaction, while career management significantly correlated with job satisfaction (Step 2:  $\beta=0.28, p<0.01$ ). As shown in Step 3 (after the inclusion of career development in the analysis), the previous non-significant relationship between career planning and job satisfaction did not change to significant (Step 3:  $\beta=-0.01, p>0.05$ ), and the previous significant relationship between career management and job satisfaction became non-significant ( $\beta=-0.06, p>0.05$ ). In terms of exploratory power, the inclusion of career development in the Step 3 had explained 67 percent of the variance in dependent variable. Statistically, this result meets the Baron and Kenny's (1986) mediating testing condition where it sends a message that linking career program to career development has been an important predictor of job satisfaction in the studied organization.

**Outcomes of Testing Hypothesis 5 and Hypothesis 6.** The table shows the results of stepwise regression analysis, summarized into three major steps. Step 1 displayed that the respondent characteristics were found not to be significant predictors of career commitment, accounting for 18 percent of the variance in the dependent variable. Step 2 exposed that career planning was significantly correlated with career commitment ( $\beta=0.21, p<0.05$ ) whereas career management

**Table 4. Results for Stepwise Regression Analysis**

Variable	Dependent Variable (Job Satisfaction)		
	Step 1	Step 2	Step 3
<u>Controlling Variable</u>			
Gender	0.65	0.07	-0.06
Age	0.56	0.07	-0.43
Educational Level	0.93	0.04	0.71
Length of Service	-0.39	-0.02	0.01
Position	0.13	0.12	0.11
<u>Independent Variable</u>			
Career Planning		0.22	-0.01
Career Management		0.28**	-0.06
<u>Mediating variable</u>			
Career Development			0.68***
R Square	0.21	0.35	0.67
Adjust R square	0.00	0.07	0.41
R square change	0.05	0.08	0.33
F	1.04	2.22*	11.57***
F Δ R Square	1.04	5.54**	76.00***

Note: Significant at \* $p<0.05$ , \*\* $p<0.01$ , \*\*\* $p<0.001$

insignificantly correlated with career commitment ( $\beta=0.19, p>0.05$ ). The inclusion of these variables in the Step 2 had explained 38% of the variance in the dependent variable. Further, the inclusion of career development in Step 3 revealed that career development is a mediating variable for the career program (i.e., career planning and career management) and career commitment relationship ( $\beta=0.42, p<0.05$ ), therefore H1 and H2 were supported. This result explains that before the inclusion of career development in Step 2, career planning ( $\beta=0.21, p<0.05$ ) was found to be significantly correlated with career commitment whereas career management was found to be insignificantly correlated with career commitment ( $\beta=0.19, p>0.05$ ). As shown in Step 3 (after the inclusion of career development in the analysis), the previous significant relationship between career planning and career commitment (Step 2:  $\beta=0.19, p<0.05$ ) did not change to insignificant (Step 3:  $\beta=0.19, p<0.05$ ), but the strength of relationship between such variables decreased. Conversely, the previous insignificant relationship between career management and career commitment (Step 2:  $\beta=0.09, p>0.05$ ) did not change to significant (Step 3:  $\beta=-0.02, p>0.05$ ). In terms of exploratory power, the inclusion of career development in Step 3 had explained 52 percent of the variance in dependent variable. Statistically, this result meets the Baron and Kenny's (1986) mediating testing condition where it sends a signal that linking career program to career development has been an

important predictor of career commitment in the studied organization.

This study shows that career development does act as an important mediating variable in the relationship between career program and personal outcomes in the organizational sample. In the context of this study, managers have included individual needs in planning and managing the progression of employees' career. The majority of employees perceive that the ability of managers to plan and manage such career programs have increased employees' career development. As a result, it may lead to an increased job satisfaction and career commitment in the studied organization.

The implications of this study can be divided into three major aspects: theoretical contribution, robustness of research methodology, and contribution to practitioners. In term of theoretical contribution, this study reveals two important outcomes: firstly, career development has mediated the effect of career program (i.e., planning and management) on job satisfaction. This result explains that the ability of managers to properly plan and manage career programs based on employee needs have increased employees' career development. Consequently, it may lead to an increased job satisfaction in the studied organization. The finding of this study has also supported and broadened studies by Chen, Chang and Yeh (2004), and Puah and Ananthram

**Table 5. Results for Stepwise Regression Analysis**

Variable	Dependent Variable (Career Commitment)		
	Step 1	Step 2	Step 3
<u>Controlling Variable</u>			
Gender	.00	.00	-.06
Age	.14	.11	.28
Educational Level	-.11	-.15	-1.17
Length of Service	-.02	.05	.56
Position	.20	.16	.15
<u>Independent Variable</u>			
Career Planning		.21*	.19*
Career Management		.19	-.02
<u>Mediating variable</u>			
Career Development			.42***
R Square	.18	.38	.52
Adjust R square	-.01	.09	.27
R square change	.03	.11	.12
F	.74	2.78**	5.29***
F Δ R Square	.74	8.64***	21.85***

