

## The Attractiveness of Hydroponics for Millennial Youth Organization at Cibeunying Kidul Bandung

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**Abstract:** Hydroponics is a modern way of farming today, although currently the majority of hydroponic farmers are over 40 years old. but not infrequently many millennial generations start to look at this business, they are no longer ashamed to farm because they use very modern methods. hydroponic business actors among millennials, if given training and high motivation, will bring huge profits. and can support the Green Environment concept because it is very environmentally friendly. This research is aimed at members of the Youth Organization in the Cibeunying Kidul area who have previously received training in farming using hydroponic methods, but they have not been motivated to become a real hydroponic business actor, this is also caused by the less supportive organizational environment around them. By distributing a sample of 42 respondents, then the results of the questionnaire are processed using descriptive verification methods, it can be concluded that training and the organizational environment have a significant influence on the motivation of members of the youth organization to become entrepreneurs in the hydroponic field.

**Keyword:** Training, Work Environment and Motivation

### 1. Research background

For millennials, farming is usually considered an activity that is less desirable because it is dirty, tired, hot in the sun, and so on. Farming activities are synonymous with playing with soil, manure, and hoes. In fact, our country is known as an agricultural country, where most of the population works as farmers. But make no mistake, farming does not necessarily have to play the land and hoes. 'Hydroponics' is one of the answers to farming without having to use land.

The resulting product is certainly more hygienic, because it is less exposed to pests and diseases, does not use chemical fertilizers, and is not contaminated by soil. Then the product is immediately taken to the packing house to be cleaned and packed as needed. Products of various types of lettuce are usually sold in whole form and can also be in the form of mixed salads. Likewise with various types of other commodities, usually packed immediately so that they are not easily damaged and add to the selling value. The planting medium used does not use soil, but usually uses rockwool to grow various types of lettuce, mustard greens, and kale. Some also use coir peat / coconut powder when planting tomatoes, melons, mint, and strawberries.

We can usually find all the products produced in several retail stores such as Carrefour, Giant, Transmart, and also restaurants. Of course, the target consumers of this product are middle to upper class. But not infrequently it can usually be sold in traditional markets and even already have regular customers. Plantations with hydroponic techniques like this are very profitable. Especially if you have land that is not very large but can get satisfying and quality results. Maintenance is also classified as very easy and not too complicated as in conventional plantations which have to hoe, spray, weed, and so on.

From the convenience obtained from hydroponic techniques, of course, it can make millennials even more interested in plunging into the world of agriculture and developing businesses in the agricultural sector. So that millennials can raise the degree of farmers to be seen as better.

### 2. Literature review

#### Training

Training is an effort to improve the quality of human resources in the world of work. Employees, whether new or already working, need to take part in training. Training is the process of teaching new or existing employees the

basic skills they need to carry out their jobs. In measuring the training variables, the study adapted the indicators used in Gary Dessler's research (2015: 284), training was divided into 5 indicators, namely as follows:

1. Instructor. The instructor reminded that training was generally oriented towards improving skills, so the trainers selected to provide training materials had to have sufficient qualifications in accordance with their fields, professional and competent.
  - a. Adequate qualifications / competencies
  - b. Motivate participants
  - c. Needs feedback.
2. Training participants. Of course, training participants must be selected based on certain requirements and appropriate qualifications.
  - a. The spirit of following the training
  - b. Desire to pay attention.
3. Method - The training method. Which will ensure the implementation of effective human resource training activities, if it is in accordance with the type of material and the abilities of the training participants.
  - a. The suitability of the method with the type of training.
  - b. Suitability of the method with the training material.
4. Training Materials. Human resources are materials or curricula that are in accordance with the objectives of human resource training that the company is trying to achieve.
  - a. Adding abilities
  - b. Suitability of material with training objectives
5. Training objectives. Training requires predetermined objectives, particularly in relation to the formulation of an action plan (action plan) and setting targets, as well as the expected results of the training held.
  - a. The skills of the trainees.
  - b. Understanding the work ethic of the trainees.

### **Work Environment**

The work environment according to Afandi (2018: 16) is something that is in the environment of workers that can affect in carrying out tasks such as temperature, humidity, ventilation, lighting, noise, cleanliness of the workplace, and whether or not there are adequate work equipment tools. According to Alex S. Nitisemito, there are seven dimensions of the work environment, namely:

- a. work atmosphere,
- b. lighting,
- c. air circulation,
- d. relationship with coworkers,
- e. noise,
- f. odor and
- g. security.

