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Factors affecting career success: The case of graduate students

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ABSTRACT

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The purpose of this paper is to explore factors affecting career success of graduate students from Ho Chi Minh City Open University in Vietnam. By employing mixed research method with qualitative and quantitative techniques, we first conducted in-depth interview with 20 graduate students to find out factors that can affect their career success, and then quantitative data was collected with a survey of 436 graduate students in Vietnam. We employ Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart PLS 3.2 software to analyze the collected data. The finding suggests that individual competences, working experience, personal networks and organizational structure were crucial factors that influence objective career success, while individual aspirations and personal networks were important factors for subjective career success. The paper provides important implications for organizations and educational institutions to enhance career success of their workers.

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1. Introduction

Why are some people more successful than the others? This interesting question is partially answered by scholars in previous studies (Judge et al., 1995). The main reason for the limited research in this area is the complexity in defining and measuring success. Friedman and Greenhaus (2000, p. 27) define success as “*to achieve one's desire*”. From this definition, it is obvious that each individual will have different criteria about success (Burnaby, 1992). For laborers, most of the studies about success often focus on their career success. The studies of career success are not only beneficial to individuals and their organizations but also to educational institutions (Schein, 1978). On a personal level, career success requires favorable material, power and satisfaction (Gattiker & Larwood, 1990). Knowledge of career success helps each individual develop strategies for their career development (Ellis & Heneman, 1990). At organizations, the success of individuals helps managers achieve the business development and management goals (Aryee et al., 1994). At educational institutions, career success of graduate students will help them review the appropriate of teaching and training programs. Although career success plays an essential role for many subjects, there are few studies on the factors affecting career success of employees in the world. Currently, there is no research in Vietnam on the determinants of career success of university graduates at a specific university. This study is designed to fill the research gap. This study would contribute to the current literature of career success as well as to improve the teaching methods for students to enhance their career success.

The structure of the paper is organized as follows: After this introduction section, in section 2 we discuss about literature review. The research methodology and data are discussed in section 3, and section 4 will present the findings of the paper. We conclude in section 5.

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2. Literature review

2.1 Definition of career success

Judge et al. (1995, p. 486) define career success as “the accumulation of achievements (real or perceived) arising from work experiences”. Career success can be classified into objective career success (or extrinsic success) and subjective career success (or intrinsic success) (Nabi, 2001). The objective career success is considered as “higher levels of material benefits and occupational attainment” (Blickle, Schütte & Wihler, 2018), while subjective career success refers to “an individual’s perceptions of his or her own success, based on perceptions of personal career accomplishments and future prospects” (Dries, Pepermans & Carlier, 2008). Nabi (1999) points out the important of exploring both objective and subjective success in career research because they are different conceptually and not parallel to each other. In this study, we employ both objective and subjective career success as our dependent variable.

2.2 Determinants of career success

Based on previous literature and empirical studies (Heredia, 2009; Baruch, 2006; Heslin, 2005; Arthur, Khapova & Wilderom, 2005), we build a model of the determinants of career success for graduate students at Ho Chi Minh City Open University. The factors that can affect career success of graduate students including individual competences, individual aspirations, working experience, personal network, organizational structure (see Heridia, 2009).

2.2.1. Individual competences (COM)

The concept of competence was first developed by McClelland (1973) who finds that intelligent and grades in school do not guarantee for career success of a person. McClelland (1973) states that competence is an important indicator to predict career achievement rather than traditional exams are. He defines competence as “*a person trait or set of habits that leads to more effective or superior job performance*”; in addition, competence is explained as “*ability that adds clear economic value to the efforts of a person on the job*”. Similarly, Woodall and Winstanley (1998) define competence as a group of knowledge, skills, attitudes as well as experiences which are important for the success of a person. Bergenhenegouwen, Horn and Mooijman (1997) state that individual competence is crucial for workers to achieve outstanding task performances rather than their skills and knowledge are. Secondly, individual competences will affect how a specific worker acts in professional circumstances. Thirdly, individual competence behavior will help distinguish between a successful and failure person. We expect that graduate students who have high level of individual competences will achieve higher level of objective and subjective success. This leads to the following hypotheses:

Hypothesis 1: Individual competences will have positive influence on objective success.

