

# The Influence of Personality Traits on the Entrepreneurship of Sheep Farmers in Garut Regency

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## Abstract

Creative Destruction Theory of Joseph Schumpeter explains that entrepreneurship is one of constructive solutions in the real sector, which at the same time creates jobs and leads to an increase in welfare. Therefore, entrepreneurs must have a consistent personality in responding to different situations. The aims of this study were to determine the demographic characteristics of farmers and agribusiness characteristics of the sheep farming in Garut as well as to analyze the influence of personality traits on agribusiness entrepreneurship of the sheep farming in Garut. The study was designed as a field study using the survey method. The primary data were obtained from the results of questionnaires distributed to 251 sheep farmers with Likert scale scores. The data were analyzed using Structural Equation Model (SEM) through LISREL program at  $\alpha 0.05$  and loading factor of  $\geq 0.50$ . The results showed that personality traits of Extraversion, Agreeableness, and Conscientiousness affected the farmers' entrepreneurship. The farmers who have an open personality and are agreeable tend to have a strong entrepreneurial character. The entrepreneurship of the farmers will be stronger if they do not follow the order and disobey the rules or dare to leave their habits and perform their job differently and bravely. Thus, the entrepreneurial characters of sheep farmers in Garut are influenced by their personality traits.

**Keywords:** personality traits; entrepreneurship; sheep farmers.

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## 1. Introduction

The agricultural development is directed toward supporting food security, increased competitiveness, diversification, increased productivity and value-added products of agriculture, livestock, plantation, fishery and forestry to improve the welfare of farmers, fish farmers and fishermen. Among the sectors of agriculture, livestock become one of the foundation of agricultural development, and sheep is one livestock that are cultivated in the framework of compliance with food. Sheep have many advantages, including the characteristics of the meat which has the benefit of preventing anemia, muscle building and improving the immune system. Additionally, mutton become an integral part for the majority of the Indonesian people who converted to Islam, with their ritual sacrifices by using sheep. These conditions make the sheep as a commodity farms that business opportunities continue to grow.

The business development of sheep is shown by the sheep population growth data from year to year increase (Table 1), with an average growth of 9% per year. The development of the sheep population is certainly a result of new breeders who breed sheep and existing breeders who market expansion, thereby increasing livestock population. The population growth also shows more people who saw that sheep breeding is a commodity that has a good business opportunity; this is demonstrated by the growth rate over the last 3 years, which reached more than 10 percent.

This implies that the market potential of sheep continued to grow, especially across parts of the sheep can be utilized, the meat for food, bone to craft and bone meal, as well as the skin for fashion products and also various crafts, all of which can provide added value and income in order to improve the welfare of farmers. From the statement contained terms that business, commodity sheep need more human resources who are able to conduct business or entrepreneurial activities [1].

**Table 1:** Population of the National Sheep

Year	Population (000 head)	Growth
2008	9,605	-
2009	10,199	6%
2010	10,725	5%
2011	11,791	10%
2012	13,420	14%
2013	14,926	11%
2014	15,716	5%

Source: Indonesia Ministry of Agriculture (2015)

Further observation, the development of sheep farming in Indonesia is not only pursued for the benefit of the food or its derivatives in the form of craft sheepskin, there is also a sheep that are cultivated for the benefit of

the hobby. Type sheep sought for this type of commodity hobby Garut sheep or sheep competed (domba aduan). Characteristics of the Garut sheep is different with sheep bred for the sake of food, so the farmer (the entrepreneur) should have special characteristics that match the characteristics of Garut sheep's business. This is supported by the results of research of Winarso [7] which suggests that one factor that was instrumental in the success of the business of cattle sheep and sheeps are human resources, disclosed further that the variables of human resources is considered the most influential was education, experience raising and relations with the market.

Thus, entrepreneurship is one constructive solutions in the real sector, which will open up employment opportunities and lead to an increase in welfare. For this reason, it takes painstaking efforts to be able to select and determine precisely the individuals who may become excellent entrepreneurs.

Entrepreneurial individuals are those who are action-oriented, highly motivated, and willing to take risks in the pursuit of their goals [11,14,28,30]. Thus, entrepreneurs have the characteristics of being confident, task-result oriented, bold in taking risk, independent, initiative, energetic and hard working. They are also leading, spiritually innovative, creative and future-oriented [24].

Reference [27] defines entrepreneurs as the nature of courage, virtue, nobility and exemplary in taking risks based on their own capabilities. Therefore, entrepreneurs focus on two main aspects, namely (1) developing and fostering entrepreneurial mental attitude (bold, primary, noble, exemplary); and (2) possessing mental attitudes in conducting businesses (innovative, independent). Drucker states that in the United States, an entrepreneur is often defined as a person who starts his or her own new small business [20]. Moreover, they always search for innovations, respond to them and use them as an opportunity. Growth and development of entrepreneurs should be continuously encouraged, at least for the scope of agribusiness since it is the most common occupation by the community and becomes the economic fundamentals of the people of Indonesia [26,29].

There has been a great amount of empirical evidence showing the failures of entrepreneur stimulus program because of the inaccuracy in selecting the participants. It turns out that the participants lack of or do not even have the factors of entrepreneurship. An entrepreneur requires an attitude and behavior in the form of courage to take risks, being prudent in decision-making, skills in identifying opportunities and good managerial ability [10,21,22,30]. Reference [30] state that an entrepreneur is required to have an attitude like responsibility, courage to take risks, confidence, desire to immediately obtain feedback, high spirits, future orientation, organizational skills, assessment that achievement is higher than money, being committed, tolerance of uncertainty, flexibility, and stamina [30].

Therefore, entrepreneurs must have factors deriving from themselves which are useful to develop their entrepreneurial attitudes, one of which is the personality for entrepreneurship. According to [10], personality is a dynamic organization in the system of psychological and physical individual's unique responses to stimuli from the environment. Trait is described as theoretical constructs that describe basic unit/dimensions of personality [10]. It describes consistency of individual responses in different situations and dispositions to behave in a certain way, as reflected in the behavior of an individual in various situations.

