

A Study of the Effects of Career Functions, Psychosocial Functions and Role Model Functions on the Sustainability of Entrepreneurship Mentoring

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Previous research has shown that the function of entrepreneurship mentoring affects the success of start-ups, but there is no research on how the function of entrepreneurship mentoring affects the sustainability of start-up companies based on start-up performance. The study subjects were preliminary and early founders, and the survey was conducted as a survey method. The survey items consisted of 63 questions including 13 demographics. A Likert five-point scale was used for the measurement. For the empirical analysis, frequency analysis, descriptive statistical analysis, exploratory factor analysis, reliability analysis, correlation analysis, regression analysis, and mediation effect analysis were performed using SPSS 22. The results show that the career function of entrepreneurship mentoring has the greatest impact on sustainability, and that psychosocial function has a positive effect on sustainability. It was confirmed that the role model function did not affect sustainability. Second, it was confirmed that the role model function of entrepreneurship mentoring was completely mediated by sustainability through entrepreneurship performance, and that psychosocial and career functions were partially mediated by sustainability through entrepreneurship performance. In order to secure the sustainability of start-up companies, it is believed that mentors are required with the ability to establish a government-backed policy that will provide ongoing mentoring to founders and start-up companies, as well as the efforts of senior companies and entrepreneurs.

Key words: *Functions of entrepreneurship mentoring; career functions; psychosocial functions; role model related functions; entrepreneurship performance; sustainability.*

Introduction

The interest in and need for entrepreneurship are increasing rapidly with the expansion of the entrepreneurship ecosystem and support policy to revitalise innovative entrepreneurship, which is the core policy task of the current Korean government. As a result of the continuous increase in the demand for start-ups, various support policies for start-ups are being implemented, emphasising the need for effective government support and systematic establishment of start-ups for the survival and growth of founders and start-ups. However, start-up companies still cited the obstacles to start-ups as: the expected difficulties in securing start-up funds; the fear of failure of the start-ups and the need to rise again; and the overall knowledge and ability of the start-ups. In addition, the lack of experience was 67.4, 27.4 and 23.2 per cent, respectively, and it can be seen that more than 80 per cent of the start-up companies did not receive any start-up related training, including start-up mentoring, before the start-up. Start-ups have a five-year survival rate of 27.5 per cent, making it difficult to maintain sustainability (Ministry of SMEs and Startups, 2017). These results suggest that the sustainability of start-ups can be achieved by securing start-up funds and overcoming vague fears of start-up failure and recovery. The researcher's expectation that this may help the study can be attributed to the research.

Materials and Methods

Mentors and Mentoring

A mentor is someone who has knowledge and experience in a particular field and acts to improve the mentee's ability and awaken their inherent strength through teaching and advice. Levinson and McKee (1978) define mentors as elders who 'have long experience in a particular field and have a wealth of knowledge and experience in that field', while Hunt and Michael (1983) state that they have superior knowledge and experience. Kram (1983) concludes that 'mentors are sufficient influence to propagate skills and experiences in various areas to mentees in order to advance the interests of organisations and individuals within organisations, and to help mentees grow individually through ongoing counselling and support.

The concept of mentoring began to attract the attention of scholars studying organisational behaviour in the late 1970s, and its value for successful entrepreneurs was acknowledged by the *Harvard Business Review* in 1978 (Roche, 1978).



Start-up, Start-up Company

Entrepreneurial activity can be defined as entrepreneurial human behaviour that can create value through the process of expanding economic activity while creating and exploring new products, processes or markets, with human enterprise as a component (Ahmad & Seymour, 2008).

Entrepreneurship literally creates work. According to the related law, entrepreneurship refers to the establishment of a new SME. It is also defined as the creation of a new corporate organisation that did not exist previously to produce, sell and procure goods or services by combining human, material and social capital.

SME start-up activities have an important place in the growth and employment of macroeconomics. In addition, the London School of Business and the Babson College and Kauffman Foundation Research Institute in the United States have jointly studied the relationship between SME start-up activities and economic growth since 1999. It has been hypothesised that a high positive correlation exists.

According to the current law in Korea, a start-up company is defined as ‘a person who started a small business and a small business’. Since then, this definition has been subdivided to include early start-ups in order to provide customised support.

