

Contribution of Entrepreneurial Characteristics and Competency towards Business Performance of the Japan Internship Alumni Association

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The main objective of the Japan internship program for young farmers is to address farmer regeneration problems in Indonesia. In other words, young farmers joining the program in Japan could gain knowledge and experience related to advanced technology, then after returning to Indonesia they could implement those skills to be entrepreneurs. Therefore, the objectives of this study were: 1) to describe the characteristics of Japan internship alumni; and 2) to analyze the contribution of individual, psychological characteristics and entrepreneurial competence toward business performance of the Japan internship alumni association. Purposive sampling approach was used to determine the respondents in this study with the number of respondents as many as 123 people. Respondents were spread from 3 provinces in Java Island, namely West Java, Central Java and East Java. Data collection was carried out from November 2020 to March 2021. In order to answer the research objectives, path analysis was used as the basis for analyzing the contribution of individual and psychological characteristics and entrepreneurial competence to the business performance. In this research, it can be seen that there was significant influence of both individual and psychological characteristics toward entrepreneurial competency. In addition, entrepreneurial characteristic variables had both a direct and indirect influence on performance. Entrepreneurial competence also had a positive influence on business performance. This reflects that after returning to Indonesia, respondents had personalities that shape entrepreneurial competencies. In this case, these competencies can ultimately drive business performance. Thus, the Japan internship program had been able to shape individual and psychological characteristics that were able to improve entrepreneurial competence and business performance at the same time.

1. Introduction

The Japan Internship Program is an internship program initiated by the Agency for Agricultural Extension and Human Resource Development, Ministry of Agriculture, Republic of Indonesia. This internship program has been started since 1984 aimed at young farmers. The main objective of this program is to increase the capacity and ability of young farmers to regenerate farmers in Indonesia. In addition, this program also aims to produce agricultural entrepreneurs through providing experience related to agricultural technology and systems in Japan. Participants who have completed the internship are expected to become agents of economic development in their respective regions. The existence of this internship program certainly has a positive effect on the regeneration of farmers and entrepreneurs in Indonesia (Jamil, Hidayat, et al., 2021).

Trainees also learn about the use of advanced technology for agriculture, from the cultivation process to the processing of agricultural commodities. The experience, skills and competencies related to advanced technology and advanced agricultural systems gained can be applied in Indonesia, so that they can apply these skills to become entrepreneurs (Priyadi, 2019; Nawawi, 2010). Therefore, in order to improve the entrepreneurial performance of Japan internship alumni, good individual character, psychological character, and entrepreneurial competence are needed (Dhamayantie & Fauzan, 2017). However, different trainees' backgrounds (education, age, and experience) cause the contribution of Japan internships alumni's entrepreneurial performance to vary in results. Some alumni experience an increase in income, but others have a relatively fixed income. In addition, the competence and psychological characters acquired by trainee alumni during their internships also cause changes to their income, business performance, and change their mindset in running their business. Based on these phenomena, it is important to examine the contribution of individual characteristics and entrepreneurial competencies of trainees to the business performance of Japan internship alumni association. This study aimed to: (1) describe the characteristics of Japan internship alumni; and (2) to analyze the contribution of individuals, psychological characteristics and entrepreneurial competencies to the business performance of farmers (alumni).

Research related to internships in Japan has been done by several author/researcher (Jamil, Hidayat, et al., 2021; Priyadi, 2019; Nawawi, 2010). Researches conducted by (Priyadi, 2019; Nawawi, 2010) are more about the motivation, survival strategies of Japan trainees, and the skills

acquired when conducting an internship in Japan. The research (Jamil, et al., 2021) explains the impact of the Japan internshipship program on the income of farmers in East Java. Based on this, the novelty of this research lies in the discussion of the contribution of individual characters (age, education, experience and cosmopolitan), psychological characteristics (hard worker, self-confident, disciplined, and willing to take risks) and entrepreneurial competences (managerial ability, conceptual, social work, time management, and decision making) of Japan intern trainee alumni on the business performance. The business performance was measured based on revenue, profit, growth in the marketing area, and the courage to take risks.