Trait theory is a personality theory based on an assumption that a consistent pattern of thoughts, feelings, or actions distinguishes one person from another so that trait is relatively stable over time and consistent from one situation to another one. Another assumption is that it is the basic trend that persists for life, but the characteristics of behavior can change because there are adaptive processes, differences in strength, and combinations of the existing traits. Basic personality trait level changes from late teenage to adulthood.

According to [10], genetic and environmental factors are equally influential in determining human behavior [10]. Not only hereditary factors alone or environmental factors alone will determine how the personality is formed, but it can be determined through the reciprocal influences of heredity and environment that form personality characteristics. In connection with the existence of a genetic role in the formation of personality, there are four important insights that need to be considered: First, although genetic factors play an important role on the development of personality, non-genetic factors still have a role to variations in personality; Secondly, although genetic factors are important in influencing the environment, non-genetic factors are the factors most responsible for environmental differences of people; Thirdly, experiences in the family are important, although family environment is different for every child in connection with his or her gender, birth order, or unique events occurring in his or her family life; Fourthly, although there is a strong genetic contribution to a personality trait, it does not mean that the trait is fixed or cannot be influenced by the environment.

The Big Five Personality is an approach used in psychology to see human personality through traits that are arranged in five domains of personality that have been formed by using the factor analysis. The forerunner figures were [2,8]. The five personality traits include OCEAN, which stands for O = openness to experiences, C = conscientiousness, E = extraversion, A = agreeableness, and N = neuroticism.

The existing phenomena suggest that in studying entrepreneurship, it is not sufficient to simply rely on the process of learning, training and capitalization support. Research on the influence of personality traits on the behavioral outcomes shown should also be carried out so that which personality traits that should receive attentions in developing the agribusiness entrepreneurship in Indonesia can be identified.

Sheep farming was selected because sheeps have been excellent livestock in the region of Garut Regency which is a center of sheep farms in West Java. The existence of Garut sheep farming businesses must be maintained and developed because sheeps from Garut are one of the nation's livestock germ plasms. They are small local superior ruminants which become sources of livestock meat production; also, breeding sheep can be conducted as a hobby with a high economic value. In addition, for Muslims who want to perform their scarification at the time of Hajj, Garut sheep is one of the main options for the sacrificial animals because it has advantages in physical appearance. Along with the development of agribusiness sheep farming in Garut Regency, the tanning industry and manufacturing industry of various products made from processed sheepskin have also grown. This shows the magnitude of the role of agribusiness sheep farming in Garut Regency, West Java.

It is interesting to include sheep farming in Garut as the research subject because most of them are small businesses. Small businesses agribusiness were chosen because they are considerably associated with the

businesses related to most basic needs of the communities so that they determine the viability of the economy of a region.

Based on the above explanation, the formulation of the problem of this research can be described as follows: "the extent to which personality traits can influence the entrepreneurship of sheep farming". From the formulation of the problem, a number of problems can be identified as follows: (1) what the demographic characteristics of the farmers and entrepreneurship of sheep farming in Garut are; and (2) how large the influence of personality traits on sheep farming entrepreneurship in Garut is.

Therefore, the aims of this study were (1) to analyze the demographic characteristics of the farmers and entrepreneurship of sheep farming in Garut, and (2) to analyze the influence of the personality traits on the entrepreneurship of Garut sheep farming.

The research will focus on the influence of the personality traits on the entrepreneurship of sheep farming in Garut Regency, West Java; thus, it used the big five personalities of Costa and McCrae [17,18,19]. The five traits included openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

## **2. Literature Studies of Entrepreneurship**

Bann indicates that entrepreneurs are people who are optimistic, think positively about their business and bold to take responsibilities, and honest toward their personal values in order to build and improve self-confidence and self-esteem [9]. Therefore, entrepreneurship is a complex phenomenon, which includes emotional and rational elements. Entrepreneurial experience is a very personal experience influenced by attitudes, beliefs, values, assumptions and strengths, which will be tested during the process of entrepreneurship [24].

Reference [15] reveal that entrepreneurships and innovations have obtained a lot of attention in various studies; however, only a few studies specializing in small-scaled businesses [15]. The studies conducted in Norway have shown that the entrepreneurs who have a positive attitude to be independent tend to change the way they manage their business, thus resulting in the rise of the level of welfare. Meanwhile, the research in the management of tourism in Australia shows that through entrepreneurship, a person is able to see the potential of a situation that most people have assessed it as multidimensional complexity instead thinking of it as a dominant inhibitor which may not be resolved [25].

A similar study conducted in Greece shows that creativity, procreativity and control of situation determine passion and emphasis of individuals to engage in entrepreneurial activities [32]. Meanwhile, in China, in addition to the empowerment of local communities, policy deregulation and provision of privatization rights for their work have been given; as a result, the revival of micro and small businesses is characterized by the massive entrepreneurial behavior. Reference [23] add that the research on dairy farmers in the Netherlands shows that the objectives, expectations and attitudes have significantly determined the strategy and entrepreneurial behavior rather than the size of the ownership of the business itself [23].

Reference [31] who studied the complementary effects of market orientation and entrepreneurial orientation on

small-scaled business profits concluded that market orientation reflects the extent to which the company has built the satisfaction of needs and desires of customers [31]. However, entrepreneurial orientation reflects the extent to which the company has established the identification and exploitation of opportunities which have not been taken. The research results by [13] on communal dairy farming in Pasuruan Regency and Bandung Regency show that entrepreneurial competencies of the farmers have a very significant influence on their productivity [13]. Developing entrepreneurial competencies of the farmers requires supports in facilities, infrastructure, and information in accordance with their needs. Additionally, Reference [5] concludes that the entrepreneurial orientation factors (processes, practices and decision-making activities that produce a breakthrough), which have the proactive, innovative and risk-taking dimensions have the most powerful roles in the development of excellent fishery products [5].

Thus, the studies conducted by [5,13,31] show that the role of entrepreneurship is very important in determining the success and development of a business [5,13,31]. The results of these studies have made entrepreneurship more attractive for research. The subjects of the success of an entrepreneurship are the entrepreneurs themselves; therefore, in order to understand these entrepreneurs, their dominant factors that can affect their performance must be identified. The dominant factors that affect the performance of entrepreneurs will be very useful for predicting the success of their entrepreneurship. In addition, the factors identified can be the basis for a treatment that will be implemented in the strengthening and development of the entrepreneurship.