Mentoring Function

Kram (1983) is a leading researcher on mentoring. Looking at the above studies, the function of mentoring is divided into career function and psychosocial functions (Kram, 1983). Kram states that role model features are embedded in psychosocial functions, while career functions are influenced by the strength, competence and position of mentors in the organisation. Psychosocial functions can be influenced by the quality of the mentor–mentee interaction and emotional exchange activities (Kram, 1983).

Burke (1984) later added to Kram’s two-dimensional mentoring functional classification to include role modelling functions that provide mentors with the knowledge and skills to guide appropriate behaviour. The three-dimensional model is presented in Table 1.

Table 1: Classification of mentoring by function

Career functions	Psychosocial functions	Role modelling functions
Sponsorship	Acceptance and confirmation	Role modelling
Exposure and visibility	Counselling	
Coaching	Friendship	
Protection	Role model	
Challenging assignment		

Entrepreneurial Performance

In the past, most companies used financial performance indicators such as net income, return on investment and return on equity (Ittner & Larcker, 1998).

Of the 37 critical factors involved in the net profit margin of total assets for individual companies, market share is of paramount importance, so if companies want to maximise their profits, they must seek to encroach on the market and increase their market share (Prescott et al., 1986).

The most widely studied non-financial performance indicator is market share analysis, which represents the competitive position of the market. Companies with a high market share have a favourable position in the development of the experience curve through economic and commercial perceptions, and distribution path governance, securing favourable trading conditions with customers and suppliers. Market share and profitability are closely related (Beard & Dess, 1981).

A company's performance is generally divided into non-financial and financial performance. For start-ups, financial performance measurement is not easy. This is because start-up companies are hesitant to provide financial data; they experience a lack of accuracy because objective financial data are not transparently disclosed, small-business data can be difficult to interpret even if clear financial information is available. Many evaluations are used, and empirical studies show that early start-ups use more non-financial performance estimates.

The study measures start-up performance with 19 factors. These include market share, redemption rate, sales, profit margins, ROI, asset growth, financial liquidity, new item development, brand recognition, demand-building capabilities, intellectual property applications, customer satisfaction, in-house skills development, loan guarantees and government support. They also include projects, funding potential, employment growth, hiring plans and turnover.

Sustainability

Sustainability can be interpreted in different ways, depending on what is pursued in which area. In particular, in the case of a company established in various fields, since the areas of interest and the purpose of pursuing are different, the method of determining the degree of sustainability may also be different – even if a certain standard is upheld (Holdren, Daily & Ehrlich, 1995).

In this study, the items measured for sustainability were classified into economic responsibility, environmental responsibility and social responsibility.

Entrepreneurial Mentoring Functions and Entrepreneurial Performance

According to previous studies, most of the best managers who have been mentored are producing higher performance and higher job satisfaction than managers without mentors. In addition, mentoring can have a positive impact on the career development of managers and professionals, personally contribute to career success and positively impact organisational performance. Interactions with organisational performance may vary according to mentoring functions, methods and interactions (Chao, 1997). Based on the preceding studies, the hypothesis that entrepreneurship mentoring function affects entrepreneurship performance will be established and analysed.

Entrepreneurial Mentoring Functions and Sustainability

Antonella (2009) points out that in the research on the sustainability of social enterprises, in order to managers to make successful social enterprises, managers must have high degree of access to professional services and information. These conditions are as important as financial expansion and market selling conditions (Antonella, 2009). Antonella emphasises that managers need ongoing training, and mentoring is an area of access to, and training in, expert services and information.

Strengthening the linkage between mentors and mentees, and between stable companies and companies preparing for independence is a recognised way to secure sustainability.

The Research Model and Hypothesis

Research Model

Based on the studies examined so far, this study aims to examine the effects of entrepreneurship mentoring on sustainability via entrepreneurship performance through empirical analysis. Through the theoretical considerations discussed above, this study attempts to verify the effects of career functions, psychosocial functions and role model functions on the start-up performance and sustainability of the start-up companies through

empirical studies. In order to achieve this, the following research model was created, based on the concept and theoretical basis established through previous research. The model of effect analysis between variables is shown in Figure 1.