Note: Significant at \* $p<0.05$ , \*\* $p<0.01$ , \*\*\* $p<0.001$



(2006). Secondly, career development has mediated the effect of career management on career commitment. This result explains that the ability of managers to properly manage career programs based on employee needs have increased employees' career development. Consequently, it may lead to an increased career commitment in the studied organization. The finding of this study has supported and extended studies done by Chen, Chang and Yeh (2004), Greenhaus, *et al.* (2000), and Puah & Ananthram, (2006). Thirdly, career development has not mediated the effect of career planning on career commitment. A careful observation of the semi-structured interview results reveals that this result may be affected by external factors. Firstly, respondents may have different judgments and interpretations about the values and importance of career development programs implemented in the organization. Secondly, respondents may have different views about the capability of management to design and implement career development program for employees who have worked in different job groups. These factors may decrease the mediating effect of career development in the hypothesized model.

With respect to the robustness of research methodology, the survey questionnaire used in this study had satisfactorily met the standards of validity and reliability analyses; this may lead to produce accurate and reliable research findings. Regarding practical contributions, the findings of this study can be used as guidelines by management to improve employees' career in organizations. In order to achieve such objectives, management needs to pay attention on the following issues: firstly, encourage leaders to use transformational style in managing employees. For example, the capability of leaders to use this leadership style will improve the quality of interaction between leaders and followers, and stimulate followers to upgrade their competencies in handling challenging and unpredictable jobs. Secondly, encourage high commitment practices in organizations. For example, management needs to motivate employees to work in groups and this practice may help them to decrease work conflicts and accomplish job demands faster. Thirdly, adjust pay level according employee merits. For example, the willingness of management to adjust the type, level and/or amount of pay according to skill certifications and performance may increase retain and motivate high performing employees to support organizational strategy and goals. Fourthly, update the training content and methods. For example, the readiness of management to properly design and administer theory and practical based training will inculcate necessary soft and hard knowledge, skills and abilities, as well as positive attitudes to all employees. These training programs may help employees to transfer what they learn in the workplace. Finally, encourage positive social support within an organization. For example, the

willingness of supervisors and co-workers to practice positive social support (e.g., helping, respect and guidance) will help employees to decrease tensions and increase their motivations in performing daily job. If organizations heavily consider these suggestions this may positively motivate employees to support the workplace career program.

#### 4. Conclusion

This study proposed a conceptual framework based on the career program research literature. The exploratory factor analysis confirmed that the measurement scales used in this study met the acceptable standards of validity and reliability analyses. Further, outcomes of stepwise regression analysis generally showed that career development did act as an important mediating variable in the relationship between career program and career commitment in studied organization. This finding explains that the ability of management to consider individual employee needs in planning and managing career programs have helped employees to improve their career development. As a result, it may lead to an enhanced career commitment in organizations. Specifically, the findings of this study revealed that career development had only mediated the effect of career management on career commitment. This result has supported and broadened previous studies mostly published in Western countries. Conversely, career development had not mediated the effect of career planning on career commitment. A thorough investigation of the semi structured interview results shows that this result may be affected by the inconsistent and subjective respondent views about the value and importance of career development, as well as the capability of management to design and implement career development program for employees who have worked in different job groups. These factors may overrule the mediating role of career development in the career program models of the studied organization. Therefore, current research and practice within the career program models needs to consider career development as a crucial element of the workplace career program domain. This study further suggests that the ability of managers to properly plan and manage career programs based on employee needs will strongly increase employees' career development. Consequently, it may lead to increased subsequent positive attitudinal and behavioral outcomes (e.g., satisfaction, trust, performance, fairness and ethics). Thus, these positive outcomes can lead to achievement of organizational strategic vision and mission 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 the 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 conclusion drawn from this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Thirdly, this study only focused on particular elements of the workplace career and neglected 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 among 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 of generalizing the results of this study to other organizational settings.

The conceptual and methodology 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 it is done in more than one organization. Fourthly, as an extension of career development, other theoretical constructs of career development such as readiness to acquire necessary knowledge, up to date skills, new abilities and positive attitudes, individual talents, and motivation to transfer knowledge, skills, abilities and positive attitudes in the workplace are important components should be considered because they have been widely recognized as an important link between career program and personal outcomes. Fifthly, besides job satisfaction and career commitment, other personal outcome constructs need to be examined because they are found important in the workplace career research literature, such as career performance, job stress, trust, and ethics. The importance of these issues needs to be further discussed in future studies.

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