### **2.1. Personality Traits**

Reference [6] in his study reveals that the renewal of the technological and innovative characteristics are important aspects in small-scaled business development, growth and wealth creation [6]. The hypothesis tested was related to the five major personality traits of OCEAN i.e. O = openness or transparency, C = conscientiousness or self-awareness, E = extraversion, A = agreeableness or inclination to agree and N = neuroticism or tension, with the development of technology using multiple regression analysis. The resulted model describes two personality factors that are beneficial for the development of technology i.e. openness as the positive impact and neuroticism as the negative impact.

The relationship between personality traits and interpersonal communication skills with work performance at the insurance agency had been studied by [3]. His research results showed that there was a significant negative relationship between neuroticism trait and work performance, and there was a significant positive relationship between the traits of agreeableness, conscientiousness and interpersonal communication skills and work performance at the insurance agency. In regards to interpersonal communication skills, the traits that can contribute to the work achievement of an insurance agent include extraversion on facet assertiveness, openness on facet ideas, agreeableness and conscientiousness.

There are two factors that have a great influence on the work performance of an individual, namely, abilities including interpersonal communication and personality trait. The interpersonal communication skills are measured in three categories, namely, clarity (the verbal and non-verbal effectiveness), self-esteem/self-confidence (self-opening and self-assertion) and awareness/ concern (active listening and understanding). This

trait approach can best describe human personality. Individual personality trait is basically a dimension; therefore, everyone has continuous variations. Most individuals are in between these two extreme poles of each dimension [17,18,19].

Reference [11] conducted research on academic procrastination behavior based on the levels of self-regulation learning and personality trait. The research results show that there is no relationship between the levels of self-regulation learning and academic procrastination behavior of the students whereas the traits of openness to experience, conscientiousness, and extraversion are significantly influential on the students' academic procrastination behavior [11].

Reference [16] in the discussion of her dissertation states that lecturers that have personality traits appropriate to the nature of their work will feel that they are at the right place [4]. This feeling will lead to positive attitudes towards the university such as a high commitment to the university. The results of the study in Sweden showed that supple and comfortable attitudes, personality traits and influences from the surrounding communities who support the environment will produce attitudes that support the achievement of environmentally friendly transport management [16].

The big five taxonomy is a comprehensive assessment of personality traits in which an individual perceives himself or herself to others. The research on personality trait which was based on the concept of the big five personality of Costa and McCrae [17,18,19]. shows that there is no single trait possessed dominantly by an individual but it shows how strong each trait possessed is. Openness to experience illustrates traits that individuals are imaginative, creative and curious and have free and original thinking as well as are fond of variety and sensitive to art. Conscientiousness trait shows that individuals are earnest, responsible, diligent, organized, timely, ambitious, willing to work hard, and success-oriented. Extraversion describes individuals who are sociable, talkative, active, assertive, gregarious, and fond of having fun. Agreeableness trait shows individuals who are friendly, gentle, generous, tolerant, and kind-hearted and tacitly agree to the opinions of other people and trust them as well. Neuroticism trait is related to negative trait where individuals are anxious, easily depressed, bad-tempered, easily frightened, tense, prone to criticism, and emotional.

### **3. Research Method**

The study was conducted in two districts with three villages, namely, Panembong Village of Bayongbong District, Cikandang Village and Giri Jaya Village in Cikajang District, Garut West Java by considering the fact that Garut Regency has an advantage for the development of the agribusiness entrepreneurship of sheep farming. The research began in July 2014 and ended in November 2014.

The research was designed as a field study using the survey method. The subjects of the research were the sheep farming entrepreneurs who own a small scale micro-enterprises, with assets of  $\leq$  Rp 500 million, excluding land and buildings. This limit is based on the criteria for SMEs under the Act Number 20 of 2008.

The population of the study population was the sheep farmers who are included in the category of micro-small sheep farmers in Garut, West Java Province. Selection of villages and districts was conducted in a purposive

method based on considerations of the total number of sheep population, number of sheep farmers, and existence of sheep farmers raising sheep for their meat and for their dexterity (ketangkasan) and groups of sheep farmers. As many as 250 sheep farmers were selected as the respondents through accidental sampling technique. They came from Panembong Village of 64 people, Cikandang village of 46 people, and Girijaya Village of 140 people. The research used a questionnaire with a structured statement format using a Likert scale with the intervals of 1 to 5. The questionnaire on the personality traits used a scale of NEO Personality Inventory (NEO-PI) developed by Costa and McCrae [17,18,19]. The word "NEO" is an abbreviation of the first measured three domains, namely, neuroticism, extraversion, and openness to experience. Each trait has six facets, so this measure as a whole has 30 personality facets (Table 2). The score calculation conducted on this personality trait measurement was based on a sub-scale (measured variables) that has a high loading factor on each personality trait scale (latent variables). Determination on the high and low of the scores of the personality traits is as follows:

- The mean score of 1.00 : low score.
- The mean score between > 1.00 – 2.00 : a bit lower score.
- The mean score between > 2.00 – 3.00 : moderate score.
- The mean score between > 3.00 – 4.00 : slightly higher score.
- The mean score between > 4.00 – 5.00 : high score.

In summary, the domains and facets of the five major personality traits used in this study are as follows:

**Table 2:** Domains and facets in the big five personality *traits*

Domains	Facets
Extraversion (TraitExv)	warmth (X11) gregariousness (X12) assertiveness (X13) activity (X14) excitement seeking (X15) positive emotion (X16)
Openness to Experience (TraitOpE)	fantasy (X21) aesthetics (X22) feeling / (X23)



	actions / (X24)  ideas / (X25)  values / (X26)
Agreeableness (TraitAgr)	trust (X31)  straightforwardness (X32)  altruism (X33)  compliance (X34)  tender mindedness (X35)  modesty (X36)
Conscientiousness (TraitCon)	competence (X41)  order (X42)  dutifulness (X43)  achievement striving (X44)  self-discipline (X45)  deliberation (X46)
Neuroticism (TraitNeu)	anxiety (X51)  hostility (X52)  depression (X53)  self-consciousness (X54)  impulsiveness (X55)  vulnerability (X56)
Entrepreneurship (Entreshi)	Knowledge (Cognitive)  Attitude (Affective)  Action (Psychomotor)

The Structural Equation Modeling (SEM) was used in the testing on the influence of the personality traits on the entrepreneurship of sheep farmers. The main goal of SEM is to obtain an appropriate hypothetical model (fit) or to describe the sample data. There are a number of requirements that must be met to obtain a fit model i.e. it must have a P-value greater than 0.50; a value of Root Mean Square Error of Approximation (RMSEA) less than 0.05; as well as a value of Goodness of Fit Index (GFI) greater than 0.90. The level of significance of each variable is determined by the t-value greater than 1.96.