2. Research Method

This research was conducted using primary data from interviews using a questionnaire guide (Setyorini & Syahlani, 2019; van den Berg et al., 2013) which was followed by 123 respondents (Imran, 2017). The respondents involved in this study were alumni who had joined the Japan internship program implemented by the Ministry of Agriculture. The respondents came from three provinces on the island of Java, namely West Java, Central Java, and East Java with a purposive sampling technique (Campbell et al., 2020). Data collection was carried out from November 2020 to March 2021. In order to analyze the relationship between individual contributions (Straus et al., 2016), psychological characteristics, and entrepreneurial competencies as supporters in the business performance of Japan internship alumni, they were analyzed using path analysis. The purposes of using path analysis (Sarwono, 2011) were to see the relationship between variables based on an apriori model, to draw and test a mathematical model using the underlying equation, and to identify the path of the cause of a particular variable to the other variables it influenced.

Individual characteristics affect the management of a business which will ultimately affect the performance and success of a business (Soejono, et al., 2015). Individual characteristics consisting of age, education, experience, and a sense of being cosmopolitan habitant (Soejono, et al., 2015) are needed in the formation of an entrepreneurial competence which this variable will be the intervening variable of the relationship between individual characteristics and business performance (Sarwoko, 2013). Psychological character consisting of hard worker, self confident, disciplined, and willing to take risk is not only important in influencing business competence but also important in business development in the future (Zhang & Zhang, 2013; Soejono, et al., 2015; Jamil & Destiarni, 2021; Jamil, et al., 2021). A successful business is influenced by the skills and competencies possessed not only by the manager but all those involved in the business (Sarwoko, 2013). Business competencies consisting of managerial capability, conceptual capability, social capability, decision marker capability, and time management capability (Sarwoko, 2013; Jain, 2011) have a positive impact on business performance (Soejono, et al., 2015).

The following is path analysis model used in this research by revealing the path coefficient (Kusuma, 2013; Muhlisin, et al., 2021) resulted:

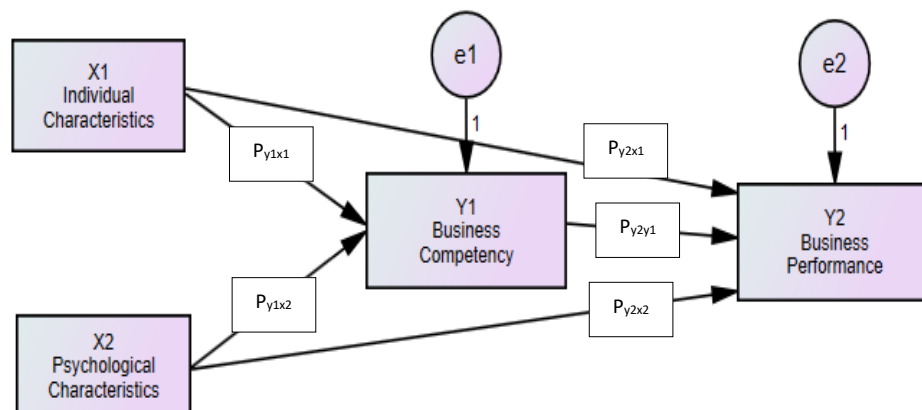


Figure 1. Path analysis model

The structural equation formed from the model is (Chairani P et al., 2020):

$$Y_1 = p_{y_1x_1}X_1 + p_{y_1x_2}X_2 + p_{y_1e_1}\varepsilon_1 \quad (1)$$

$$Y_2 = p_{y_2x_1}X_1 + p_{y_2x_2}X_2 + p_{y_2y_1}Y_1 + p_{y_2e_2}\varepsilon_2 \quad (2)$$

By Individual characteristics were variable X1, psychological characteristics were variable X2, entrepreneurial competences were variable Y1, and business performances were variable Y2. The analysis carried out included:

1. Effect of direct relationship between X1 and X2 towards Y1
2. Effect of direct relationship between Y1 and Y2
3. Effect of indirect relationship between X1 and X2 towards Y2 through Y1
4. Effect of direct relationship between X1 and Y2
5. Effect of direct relationship between X2 and Y2

3. Result and Discussion

Table 1 shows that as many as 68.29 percent agreed that age was a factor that determined their success in running a business. The experience indicator had the highest percentage of assessment on individual characteristics because alumni who agreed were 98.27 percent. Having an internship in Japan was one of the experiences that made alumni able to face various problems and challenges in running a business. On the indicator of public openness or cosmopolitan, alumni agreed (97.56 percent) that entrepreneurs who were actively looking for solutions to the problems they face would be more successful. This reflects that the alumni had realized the urgency of seeking various information related to the problems they faced.