So it can be concluded that the work environment is everything that is around the workplace, both physical and non-physical work environments that can affect employee performance. However, for this study, only four dimensions were adjusted according to the object of research, namely the Youth Organization of the Youth Organization in Cibeunying Kidul Village, namely: Organizational atmosphere, Relationships with colleagues, Noise and Security.

### **Work Motivation**

Motivation can be defined as a goal or impetus, with that real goal being the main driving force for a person in trying to get or achieve what he wants, either positively or negatively. In addition, the notion of motivation is a change that occurs in a person that appears in the presence of feelings, psychiatric and emotional symptoms so as to encourage individuals to do or act something caused by needs, desires and goals. Work motivation is a condition that influences to generate, direct and maintain behavior related to the work environment. There is also according to Wibowo (2014: 323) work motivation is an impetus for a series of human behavior processes in achieving goals. In addition, according to Wibowo, there are also according to Viethzal Rivai (2014: 607) Motivation is a series of attitudes and values that influence individuals to achieve specific things according to individual goals. According to Handoko (2015; 249) and according to Winardi (2015: 322) Motivation is what causes, channels, and supports human behavior, so I want to work hard and enthusiastically to achieve optimal results. According to Ardana, et al (2013; 193) the dimensions of work motivation are as follows:

- a. Proper job placement. The right job placement is that the employee is placed in the field under his control in accordance with the expertise possessed by the employee.
- b. Pleasant working conditions. Pleasant working conditions mean that employees feel comfortable with their work.

c. Recreational facilities. Recreational facilities are facilities provided by the company to its employees in order to relieve fatigue during work such as holiday.

d. Health insurance. Health insurance is a guarantee provided by a company in order to increase a sense of security while working in a company.

For this research, only two dimensions will be used, namely: Appropriate work placement in the youth organization and pleasant working conditions, in this case hydroponic business practices aimed at members of the Youth Organization.

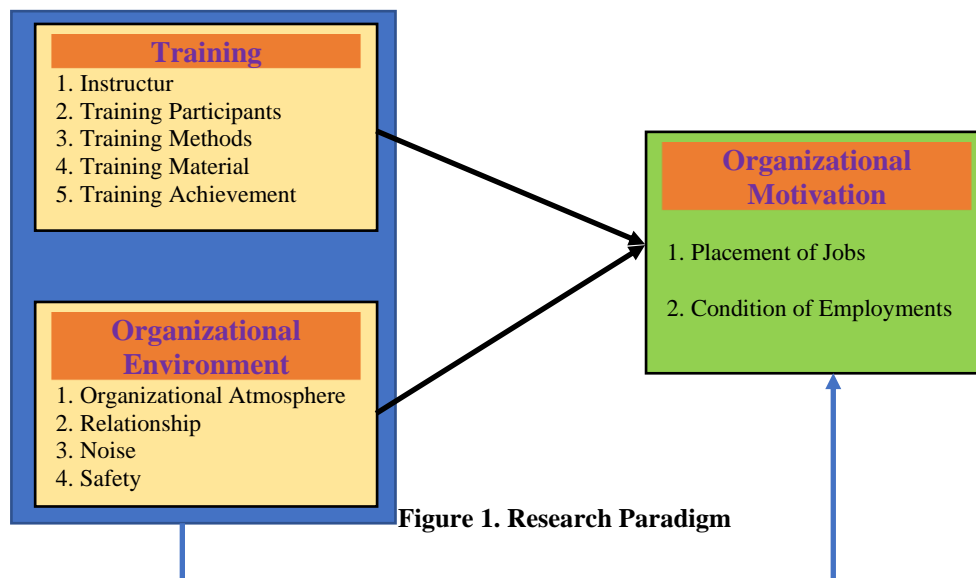


Figure 1. Research Paradigm

### 3. Research hypothesis

H<sub>1</sub> = Hydroponic Business Training has a significant effect to Motivation of Members Karang Taruna

H<sub>2</sub> = Organizational Environment has a significant effect to Motivation of Members Karang Taruna

H<sub>3</sub> = Hydroponic Business Training and Organizational Environment has a significant effect to Motivation of Members Karang Taruna

### 4. Research methods

Research method is defined as a scientific way to obtain data with the aim of specific use data. This type of research uses methods that use descriptive verification methods with a quantitative approach. The descriptive method is as follows. The descriptive method is a method used to describe or analyze a research result but is not used to make broader conclusions. Meanwhile, verification research allow Sugiyono (2015: 55) is research that aims to determine the relationship between two or more variables.