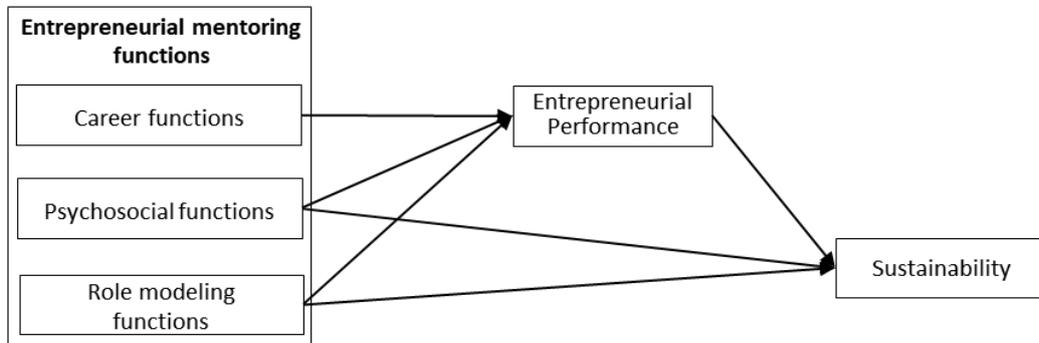


Figure 1. Research model

Research hypotheses

- H1-1 Career functions of entrepreneurship mentoring will have a positive effect on entrepreneurship performance.
- H1-2 The psychosocial function of entrepreneurship mentoring will have a positive effect on entrepreneurship performance.
- H1-3 The role modeling function of entrepreneurship mentoring will have a positive effect on entrepreneurship performance.
- H2-1 The career functions of entrepreneurship mentoring will have a positive impact on the sustainability of entrepreneurs.
- H2-2 The psychosocial functions of entrepreneurship mentoring will have a positive effect on the sustainability of entrepreneurs.
- H2-3 The role modeling function of entrepreneurship mentoring will have a positive effect on the sustainability of entrepreneurs.
- H3 The performance of a start-up company will have a positive effect on the sustainability of the start-up company.
- H4-1 The career functions of entrepreneurial mentoring will play a role in mediating the impact of entrepreneurial performance on sustainability.
- H4-2 The psychosocial functions of entrepreneurial mentoring will play a role in mediating the impact of entrepreneurial performance on sustainability.
- H4-3 The role model functions of entrepreneurial mentoring will play a role in mediating the impact of entrepreneurial performance on sustainability.

Operational definition of variables

The operational definition of each variable is summarised in Table 2.

Table 2: Operational definition of variables

Evaluation items	Measurement variable	Operational definition	Researcher
Entrepreneurial mentoring functions	Career functions	Mentors guide, expose and present, protect, challenge and sponsor mentors for the purpose of career development.	(Barr, 1998)
	Psychosocial functions	Counselling, friendship, coaching, acceptance and support of mentors to help mentees maintain psychological stability to adapt to the organisation.	
	Role modelling functions	The ability of a mentor to present a model of the mentee as a desirable senior in the organisation and to help the mentee to benchmark it.	
Entrepreneurial Performance	Financial performance	Market share, repurchase rate, sales, gross profit margin, return on investment of products and services, asset growth, financial liquidity.	(Park & Ahn, 2016); (Lim et al., 2015)
	Non-financial performance	Development of new items, brand awareness, ability to secure demand, application of intellectual property rights, customer satisfaction, in-house technology development, possibility of loan guarantees, possibility of receiving government support projects, possibility of attracting investment funds, employment increase, employee recruitment plan, improvement of turnover rate.	
Sustainability	Economic responsibility	Contribution to national development, creation of new employment, improvement of people's living standards and quality of life through continuous improvement of quality and service, profit creation. Having a high market position, improving brand and corporate value.	(Choi, 2012)
	Environmental responsibility	Support and concern for environmental protection activities, continuous provision of eco-friendly products and services, regular environmental protection campaigns, efficient use of resources and energy, efforts to collect and reduce waste resources, compliance with environmental laws and regulations.	
	Social responsibility	Efforts to improve labour conditions, human rights efforts, a fair society, efforts for customer health and safety, volunteer activities, and social reduction of company resources	

Results and Discussion

Empirical Results

This study used the SPSS 22.0 statistical program and analysed the frequency analysis, descriptive statistical analysis and validity of measurement variables. Pearson's correlation analysis was conducted to verify the correlation between the variables set prior to reliability analysis and hypothesis testing using the α 's coefficient.