Table 1. The percentage of alumni's perception towards individual characteristic indicators

Individual characteristic	The highest percentage	Alumni perception
Age (X _{1,1})	68.29	Age is a factor determining the successful of conducting a business
Education (X _{1,2})	94.31	An entrepreneur must be good at business accounting
Experience (X _{1,3})	98.27	The prior experience in doing a business affects the successful of conducting a business
Sense of being cosmopolitan habitant (X _{1,4})	97.56	An entrepreneur who is active at searching for the solution that he is facing by consulting to the experts will be more successful in his business

Table 2 shows that 98.27 percent of alumni agreed that successful entrepreneurs were those who had high work enthusiasm. The experience gained during the internship in Japan had made alumni had an attitude of working hard. Meanwhile, the indicator of willing to take risks had the highest perception on alumni, they agreed that successful entrepreneurs are those who tried to increase business capacity. Risk is the nature of business activity, so that entrepreneurial attitudes in dealing with risk were influenced by experience and level of education.

Table 2. The percentage of entrepreneurship assessment towards psychological characteristics

Psychological characteristics	The highest percentage	Alumni perception
Hard worker (X _{2,1})	98.27	Successful entrepreneur is highly passionate on working
Self-confident (X _{2,2})	99.18	Character of a successful entrepreneur, namely enthusiast in managing his business
Disciplined (X _{2,3})	99.17	Character of a successful entrepreneur who has a commitment to follow the rules he has created
Willing to Take Risk (X _{2,4})	100	Character of a successful entrepreneur who tries to grow his business capacity

Indicators of managerial ability and social ability had the highest percentage based on the perception of each respondent (Table 3). Alumni thought that they had the ability to plan a business, so that they know to expand their businesses. In addition, alumni also had skills in cooperating with others related to business experience. This is reflected in the participation of alumni in various farmer institutions and farmer economic institutions in order to develop their businesses including farmer group, P4S, KTNA, and Japan Internship Alumni Association (IKAMAJA). This is reflected that alumni had elaborated farmer institutions not only for collective buying of the agricultural input but also for advocating their businesses (Christina et al., 2015).

Table 3. The percentage of entrepreneurship assessment towards business competence

Business competence	The highest percentage	Alumni perception
Managerial capability (Y _{1,1})	100	A successful entrepreneur creates plan for developing his business ahead

Conceptual capability (X _{1,2})	99.18	A successful entrepreneur designs the strategies to gain his planned business goals
Social capability (X _{1,3})	100	A successful entrepreneur can collaborate with others to develop his business
Decision making capability (X _{1,4})	98.37	A successful entrepreneur is able to take a decision by considering the pros and cons
Time management capability (Y _{1,5})	99.19	A successful entrepreneur is a person who creates his schedule clearly for every goal he is supposed to achieve

Table 4 shows that the income indicator had the highest percentage based on the alumni' perception (of 95.15 percent). This condition is in line with research (Jamil, et al., 2021) which states that there is a significant difference in income before and after the Japan internship program. The Japan internship program was proven to be able to increase the business volume of alumni directly. The Japan internship program was able to directly improve alumni's income, because after the alumni returned to Indonesia, they had capital to invest in their business.

Table 4. The percentage of entrepreneurship assessment towards business performance

Business performance	The highest percentage	Alumni perception
Income (Y _{2,1})	95.15	Production volume of current business is getting higher than the volume before joining Japan Internship
Profit (Y _{2,2})	92.27	The profit of current business is higher than the profit before joining Japan internship
The growth of marketing region (Y _{2,3})	95.12	Currently, there's an increase of internet users as a product marketing media to be compared with the time before joining Japan internship

The results of the path analysis of structure 1 revealed F value of 39,224 with a probability value (sig) = 0.000, because the value of sig was less than 0.01, then the decision was rejecting H0 (Table 5). In other words, the individual characteristics variable (X1) and psychological characteristics variable (X2) had a significant effect on entrepreneurial competence (Y1). In addition, the results of the path analysis of structure 2 revealed a probability value (sig) = 0.000. This indicates that the individual characteristics variable (X1), psychological characteristics variable (X2) and entrepreneurial competence variable (Y1) had a significant effect on business performance (Y2) at a significant level of 1 percent.