#### **4. Results And Discussion**

##### ***4.1. Demographic Characteristics of Sheep Farmers***

The total respondents for this research was 250 sheep farmers where the majority (93.6%) was male. Historically, the sheep were grazing in pastures and were supervised by the shepherds, who were generally male. They had to keep their livestock against wild animals and cattle raiders. To date, the sheep farming business is still an activity that requires a lot of energy outside the house, especially for searching for grass and cattle handling; therefore, this type of business is more appropriate if it is run by men.

The existence of livestock in a family in rural areas of Indonesia has lasted for a very long time, especially Garut sheep farming. Therefore, this sheep business is a communal business that lasts for generations. This business is conducted after the farmers possess a piece of land for stalls or continue their parents' business. The farmers at the research sites are generally aged from 30 to 60 years (68.4%), thus indicating that they have settled down to have a family so that this sheep farming business has been the choice to support their family economy.

The formal education of the majority of the sheep farmers (80.4 %) in the research location is still low since they just completed their primary school. Nonetheless, there are some sheep farmers (0.8%) who graduated from the university. This indicates that the business of sheep farming can be conducted the people of different levels of education. At first glance, it seems that the business of sheep farming in Garut can be run by the people who are less educated easily. In fact, it is difficult to realize because it requires conducive environment. The farmers should be familiar or have the sufficient opportunity to see, observe and try to do the business activities as well as to hear about the business of sheep farming.

Sufficient time is required by the farmers to learn the business of Garut sheep so that he does not only know the interesting things about the business itself but also know the risks, need for hard work, love for their sheep and discipline as well as the seriousness of intentions of breeding sheep.

The local government of Garut Regency is well aware of the potential of the business of Garut sheep. In addition to meeting the needs of families in the rural economy, the sheep business is also the germ-plasm (plasma-inti) that must be constantly maintained and developed. The local government through the farm workers have been trying to provide counseling and training programs for the sheep farmers. The farmers seemed to be less enthusiastic about the program, since only 23.2 percent joined the farming extension and 1.2 percent participated in the farming training program. This may occur if the contents of the education and training are not in accordance with the needs and interests of the sheep farmers. The farmers are individuals who have observed

and run the business of Garut sheep; therefore, if the contents of the education and training are only on the maintenance or cultivation systems, they will reduce the interest of farmers to engage in such activities. An extension worker in the sheep farming needs to understand more about the needs and interests of the farmers since they are already very experienced and direct agents in the field.

A small number of farmers (12%) have relied on the yields of their sheep farming for their economic life while the other farmers work as farm laborers (50.4%) and farmers (24%). This shows that the business of Garut sheep is able to become a source of family income for the respondents or the main source of income. The farmers' life is generally still in the prosperous group I which is due to their scale of business and their increasing expenditure for daily needs.

#### ***4.2. Characteristics of the Entrepreneurship of Sheep Farming***

At the beginning of their business, most farmers (94.8%) began their sheep ownership of less than 1 ST, and the rest had no more than 2 ST. Most farmers have cattle business experience less than 10 years (54.4%), and some other (45.6%) have been running their business more than 10 years, so they become experienced farmers. Interestingly, there was an increase in the number of Garut sheep raised at the study site. The number of the farmers with <1 ST reached 77.2 per cent, while the number of those with 1-2 ST increased by 19.6 percent, and even the number of farmers managing > 2 ST reached as much as 3.2 percent.

Most of the respondents (68.4%) were directed to sheep breeding (production), while as much as 17.6 percent and 14 % of them were directed for sheep fattening and agility (race) respectively. For the business of production, the farmers will be more in need of superior adult sheep females to produce better offspring in order to obtain a high selling price. Moreover, the superior male sheep are also required to mate the female sheep, although there is a mating system with an artificial insemination. Natural mating is usually more successful because a male is united with an adult female sheep (1: 5-7 tails) so that the male can accurately detect the female's sexual desire. For the fattening cattle business type, it tends to require more male sheeps since in general their growth is better than that of the females. Although the price of male sheep is more expensive, it will be covered by the price of adult male sheeps higher than that of adult female sheeps. The farming of sheep with the kind of agility requires a superior pedigree of its parent, so that they able to win or survive during an agility competition, resulting in high selling price.

16.4 percent of respondents have relied heavily on this garut sheep business as their main job. However, most respondents (74.4%) still conduct the business as their side job for their savings to support the family's needs, especially for their children at the beginning of the school year and special celebrations. 9.2 percent of the respondents raise the sheep for their hobby, and their orientation is for fun and nurtures the culture of the Garut community in the field of livestock business. Garut sheeps reared generally have the purchasing and selling prices higher than those of sheep raised by other farmers.

The farmers whose sheep business purpose is to make this as the main source of family income or a source of additional revenue are mostly engaged in the production of business, while the farmers who conduct the sheep

business for their hobby raise sheeps for their dexterity or race. This type of production business tends to be more flexible in sales because they do not have to wait for sheeps to be fat or large or to be a champion. In addition, this production business is relatively more stable in providing products that will be sold. The business of sheep fattening always requires the farmers to purchase lambs (bakalan) from other farmers; as a result, they have to compete with the middlemen or traders. Moreover, the business of sheep agility requires sufficient capital, seed selection capacity, and better sheep handling skills.

The sheep business managed by the farmers (56.8%) turned out to be of a revenue sharing system, while as much as 43.2 percent of the farmers provide the capital by themselves. The intention of running both types of business is solely to supplement the family income. The business of Garut sheep whose objective is as the main source of income and hobby is dominated by farmers who own the business.