Hypothesis 2: Individual competences will have positive influence on subjective success.

2.2.2 Individual aspirations (ASP)

Individual aspiration is defined as “the strength of an individual’s motivation to achieve progressively higher or conversely lower goals based on experiences of success and failure, his own and others who constitute his reference models, in short, it is the expected level of achievement. The level set is in fact the compromise between the desire for success and the desire to avoid failure, the first pushing the level up, and second pulling it down” (Vig & Singh, 2000). Individual aspiration is considered as the motivation for personal development and career success. We have the following hypotheses:

Hypothesis 3: Individual aspirations have positive influence on objective success.

Hypothesis 4: Individual aspirations have positive influence on subjective success.

2.2.3 Working experience (EXP)

Work experience is becoming an indispensable part of the recruitment process for university graduates. Previous empirical studies suggest the positive relationship between work experience and objective career success. For example, Judge et al. (1995) report the positive association between working experience and salary of managers. Additionally, having more work experience, employees feel more confident and successful at work (Katz, Tushman & Allen, 1995). We also expect the positive relationship between years of experience and subjective career success. This leads to the following hypotheses:

Hypothesis 5: Working experience has positive influence on objective success.

Hypothesis 6: Working experience has positive influence on subjective success.

2.2.4. Personal network (NET)

Personal network is a group of people who are intended to develop and maintain the relationship with a person to support his or her in a given activity (Gersick, Bartunek & Dutton, 2000). Gersick, Dutton and Bartunek (2000) indicate that personal network provides two types of advantages for an employee: emotional support and career support. In addition, Seibert,

Kraimer and Liden (2001) suggest that the network would allow people to access information and resources as well as receive career sponsorship to enhance their career success. We expect that the personal networks would have positive impact on both objective and subjective career success of graduate students. Therefore, we propose the following hypotheses:

Hypothesis 7: Personal network has positive influence on objective success.

Hypothesis 8: Personal network has positive influence on subjective success.

2.2.5 Organizational structure (ORG)

The recent career literature points out the important role of individual in achieving career success; however, organizations also play a crucial part in career management. Organizational structure will determine the hierarchical ladder, responsibilities of employees in the organization, opportunities for promotion as well as the level of coordination between employees (Heridia, 2009). Lacking of career prospects in organization is considered as the main reason for low productivity and high rate of employee turnover. Therefore, we propose the following hypotheses:

Hypothesis 9: Organizational structure has positive influence on objective success.

Hypothesis 10: Organizational structure has positive influence on subjective success.

3. Methodology and Data

3.1 Sample description

We use both qualitative and quantitative research to conduct this paper. Qualitative research is employed in the first stage by doing in-depth interviews with 20 graduate students to find out factors that can affect their career success. In the second phase, we conduct the quantitative research basing on the scale of constructs in previous empirical studies. Furthermore, the scale of constructs is adjusted after doing the qualitative research. In this study, we employ email to distribute the questionnaires and then collect data of 436 graduate students at Ho Chi Minh City Open University with convenient sampling method. The description of sample is reported in Table 1.

Table 1
Summary of the results of sample statistics

		Frequency	%
Gender	Male	174	39.9
	Female	262	60.1
Age group	22-26	246	56.4
	27-34	156	35.8
	Above 34	34	7.8
Marital status	Single	348	79.8
	Married	88	20.2
Working at the organization	State agency	78	17.89
	Joint stock company	132	30.28
	Private enterprise	64	14.68
	Limited liability company	100	22.94
	Foreign invested company	56	12.84
	Non-governmental organizations	6	1.38

3.2. Measurement

3.2.1 Dependent variables

In this study, we employ both objective and subjective career success as our dependent variables.

a) Subjective career success (SUB)

We follow Gattiker and Coe (1986) as well as Heredia (2009) by employing Job Success which represents the job satisfaction of university graduates to proxy for subjective career success. The construct initially had 16 items in the pilot phase and finally with 10 items. The interviewees were asked to select the statements that are suitable with them on a five-point Likert scale from (1) "Completely agree" to (5) "Completely disagree". Example of one of the statements "I am satisfied with the advancement from my job".

b) Objective career success (OBJ)

Objective career success is usually measured by salary and promotions (Judge et al., 1995). We follow previous empirical studies by measuring objective career success as annual salaries of graduate students (see Blickle, Schütte & Wihler, 2018; Giraud, Bernard & Trinchera, 2019).