Demographic Characteristics Analysis

The total number of samples used in this study was 234, and the frequency analysis of the general characteristics of the distribution of samples was performed. The results showed that 84.1 per cent (197) were male and 15.8 per cent (37) were female. Those under 35 years comprised 8.1 per cent (19), 30.3 per cent (71) were 35–45 years old, and 61.5 per cent (144) were over 46 years. The highest level of educational attainment was graduate students and higher (53.8%, or 126), followed by university graduates at 40.5 per cent (95).

The Exploratory Factor and Reliability Analysis

In this study, the data collected from the founders who had been experienced in the start-up mentoring analysis showed that the standard deviation was 3 or less, the absolute value of skewness statistics 3 or less and the kurtosis statistical value 3 or less. Table 3 presents a summary of the exploratory factor analysis and the reliability analysis results.

Table 3. The exploratory factor and reliability analysis

Measurement item	Factor					Commonality	Reliability analysis
	Psycho-social functions	Career function	Entrepreneurial Performance	Sustainability	Role modelling function		Cronbach's alpha
Psychosocial function 5	.778					.694	.848
Psychosocial function 4	.764					.757	
Psychosocial function 2	.748					.699	
Psychosocial function 1	.734					.723	
Psychosocial function 3	.665					.599	
Career function 1		.763				.763	.858
Career function 4		.747				.721	
Career function 2		.740				.723	
Career function 5		.658				.631	
Entrepreneurial Performance 1			.774			.748	.830
Entrepreneurial Performance 3			.765			.789	

Entrepreneurial Performance 2			.682			.700	
Sustainability1				.831		.809	.805
Sustainability2				.663		.671	
Sustainability3				.653		.675	
Role modelling function2					.766	.786	.792
Role modelling function3					.719	.763	
Role modelling function4					.645	.715	
Eigen-value	3.258	2.980	2.394	2.256	2.080		
Variance %	18.099	16.554	13.300	12.533	11.554		
Accumulated (%)	18.099	34.653	47.954	60.487	72.041		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy						.879	
Bartlett's Test of sphericity	Approx. χ^2	2404.053	df	153	p-value	0.000	

Pearson's Correlation Analysis

As a result of exploratory factor analysis in this study, correlation was obtained to find the degree of directionality and denseness among the variables of the calculated components through averaging the measured variables with homogeneity obtained through reliability analysis and homogeneity through reliability analysis. Relationship analysis was conducted. As for the correlation between variables, career functions showed high correlation with role model functions(0.631**) and Pearson correlation coefficient with entrepreneurial performance (0.630**). As a result of correlation analysis of all variables, all correlations were statistically significant ($r \geq .05$).

The results of the correlation analysis are summarized as shown in Table 4.

Table 4. Summary of correlation analysis results

Variables	N	Mean	Standard deviation	Career functions	Psycho-social functions	Role modelling functions	Entrepreneurial performance	Sustainability
Career functions	234	4.0203	.64801	1	.416**	.631**	.630**	.628**
Psychosocial functions	234	4.0368	.59484	.416**	1	.468**	.415**	.526**
Role modeling functions	234	3.8205	.72102	.631**	.468**	1	.569**	.525**
Entrepreneurial Performance	234	3.9031	.78500	.630**	.415**	.569**	1	.535**
Sustainability	234	3.9288	.73709	.628**	.526**	.525**	.535**	1
**. The correlation is significant at the .01 level (both sides).								

Test of Hypothesis

This hypothesis was tested using SPSS 22. Table 5 shows the results of hypothesis testing of entrepreneurship mentoring and sustainability, entrepreneurship mentoring and entrepreneurship, entrepreneurship and sustainability. The result of verifying the hypothesis is shown in Figure 2.