Most of the selling prices of the production of lamb that the farmers receives range from Rp 500,000 to Rp 1,000,000 per head (63.60%) and the selling price of the male lambs is more expensive than that of the female lambs. The selling price of the adult female sheep ranges from Rp 1,000. 000 to Rp 2,000,000 (76.80%) whereas that of the adult male ranges from Rp 2,000,000 to Rp 3,000,000 (69.20%). Some farmers who have superior sires are able to sell their lamb from Rp 4,000,000 to Rp 5,000,000 (2.00%), whereas the price of adult sheep ranges from Rp 5,000,000 to Rp 10,000,000 (1.20 percent for the adult female and 8.40 percent for the adult male. The price of a winning male sheep from fighting in an agility match will sharply increase starting from Rp 25 million and above.

In general, the Garut sheep farmers sell their products to the sheep middlemen sheep (89.6%), and the rest is purchased by the final consumer as much as 7.6 percent, and as much as 2.8 percent by the meat traders. The middlemen still play a major role in the purchase of sheeps; therefore, it is still difficult to obtain a higher selling price by the farmers. Most of them relatively wait for the right time to sell their sheep in order to get higher prices.

However, in deciding on various matters related to their business of sheep farming, most of the farmers (57.2%) make a decision after having a discussion with their family members, while as much as 24.8 percent of them follow the advice of their group, and as much as 18 percent make decisions by themselves. According to the farmers, their family members need to be involved in decision making for the business of Garut sheep since it is a business conducted with all members of the family. More experienced farmers will usually pass on their knowledge and skills in managing their business of sheep to the farmers who just start their business or are younger than themselves so that the learning process and information exchange can take place. The main source of information for farmers in developing their business of Garut sheep farming comes from their fellow farmers (90%). This condition has lasted for a long time, so it is not surprising that farmers with low education can manage the business of garut sheep well. The experienced farmers, in general, are always able to provide information required by other farmers; thus, the involvement of farmers in the education and training of livestock carried out by officers of the department tends to be low. Television medium as one of the audio-visual media is an alternative source of information for sheep businesses. Event programs related to the sheep business are referenced by the farmers in managing their businesses. The farmers feel more confident with the

information from the television because it can be seen and heard, and it always provides the most current information. The accuracy of the information can also be confirmed through discussion among the farmers. The farmers have assessed that the development of the garut sheep business has faced problems in the availability of feed with high quality (72%), superior seeds (14.8%), and diseases (11.6%). The difficulty in obtaining green by the farmers is caused by the competition between the land for forage and land for the utilization of other agricultural businesses. Moreover, the forage land close to the villages has started switching its function to be used for buildings. According to most of sheep farmers (75.2%), to start the business requires the availability of stalls and seeds while technical skills can be learned while running the business (learning by doing). By having this sheep business, the farmers think they have obtained a wide range of business advantages including income experienced by 53.6 percent of them, growing businesses (36%), and communication networks with various circles of sheep farmers (10.4%). The success of the business of sheep farming, according to the majority of farmers (76.4%) is determined by the seriousness in managing the business and provision of good quality of feed.

#### 4.3. Personality Trait of Sheep Farmers

The farmers have assessed important matters which are related to the warmth relationship and easiness in making friends, happiness when gathering with others, being able to express opinions to others and happiness in seeking for excitement and strong emotions (Table 3). Sheep business in the village is not just run for economic activity, for the farmers do other more socially valuable activities. Togetherness with their fellow sheep farmers happens not just because they have the same business, but often they are neighbors, relatives and even friends since their childhood. Therefore, it takes a personality that leads to good relations.

**Table 3:** The average score for each indicator for Extraversion latent variable

Latent variable	Indicator	Score Average	Standard Deviation
	warmth	4.03	0.94
	gregariousness	4.55	0.69
Extraversion	assertiveness	4.27	1.03
	activity	3.83	0.60
	excitement seeking	4.22	0.69
	positive emotion	3.20	0.81

Indicators highly valued by the farmers for the trait openness to experience include aesthetics, actions and values (Table 4). The farmers assessed important matters related to openness to new values, an appreciation of

art and beauty and excitement in carrying out activities and a variety of new things. Garut sheep has two types, namely, fattening (pedaging) and racing (ketangkasan).

The sheep livestock business development requires a wide range of innovations, willingness of farmers to accept innovations and love for sheep. The sheep has a body shape that is relatively higher and larger than the other types of local sheep, and the horn is interesting so that the male look strong and firm.

The patience of the farmers in caring their sheeps is clear evidence that they have appreciated art and culture in running their business.

**Table 4:** Score average setiap indicators untuk latent variable *Openness to Experience*

Latent variable	Indicators	Score average	Standard deviation
Openness to Experience	fantasy	3.12	1.73
	aesthetics	4.34	0.96
	feeling	3.80	0.82
	actions	4.09	0.94
	ideas	3.97	0.55
	values	4.59	0.75

In the agreeableness trait, the farmers rated highly the indicators of altruism, compliance, tendermindedness, and modesty (Table 5). They stated that in managing the sheep business, they must be helpful, forgiving, attentive to others, respectful for human dignity, sympathetic to people who are less fortunate, humble, and simple.

The sheep business is run around their homes, with the goal to support the economic needs of their families. Running the relatively similar business in one environment can be realized by the farmers by being empathy with each other, giving mutual help and conducting simplicity of life.

They must help each other to live and work together in a variety of activities to develop their businesses sheep.

In the conscientiousness trait, the farmers rated almost all indicators high, namely, the competence, order, dutifulness, achievement striving and deliberation (Table 6). The sheep business o requires farmers with personality oriented toward competence, regularity, order in their work, willingness to work hard, desire for achievement, and consideration before acting.

The farmers assessed that the success of the sheep business requires good technical ability, willingness to work

with dedication endlessly, great energy, high commitment on job performance and utilization of comprehensive and accurate information for every decision made.

**Table 5:** Score average setiap indicators untuk latent variable *Agreeableness*

Latent variable	Indicators	Score average	Standard deviation
Agreeableness	trust	3.49	1.40
	straightforwardness	3.57	0.87
	altruism	4.18	0.94
	compliance	4.08	0.71
	tendermindedness	4.45	0.57
	modesty	4.31	0.73

All indicators of trait neuroticism were undervalued by farmers (Table 7). They farmers do not feel the anxiety or tension in managing their garut sheep business.