3.2.2. Independent variables

Based on qualitative research and previous empirical studies (Heredia, 2009; Baruch, 2006; Heslin, 2005; Arthur, Khapova & Wilderom, 2005), we build a model of the determinants of career success for graduate students at Ho Chi Minh City Open

University. There are five factors that can affect career success of graduate students including individual competences, individual aspirations, working experience, personal networks and organizational structure.

a) Individual competences (COM)

We follow Heredia (2009) by utilizing a scale from “the International Personality Item Pool, a Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences” (IPIP, 2007) to measure individual competences. The scale initially had 10 items in the pilot phase and finally with 5 items. The respondents were asked to select the answers that were suitable with them from a five-point Likert scale from (1) very inaccurate to (5) very accurate. Example of one of the statements from IPIP (2007) “I recommend some effective solutions for the job”.

b) Individual aspirations (ASP)

We use the Individual Aspiration Scale developed by Kim (2004) to measure individual aspirations. The scale measures the level which an individual want to achieve expertise, reach balance and independent as well as obtain security (see Heredia, 2009). The respondents are asked to choose how the items applied to them accurately from a Likert scale. It is important to note that some of the items were removed due to low outer loadings.

c) Working experience (EXP)

Working experience is measured by the number of years of working experience that a graduate student has (Heredia, 2009).

d) Personal network (NET)

Personal network is measured by the average number of people who have helped graduate students in their career such as providing employment information, job opportunities or advice (Heredia, 2009).

e) Organizational structure (ORG)

We use the scale which is adopted from the survey of internal labor market practices (see Nabi, 2001) to measure the promotion structure in the companies graduate students are working for. Respondents are asked to select the level of each item that is suitable with their organizational structure on a five-point Likert scale from (1) Completely disagree to (5) Completely Agree. An example of the item is “There is a clearly defined promotional structure”.

3.3. Analytical techniques

We employ Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart PLS 3.2 software to analyze the reliability and validity as well as explore the research hypotheses. PLS SEM model offers more advantages to compare with traditional CB-SEM model including smaller sample size and the data does not have to follow the standard distribution requirements (Hair et al., 2016).

4. Results and Discussions

4.1. Reliability and Validity Assessment

We employ the Cronbach's alpha (CA), Composite Reliability (CR), the Average Variance Extracted (AVE) as well as Heterotrait-Monotrait Ratio (HTMT) to evaluate the reliability of the scale, the convergence validity as well as discriminant validity.

Table 2

The results of CA, CR, AVE and Outer Loadings

	ASP	COM	ORG	SUB	OBJ	NET	EXP	CA	rho_A	CR	AVE
ASP1	0.934							0.835	0.840	0.924	0.858
ASP2	0.919										
COM1		0.785									
COM2		0.869									
COM3		0.854						0.886	0.902	0.916	0.685
COM4		0.811									
COM5		0.815									
ORG1			0.790								
ORG2			0.782					0.750	0.786	0.851	0.655
ORG3			0.854								
SUB1				0.818							
SUB2				0.791							
SUB3				0.737							
SUB4				0.768							
SUB5				0.805				0.923	0.930	0.935	0.589
SUB6				0.735							
SUB7				0.809							
SUB8				0.746							
SUB9				0.724							
SUB10				0.737							
OBJ1					1.000			1.000	1.000	1.000	1.000
NET1						1.000		1.000	1.000	1.000	1.000