Furthermore, regarding the quantitative approach, Sugiyono also argues that quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, quantitative / statistical data analysis. , with the aim to test the hypotheses that have been set.

In this study, the samples used as research respondents were 42 respondents who were members of the Karang Taruna Cibeunying Kidul organization. These respondents will later answer the questionnaire given by the researcher, and distributed for one day when the respondent has received hydroponic training.

5.

### 6. Research result and discussion

#### Profile Respondents

Table.1

Item	Information
Gender	Male

Age	15 – 30 years old
Profession	Students
Education Background	SMU/SMK
Expenses per month	Rp. 2.000.000,- – Rp. 4.000.000,-

Source : Questionnaire Results, 2021

Results of the collection of respondent profiles, we can see that most respondents to the questionnaire in this study were male and aged between 15-30 years. So that we can estimate that in that age range the majority are students and university students. Then we conclude again that the educational background of the respondents is mostly high school / vocational school, in the sense that with this educational background they have at least received information or knowledge about hydroponics before during school. Then in terms of spending per month between these ranges, it can be concluded that the majority of respondents come from the middle class. If it is concluded that the respondent has the financial ability to spend not too much capital for this hydroponic business, but later will get maximum profit.

**Multiple Regression Analyst Test**

Multiple linear regression analysis is used to predict the dependent variable when the independent variable experiences an increase or decrease. From the data processing that has been done, the following results are obtained:

**Tabel.2**  
**Multiple Regression Analysis Result**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardize d Coefficients	T	Si g.
	B	Std. Error	Beta		
(Constant)	1.715	3.739		.459	.647
1 Training	.900	.188	.448	4.790	.000
WorkEnv	.391	.164	.223	2.386	.019

a. Dependent Variable: Motivation

Source : Primary Data Result

Based on Table.2, this is the result of Multiple Regression Analysis Test :

$$Y = 1,715 + 0,900X_1 + 0,391X_2$$

From the results of the multiple linear regression equation, each variable can be interpreted as follows:

- a) The constant value (a) is 1.715. This means that if the training and work environment is 0 (zero) and there is no change, then the motivation of the members of the organization will be worth 1.715.
- b) The value of the X1 variable, namely training, has a regression coefficient of 0.900, meaning that if the training increases by one unit, while the work environment is constant, the motivation of the members of the organization will increase by 0.900 units.
- c) The value of the X2 variable, namely the organizational environment has a regression coefficient of 0.391, meaning that if the organizational environment increases by one unit, while training is constant, the motivation of the organizational members will increase by 0.391 units.

**Coefficient Correlation Analysis Test**

**Table.3**  
**Partial Coefficient Correlation Analysis Test**  
**Correlations**

		Training	WorkEnv	Motivation
Training	Pearson Correlation	1	.565**	.574**
	Sig. (2-tailed)		.000	.000
	N	110	110	110
WorkEnv	Pearson Correlation	.565**	1	.476**
	Sig. (2-tailed)	.000		.000
	N	110	110	110
Motivation	Pearson Correlation	.574**	.476**	1
	Sig. (2-tailed)	.000	.000	
	N	110	110	110

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source : Primary Data Result, 2021

Based on the results of the calculation of the correlation coefficient in Table 3, the results of the training correlation coefficient (X1) with organizational members' motivation (Y) are 0.574, while the results of the work environment correlation coefficient (X2) and organizational members' motivation (Y) are 0.476. In conclusion, statistically, there is a fairly strong relationship between training (X1) and organizational members' motivation (Y) and there is also a strong relationship between work environment (X2) and organizational members' motivation (Y). Meanwhile, to determine the relationship simultaneously, it can be seen from the Model Summary table by looking at the R value in the following table:

**Tabel.4**  
**Simultaneously Coefficient Correlation Analysis Test**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603 <sup>a</sup>	.363	.351	6.389

a. Predictors: (Constant), Work Environment, Training

b. Dependent Variable: Motivation

Source : Primary Data Result, 2021

Based on Table 4 above, it can be seen that the correlation coefficient value obtained between training (X1) and the work environment (X2) on the motivation of organizational members (Y) is 0.603. The correlation value is positive, which indicates that the relationship between the independent variable and the dependent variable is unidirectional, where the better the training and work environment, the better the motivation of the members of the organization will be followed. Based on the interpretation criteria of the correlation coefficient, the correlation value of 0.603 is included in the strong relationship category, in the interval 0.600 - 0.799.