The business is run with fairness, and they remain cautious with hygiene and disease as well as caring for the treatment of their sheep.

They farmers have been running the business for a long time and generation to generation; therefore, there is no reason for them to be worried.

**Table 6:** Score average setiap indicators untuk latent variable *Conscientiousness*

Latent variable	Indicators	Score average	Standard deviation
Conscientiousness	competence	4.23	0.83
	order	4.63	0.64
	dutifulness	4.69	0.69
	achievement striving	4.35	0.58
	self-discipline	3.95	0.75
	deliberation	4.43	0.80

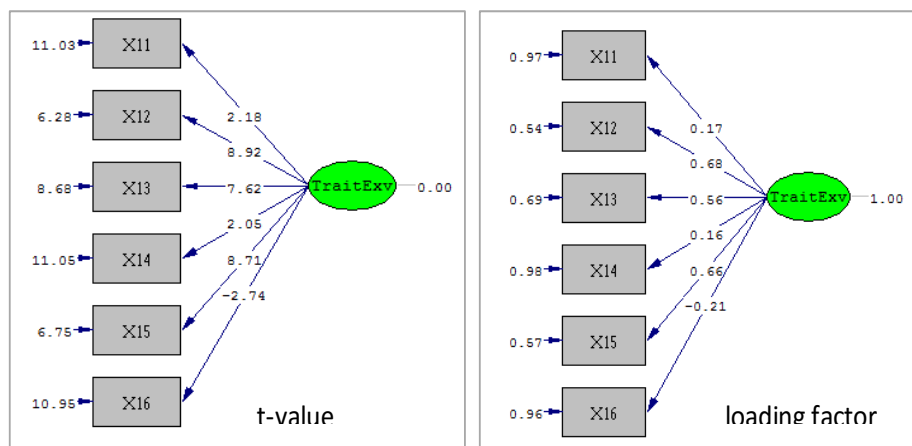
**Table 7:** Score average for every indicator for *Neuroticism* latent variable

Latent variable	Indicators	Score average	Standard deviation
Neuroticism	Anxiety	3.44	0.89
	hostility	2.40	1.23
	depression	3.56	0.69
	self-consciousness	2.23	0.79
	impulsiveness	2.31	1.36
	vulnerability	2.80	1.02

**4.4. Influence of Personality Traits against the entrepreneurship of the Sheep Farmers in Garut**

**a. Personality Trait of Extraversion**

Personality trait of Extraversion consists of warmth (X11), gregariousness (X12), assertiveness (X13), activity (X14), excitement seeking (X15), and positive emotion (X16). The SEM analysis results show that the t-values of all manifest variables or indicators (X11-X16) are the same as 1.96. This shows that all significant manifest variables explain or describe trait extraversion at  $\alpha$  0.05 (Figure 1).



**Figure 1:** T-values and loading factor of Extraversion trait

However, Figure 1 also shows that the magnitude of the contribution of each manifest variable to the different extraversion trait. This is evident from the loading factors that range from 0.16 (X14) to 0.68 (X12). According to the sheep farming in Garut, the loading factors under 0.50 were removed from the manifest variables, because they were not significant to explain the extraversion trait. Therefore, manifest variables or indicators that explain

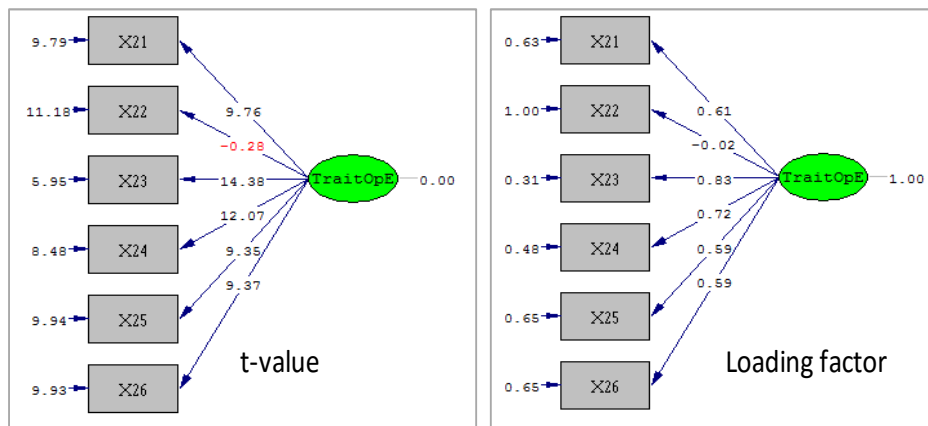


or contribute to trait extraversion by the sheep farmers in Garut include gregariousness (X12, 0.68), assertiveness (X13, 0.56), and excitement seeking (X15, 0.66).

This shows that the sheep farmers have the tendency of having extraversion personality or opening up, enjoying talking, and being energetic as explained by their gregariousness, faith quality and fondness in managing the farming. They enjoy gathering in places of public facilities, for example in coffee shop, meeting hall, small mosque or mosque, market, and rice field or garden so that they able to open their horizons in managing their sheep farming. They also believe that this farming is able to provide an additional income for them so they open their mind to search for current information related to the sale price of sheep, and this encourages them to look for matters related to the more profitable management of sheep farming.

**b. Trait Openness to Experience**

The manifest variables or indicators of trait openness to experience) comprise fantasy (X21), aesthetics (X22), feeling (x23), actions (X24), ideas (X25), and values (X26). Based on the analysis results of SEM, it can be seen that manifest variable of aesthetics (X22) is not significant at 0.05  $\alpha$ , while the other indicators are significant (Figure 2).