Table 5: Results of hypothesis test

Constructs	B	β	t	p-value	VIF	Result
(Constant)	.036		.131	.895		
Career functions	.493	.434	7.009	.000	1.714	accept
Psychosocial functions	.362	.292	5.379	.000	1.321	accept
Role modelling functions	.117	.115	1.800	.073	1.815	reject
$R^2=.486$, Adjusted $R^2=.479$, $F=72.521$ ($p < .001$), Durbin-Watson=2.127						
Dependent variable: Sustainability						
(constant)	.157		.528	.598		
Career functions	.516	.426	6.698	.000	1.714	accept
Psychosocial functions	.165	.125	2.241	.026	1.321	accept
Role modeling functions	.263	.242	3.699	.000	1.815	accept
$R^2=.458$, Adjusted $R^2=.451$, $F=64.765$ ($p < .001$), Durbin-Watson=1.925						
Dependent variable: Entrepreneurial Performance						
(constant)	.015	.270	.057	.955		
Entrepreneurial Performance	.130	.139	2.182	.030	1.845	accept
$R^2=.287$, Adjusted $R^2=.283$, $F=93.160$ ($p < .05$), Durbin-Watson=2.034						
Dependent variable: Sustainability						

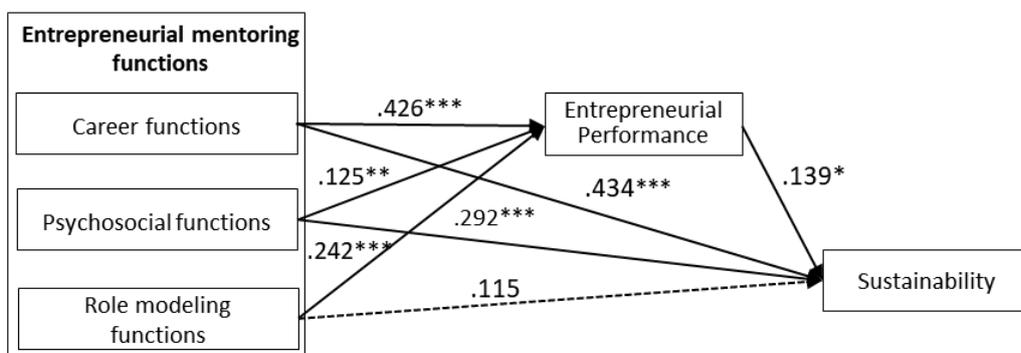


Figure 2. Hypothesis verification result

Mediating Effect Analysis

To analyse the relationship between entrepreneurial mentoring and sustainability, the three-step approach of Baron and Kenny (1986) was used to conduct a multiple regression analysis for the analysis of mediating effects. In the first stage, career and psychosocial functions had a positive impact on sustainability. Hypotheses H1.1 and H1.2 were adopted and role model features were not adopted because they did not have a significant impact on sustainability. In the second stage, career functions, psychosocial functions and role model functions were shown to have a positive effect on sustainability. In the third stage, the founding outcome was partially mediated in the relationship between career function and psychosocial function of sustainability and hypotheses H4.1 and H4.2 were adopted. Since H4.3 was not adopted in stage 1, it was excluded from the verification of intermediary effectiveness. The results of the mediating effect test are shown in Table 6.

Table 6: Mediating effect analysis of absorption

Classification	Step1		Step2		Step3		Mediated effect result
	Sustainability		Entrepreneurial performance		Sustainability		
Dependent variable	B	Beta	B	Beta	B	Beta	
Independent Variable							
(constant)	.036		.157		.015		
Career functions	.493	.434***	.516	.426***	.426	.375***	partial
Psychosocial functions	.362	.292***	.165	.125**	.341	.275***	partial
Role modeling functions	.117	.115	.263	.242***	.083	.081	-
Entrepreneurial Performance					.130	.139**	
R ²	.486		.458		.550		
F	72.521***		64.765***		56.470***		
Durbin-Watson	2.127		1.925		2.107		
p-value: *p< .05 **p< .01 ***p< .001							

Conclusion

This study suggests the direction of research regarding whether start-up entrepreneurship affects entrepreneurial performance and sustainability. As mentioned in the introduction, 72.5 per cent of start-ups have been closed for less than five years, for various reasons. However, the study found that the execution of start-up mentoring has a significant effect on



the sustainability of start-ups. As a result, the employment and utilisation of competent mentors could play an important role in reducing the closing rate and increasing the sustainability of start-ups. I would like to utilise start-up mentoring in start-up related organisations as a way to make use of the experience of failed start-ups and to ensure the survival rate, or sustainability, of the start-up companies. In addition, through detailed study of the function of entrepreneurial mentoring, I hope to establish various mentoring methodologies applicable to entrepreneurs.

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