EXP1		1.000	1.000	1.000	1.000	1.000
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The Cronbach's alpha (CA) is a useful indicator to access the reliability of the scale, and Cronbach's alpha is greater than 0.7, which means that the scale is reliable (Henseler, Ringle & Sinkovics, 2009; Hair et al., 2016). The results from table 2 indicate that all CA coefficients are larger than 0.7; therefore, all scales in the model were achieved the reliability. In addition, Composite Reliability (CR) and the Average Variance Extracted (AVE) are also considered as other criteria to evaluate reliability and convergence value (Fornell & Larcker, 1981). The value of CR must be greater than 0.6, and AVE must be greater than 0.5 (Henseler, Ringle & Sarstedt, 2015). The results from table 2 show that all scales in the model are satisfied with the conditions of reliability and convergent validity in term of CR and AVE. Furthermore, Hair et al. (2016) point out that we need to evaluate the outer loadings to explore the relationship between items and their constructs. As we can see from Table 2, all of the factor loadings of each construct are larger than 0.7. We can conclude that the items are related with the constructs.

Hair et al. (2016) propose the use of Heterotrait-Monotrait Ratio (HTMT) to evaluate the discriminant validity between constructs in the conceptual model. The value of HTMT must be smaller than 0.85. The results from table 3 show that the highest value of HTMT is 0.545. For that reason, we can conclude the discriminant validity between constructs in the model.

Table 3

The results of HTMT value

	ASP	COM	ORG	SUB	OBJ	NET	EXP
ASP							
COM	0.372						
ORG	0.327	0.545					
SUB	0.291	0.185	0.249				
OBJ	0.087	0.233	0.195	0.136			
NET	0.132	0.128	0.138	0.182	0.248		
EXP	0.226	0.310	0.092	0.097	0.332	0.259	

4.2. Partial Least Squares Structural Equation Modeling (PLS-SEM)

To measure the quality and reliability of PLS-SEM model, Hair et al. (2016) suggest additional criteria such as VIF value, R^2 value, Q^2 value (Stone – Geisser Indicator) as well as f^2 value. The analysis results from table 4 indicate that the VIF values of the conceptual structures are smaller than 5, which means that the problem of collinearity does not exist in the conceptual model (see Hair et al., 2016). In addition, we use R^2 to evaluate the explanatory of endogenous variables in the model, and Q^2 is employed to access predictive relevance value. The Q^2 has the values of 0.02, 0.15 and 0.35, which indicates that variables have the small, medium and large level of predictive relevance (Hair et al., 2016). The R^2 values of objective success and subjective success are 0.171 and 0.117, respectively. It means that the constructs in the research model explain 17.1% for objective success and 11.7% for subjective success. The Q^2 values of objective success and subjective success are 0.159 and 0.062, respectively. It means that the objective success has good predictive relevance.

Table 4The results of VIF, R^2 , f^2 and Q^2

	VIF		R^2	f^2		Q^2
	OBJ	SUB		OBJ	SUB	
ASP	1.152	1.152		0.004	0.043	
COM	1.433	1.422		0.007	0.001	
ORG	1.380	1.380		0.017	0.021	
SUB			0.117			0.062
OBJ			0.171			0.159
NET	1.090	1.090		0.027	0.021	
EXP	1.250	1.250		0.075	0.001	

Finally, Cohen (1988) points out that f^2 value corresponds to 0.02, 0.15 and 0.35 which indicates the small, medium and large size effect of exogenous variables. The results in Table 4 indicate that networking and experience have small size effects on objective success. Aspirations, organization and networking have small size effects on subjective success.

Table 5

PLS-SEM results

	β	STDEV	P Values	Hypothesis	Result
COM → OBJ	0.090	0.045	0.044	H1	Supported
COM → SUB	-0.018	0.062	0.777	H2	Unsupported
ASP → OBJ	-0.058	0.046	0.213	H3	Unsupported
ASP → SUB	0.208	0.075	0.006	H4	Supported
EXP → OBJ	0.273	0.046	0.000	H5	Supported
EXP → SUB	0.022	0.050	0.655	H6	Unsupported
NET → OBJ	0.156	0.067	0.020	H7	Supported
NET → SUB	-0.137	0.040	0.001	H8	Unsupported
ORG → OBJ	0.135	0.044	0.002	H9	Supported
ORG → SUB	-0.155	0.058	0.275	H10	Unsupported