Table 5. Estimation result of path analysis

Variable	Effect			R ²
	Direct	Indirect through Y1	Total	
X1	0.159*	0.037*	0.160*	-
X2	0.319**	0.197**	0.516**	-
Y1	0.317**	-	0.317**	-
X1,X2 & Y1	-	-	-	0.410**

Individual characteristics (X1) contributed significantly to entrepreneurial competence (Y1) (Table 4). This is in line with the conditions in the field, where the experience during an internship in Japan had a positive impact on the managerial ability of the alumni. Alumni during their internship in Japan had experience in managing agricultural businesses. This is in accordance with research (Sarwoko, 2013) which states that the characteristic has a significant effect on entrepreneurial competence.

Psychological characteristics such as hardworking, confident and disciplined encouraged alumni to continue learning so that they could improve their competence in managing their business. Most of them (90 percent) stated that hard work and discipline were the main skills that could be applied in Indonesia. Technical skills acquired during internship could not be implemented in Indonesia due to the technological gap between both countries. Alumni considered that the technology learned in Japan was more advanced compared to technology used in Indonesia.

The estimation result showed that the entrepreneurial competence of alumni was significantly influenced by individual and psychological characteristics. The contribution of psychological characteristics was greater than individual characteristics based on the path analysis. This means that the better the psychological characteristics alumni have during the program, the more they

will increase their entrepreneurial competencies. Alumni with a high willingness to take risks tend to have good managerial competence.

In order to improve entrepreneurial competence, psychological characteristics need to be improved. This can be done through involvement in various fields in a particular agribusiness during the internship program. Involvement in various fields will increase the motivation of participants in terms of discipline, confidence, hard work and willingness to take risks, which in turn will form entrepreneurial competence.

The individual and psychological characteristics (entrepreneurial characteristics) variables were found to have a significant effect on the business performance of alumni. Entrepreneurial characteristics directly affect the business performance of alumni (Soejono, et al., 2015; Jain, 2011; Kusuma, 2013). The higher the entrepreneurial characteristics including experience, the courage to take risks, the higher the alumni's business performance. The Japan internship program is considered to have succeeded in shaping the entrepreneurial characters of the respondents in improving business performance. They think that the internship experience has shaped the knowledge, attitudes and skills of the alumni to be able to increase success in business.

The entrepreneurial competence variable had a significant effect on business performance (Table 4). In other words, alumni who have entrepreneurial competencies tend to try to improve their business performance. Based on its contribution, the contribution of entrepreneurial competence is greater than individual characteristics. This is in line with alumni perception on individual characteristics especially age, they argue that age is not the main factor of business success. Entrepreneurial competence is a key factor in running a business. Business competency will later guide entrepreneurs in achieving success (Christina et al., 2015; Dhamayantie & Fauzan, 2017). Business performance is closely related to entrepreneurial competence.

Based on the result, the government especially Agency for Agricultural Extension and Human Resource Development needs to improve psychological characteristics and entrepreneurial competence. This can be done by extending and uniforming the internship duration for participants in Japan. This is based on the internship duration varied from 8 months to 2 years depending on the location (Jamil, et al., 2021). This extension of the internship duration is intended to increase retention of participants' experience during internships in Japan. Thus, apprentices can internalize the positive culture of Japanese farmers (psychological characteristic) and implement it in Indonesia.

To increase entrepreneurial competence can be done through mentoring for alumni who have returned to Indonesia. The assistance is carried out in order to provide guidance for alumni in restarting agricultural businesses that have been abandoned since their internship in Japan. Those assistance can be carried out through meetings with IKAMAJA, business matching and expert meeting. Competency improvement is also carried out by aligning the type of business before and during the internship in Japan. Alumni stated that mismatch of business types between before and after the program caused technical competence gained in Japan to not directly be applied in Indonesia. Finally, the existence of such integration will increase entrepreneurial competence in a certain type of business.

Conclusion and Suggestion

The results of the path analysis showed that the business performance of Japan internship alumni was influenced by entrepreneurial characteristics (individual characteristics, and psychological characteristics). Entrepreneurial characteristics had a significant effect either indirectly through business competence or directly on business performance. The internship program had been able to shape the entrepreneurial characteristics of alumni that could improve their competence and business performance. The business performance of alumni can be improved through psychological characteristics and entrepreneurial competency. This can be done by extending and uniforming the internship duration for participants in Japan. Thus, apprentices can internalize the positive culture of Japanese farmers (psychological characteristic) and implement it in Indonesia. In addition, to increase entrepreneurial competence can be done through mentoring for alumni who have returned to Indonesia. The assistance is carried out in order to provide guidance for alumni in restarting agricultural businesses that have been abandoned since their internship in Japan.

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