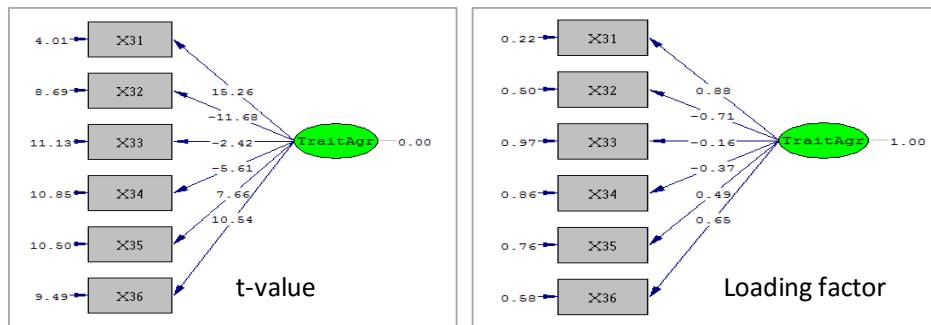
**Figure 2:** T-values and loading factors of Openness trait to Experience

In addition, Figure 2 shows that only the indicator aesthetics indicator (X22) which has a loading factor under 0.05, while the other indicators significantly explain the trait Openness to Experience for the sheep farmers in Garut. This means that they make their experience as a teacher in managing their farm. The experience described by the farmers include fantasy, feeling, actions, ideas, and values developed inside them.

Thus, raising sheep for the farmers is no longer considered as savings, but they tend to make it as a business. This trend will become stronger with if the engagement of fantasy, feeling, action, idea and value become stronger as well. Wishful thinking to have a lot of sheep, strong desire to raise sheep, more aggressive action, creative ideas, and values of social and spiritual believed by the farmers have encouraged them to continue learning from other sheep farmers to be successful.

**c. Agreeableness trait**

The manifest variables or indicators of trait Agreeableness (X3) consist of trust (X31), straightforwardness (X32), altruism (x33), compliance (X34), tendermindedness (X35), and modesty (x36). The SEM analysis results showed that the t-values of all manifest variables or indicators are significant at 0.05  $\alpha$  (Figure 3). In other words, all of the indicators are believed to explain the *Agreeableness* trait of the sheep farmers in Garut.

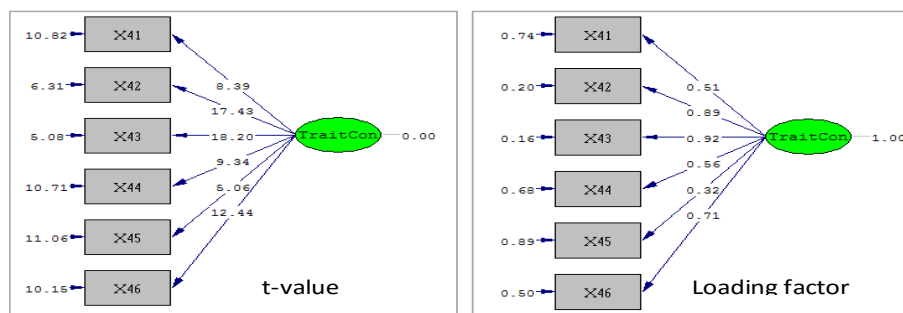


**Figure 3:** T-values and loading factors of *Agreeableness* trait

However, based on the loading factors, only manifest variables of trust (X31, 0.88), straightforwardness (X32, -0.71), and modesty (x36, 0.65) which explains the significance of the *Agreeableness* trait of the farmers. This means that in order to establish an agreement with the sheep farmers in Garut, we must start from the aspects of trust and modesty without straightforwardness but not lying, indicating that the farmers understand that they must hide something in making a deal with someone else. It, thus, in the context of a business can still be tolerated.

**d. Conscientiousness Trait**

The manifest variables or indicators of *Conscientiousness* trait include competence (X41), order (x42), compliance (X43), achievement striving (X44), self-discipline (X45), and deliberation (X46). The SEM analysis results showed that the t-values of all indicators are greater than 1.96 or significant at  $\alpha$  0.05 (Figure 4) that is all the indicators are believed to explain the *Conscientiousness* Trait of the sheep farmers in Garut.

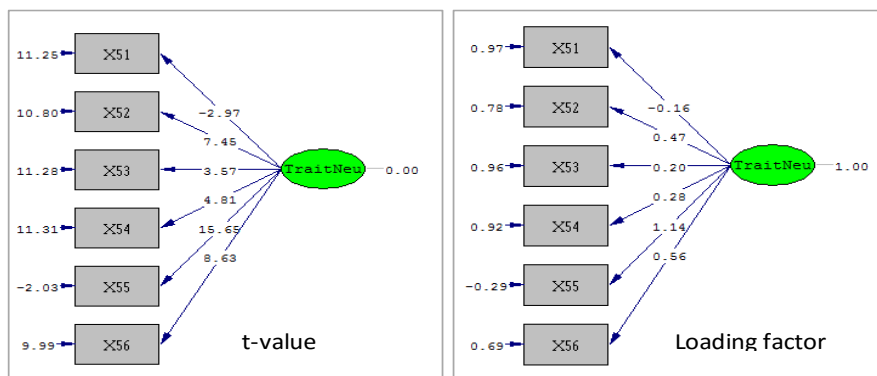


**Figure 4:** T-values and loading factors of *Conscientiousness* Trait

However, based on the loading factors, *Conscientiousness* Trait of the farmers are described by all indicators, except the indicator of self-discipline (X45) because the loading factor is less than 0.50. This means that *Conscientiousness* Trait is described by competence (X41, 0.51), order (x42, 0.89), compliance (X43, 0.92), achievement striving achievement (X44, 0.56), and deliberation (X46, 0.71). According to the farmers, raising sheeps is not by chance or trial and error, but it is because the business has been in the family for generations, so that obedience to the elders (parents or family elders) contributes the highest score to the *Conscientiousness* Trait of the farmers. In addition, it includes life order, a desire for success, competence and deliberation, conscious and independent management of their sheep farming.

**e. Neuroticism Trait**

Variable manifest or indicators of *Neuroticism Trait* include anxiety (X51), hostility (X52), depression (X53), self-consciousness (X54), impulsiveness (x55), and vulnerability (X56). The SEM analysis results indicate that the only indicator of vulnerability (X56) significantly explains the *Neuroticism Trait* of the sheep farmers in Garut (Figure 5).