Hair et al. (2016) suggest that we should conduct the Bootstrapping procedure with 5000 random subsamples. In this study, we conduct the Bootstrapping with 10000 random subsamples. The PLS-SEM results are presented in Table 5. Individual competences are positively correlated with objective career success at 5% statistically significant level ($\beta=0.09$). This finding strongly supports the hypothesis 1. Moving into higher positions in career requires graduate students to have better skills for effective performance in their job. This paper confirms the indispensable role of individual competences in determining objective career success. It is parallel with past studies (Irrinki, 2006). However, the study does not support the hypothesis 2. Individual competence has a negative sign and statistically insignificant impact on subjective career success. In other words, individual competence does not affect subjective career success.

The hypothesis 3 states that there is a positive relationship between individual aspirations and objective career success. The PLS-SEM results from table 5 do not support this hypothesis. In particular, individual aspirations have a coefficient of -0.058 with statistically insignificant impact on objective career success. Having clear aspirations does not guarantee for graduate students to have effective career strategies to obtain the objective career success (Heredia, 2009). However, we find a positive association between individual aspirations and subjective career success at 5% statistically significant level ($\beta=0.208$ and $p=0.006$). Having clear aspirations will help individual feel more successful at work. Therefore, the hypothesis 4 is supported.

We find a strong and positive relationship between working experience and objective career success at 5% statistically significant level ($\beta=0.273$). Therefore, hypothesis 5 is supported. The finding is parallel with the results obtained by other scholars who report the positive association between years of experience and salary (Katz, Tushman & Allen, 1995; Van Vianen, De Pater & Preenen, 2008). Nevertheless, our findings do not support the hypothesis 6 for the positive relationship between experience and subjective career success at 5% statistically significant level ($p=0.655$). The finding is similar with the results from Heredia (2009).

The hypothesis 7 about the positive association between individual networks and objective success is strongly supported at 5% significant level ($\beta=0.156$ and $p=0.02$). The individual network will allow graduate students to access better information and resources as well as receive career sponsorship to increase salary in their organizations (Seibert, Kraimer & Liden, 2001). Interestingly, we find a negative relationship between personal networks and subjective career success at 5% significant level ($\beta=-0.137$ and $p=0.001$). It can be explained that having larger personal networks will help graduate students to obtain higher income (objective success), but less time for themselves as wished (Athanasou & Van Esbroeck, 2008). These individuals feel that they will not succeed in their career. Therefore, larger personal networks will have negative impact on subjective career success.

The findings from Table 4 accept the hypothesis that organizational structure has positive influence on objective career success ($\beta=0.135$) at 5% level. Hypothesis 9 is strongly accepted. The finding has proved the important of organizational structure in enhancing objective career success and consistent with previous studies (Baruch, 2003; Hassan, 2007). Finally, hypothesis 10 is not supported. PLS-SEM model shows an insignificant relationship between organizational structure and subjective career success ($\beta=-0.155$ and $p=0.275$).

5. Conclusion

Why are some people more successful than the others? This interesting question has been partially answered by researchers due to the complexity in defining and measuring success. In this paper, we investigate factors affecting career success of graduate students from Ho Chi Minh Open University in Vietnam. We have employed mixed research method to conduct this paper. Qualitative research is used in the first stage by doing in-depth interviews with 20 graduate students. In the second stage, we conduct the quantitative research basing on the scale of constructs in previous empirical studies. The collected data is analyzed via PLS-SEM model with Smart PLS 3.2 software. We have found that individual competences, working experience, personal networks and organizational structure are crucial factors for objective success, while individual aspirations and personal networks are important factors for subjective success. The paper contributes to the literature by extending the theory of career success at a specific university. Organizations and educational institutions in Vietnam can utilize the findings from this paper to design specific training programs for their students as well as their employees. We suggest that educational institutions should develop more “soft-skills” for their students, especially the skills regarding individual competences and aspirations. In addition, organizations should develop effective management strategies for their workers to enhance career success.

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