**Partially Hypothesis Test (t Test)**

**Table.5**  
**Partially Hypothesis Test (t Test)**

No	Variable	t count	t table
1	Training (X <sub>1</sub> )	4,790	1,659
2	Work Environment (X <sub>2</sub> )	2,386	

Source : Primary Data Result SPSS ver.20

**Hypothesis Test for X<sub>1</sub>:**

The effect of the Training variable (X1) on Motivation (Y) in Table 5 above, according to the partial calculation that the real level of 5% ( $\alpha = 0.05$ ) t table is 1.659, while the tcount is 4.790. It can be concluded that tcount 4.790 > ttable 1.659, thus the training variable (X1) has a significant effect on the motivation of organizational members (Y).

**Hypothesis Test for X<sub>2</sub>:**

The influence of the Work Environment variable (X2) on Motivation (Y) in table 5 above, according to the partial calculation that the real level of 5% ( $\alpha = 0.05$ ) t table is 1.659, while the tcount is 2.386. It can be concluded that tcount 2.386 > table 1.659, thus the work environment variable (X2) has a significant effect on the motivation of organizational members (Y).

**Simultaneously Hypothesis Test (F Test)**

**Table.6**  
**Simultaneously Hypothesis Test (F Test)**

No	F count	F table
1	30,519	3,080

Source : Primary Data Result SPSS ver.20

From the results of the F test in Table 6 that has been done, it is found that the number of  $F_{count}$  is 30.519 and  $F_{table}$  is 3.080, in other words  $F_{count} 30.519 > F_{table} 3.080$ . Based on the test results, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted. Thus that simultaneously the training variable ( $X_1$ ) and the work environment ( $X_2$ ) simultaneously affect the motivation of organizational members (Y).

**7. Conclusion and suggestion**

**Conclusion**

1. The results of the study show that there is a significant effect of 33% between training ( $X_1$ ) on the motivation of organizational members (Y) at Karang Taruna Cibeunying Kidul. In the sense that the hydroponic training provided to members of the youth organization provides business opportunities for members of youth organizations, respondents who are active as students certainly have a lot of free time to practice this hydroponic business. However, it turned out that the training received was difficult to understand and very difficult to apply at home due to the lack of land.
2. The results showed that there was a significant effect of 23% between the organizational environment ( $X_2$ ) on the motivation of organizational members (Y) at Karang Taruna Cibeunying Kidul. In the sense that the work environment felt by members of the youth organization has a less conducive atmosphere, respondents are less communicative with one another so that each respondent lacks motivation in running this hydroponic business.
3. Based on the research results, the training variable ( $X_1$ ) and the work environment ( $X_2$ ) have a significant effect on the motivation of organizational members (Y) by 37% while the remaining 63% is influenced by other variables not included in this study.
4. Training ( $X_1$ ) and Work Environment ( $X_2$ ) results show that there is a significant influence simultaneously with the value of  $F_{count} 30.519 > F_{table} 3.080$  on the dependent variable Motivation of Organizational members (Y) in Karang Taruna Cibeunying Kidul.

**Suggestion**

1. It is recommended that the training provided for members of the Karang Taruna organization is training accompanied by mentoring within a certain period of time, so that there is interaction between the instructor and the training participants. This assistance can be done through various media, including through tutorials using digital media or mentoring through personal messages.
2. This training basically aims to train the millennial generation to become a hydroponic entrepreneur through the smallest scale, namely farming at home. However, the majority are constrained by costs or capital problems. Therefore it can be facilitated by several related agencies to formulate a budget among youth organizations in each region.
3. Motivation for entrepreneurship can also be done by some colleagues or closest relatives in the youth organization. To cultivate an entrepreneurial spirit from an early age, strong motivation is needed.

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