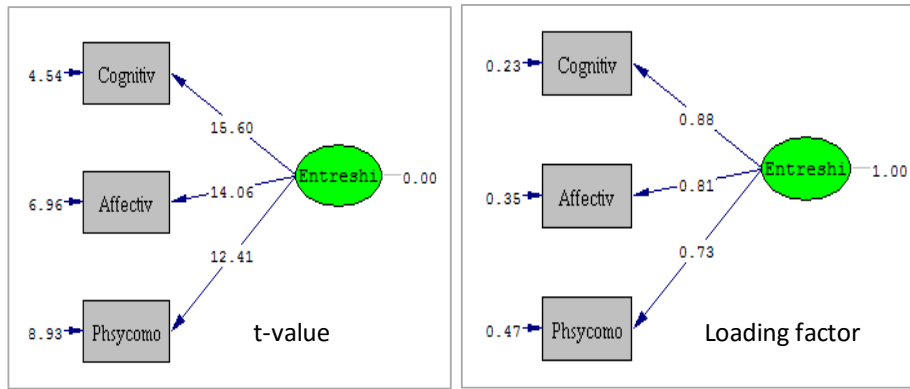


**Figure 5: T-values and loading factors of Neuroticism Trait**

Thus, the sheep farmers do not experience anxiety in managing their farming. This is due to the quiet rural atmosphere with the sufficient resources available for their livestock so that the farmers are not getting worried and anxious in raising their sheeps. However, they are sensitive to changes in the environment, especially if the environment is not friendly with their animals, such as difficulties in water supply, dry grass, and deadly diseases.

**4.5. Entrepreneurship of the Sheep Farmers**

The manifest variables or indicators of Entrepreneurship of the sheep farmers consist of cognitive, affective, and psychomotoric in raising their sheeps. Based on the analysis of SEM, the t-values of the three indicators are above 1.96 or significant at  $\alpha$  0.05, while the loading factors are above 0,50 (Figure 6). This shows that Entrepreneurship of the farmers is explained by their cognitive or knowledge on the procedures for raising sheeps, positive attitude, and actions that have been done in raising their sheeps.

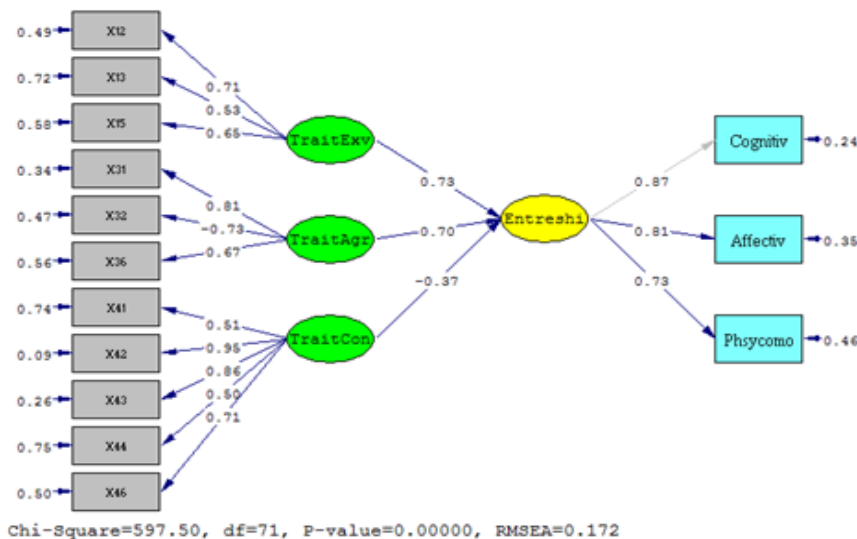


**Figure 6:** T-values and loading factors of the Entrepreneurship of the Sheep Farmers

Indicator of cognitive or knowledge contributes most in explaining the entrepreneurial character of the sheep farmers. This indicates that they are open to new information and seeking for matters related to the management of sheep farms which is more efficient and profitable. Additionally, they also consider that raising sheep is capable of providing welfare for them and their families. Therefore, they routinely provide feed stock, feed and bathe them, and maintain the health and safety of their sheeps.

#### 4.6. Influence of Traits on Entrepreneurship

Based on the results of SEM analysis on the influence of the model of the entrepreneurship trait of the sheep breeders, there are two traits of Openness to Experience and *Neuroticism* Trait which are not significantly influential on the entrepreneurship, for the t-values are under 1.96 (at  $\alpha$  0.05). Both traits were removed from the model so that only the traits of extraversion, agreeableness, and *conscientiousness* influence the Entrepreneurship of the farmers (Figure 7).



**Figure 7:** Model of the Influence of Traits on the Entrepreneurship of the Sheep Farmers

The extrovert and partnering personalities are so strong that they influence the entrepreneurial behavior of the

garut sheep farms. The stronger the personality of the farmers, the stronger their entrepreneurial capacity. Since they are dynamic and frequently travel outside the village, they are able to form their entrepreneurial characters. The established cooperation and agreement have strengthened their entrepreneurial characters.

However, the personality trait of *conscientiousness* of the farmers has negatively affected by their entrepreneurship. This means that the entrepreneurship that is affected by the *conscientiousness* trait is inverse. The *conscientiousness trait of the farmers* described by the compliance and order affecting the entrepreneurship. In other words, the entrepreneurship of the farmers will be stronger, if they do not apply their order and obedience, so they will act unusually or will not do their habit or be bold to be different, thus supporting their entrepreneurial characters especially in the formation of entrepreneurial attitudes.

## 5. Conclusion

Based on the results of the research, it can be concluded that the Garut sheep farming has been practiced from generation to generation with the objectives of earning income for the farmers to support their family economy, to maintain the development of Garut sheeps and to execute their hobby. The extraversion and agreeableness traits are personality traits that positively play major roles in the entrepreneurship especially in the formation of entrepreneurship attitudes. This is consistent with results of previous studies which confirmed that education and experience is the key to the formation of entrepreneurial character that ultimately leads to the attitude of an entrepreneur, while the *Conscientiousness* trait leading to the regularity and compliance will negatively affects the development of entrepreneurial farmers. This is in line with the characteristics of the entrepreneur should always flexibly to any situation and being creative, given in sheep climatic conditions are very influential and lately uncertain climatic conditions, so it takes a creative acts, considering the risks and even out of the box to be able to maintain competitiveness and sustainable business sheep business.

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