



The role of product knowledge on purchase intention: Case study of agriculture biological product

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ABSTRACT

This study aims to find out how companies provide product knowledge to consumers and find out how much influence the delivery of product knowledge has on the emergence of purchase intention in consumers. This research uses mixed methods with a sequential design, starting from quantitative by using a questionnaire and qualitatively by using interviews. The population in this study were all farmers in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region. The sampling technique used was non-probability sampling with purposive sampling. From these respondents, data was collected using a questionnaire. The technique in this study uses statistical data analysis techniques with validity tests, reliability tests, normality tests, heteroscedasticity tests, multicollinearity tests, and multiple linear regression analysis, in addition to knowing the effect partially and simultaneously using t-test and F-test. In addition, interviews were conducted with the two heads of farmer groups. This study shows that all dimensions of the product knowledge variable have a positive and significant effect on purchase intention. Of these three dimensions, objective knowledge is the most influential factor in purchase intention. PT. Prosper Biotech Indonesia should maintain a relationship with farmer groups in conducting counseling that conveys material about these products, because these extension workers will grow product knowledge that potential consumers have about their interest in buying products produced by the company. From there, farmers know about ValdisGROW products objectively.

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1. INTRODUCTION

The development of the world today, focused on food problems which is a global issue because food is a primary need for people around the world. Especially when food is experiencing a crisis threat that is currently spreading to several countries, especially in developing countries including Indonesia. Based on the warning from the Food and Agriculture Organization (FAO) regarding the problem of food availability in Indonesia, Indonesia should be aggressive in the problem of depleting food supplies (Iswara, 2021). This prediction leads to food security in Indonesia in 2050 which decreases due to

factors vulnerable to climate change and agricultural land in Indonesia which is categorized as having been severely damaged due to the excessive use of chemical fertilizers and pesticides. With this problem, the government, especially the Ministry of Agriculture, should make efforts to deal with the problem of soil damage and pest expulsion in crops, because, in some regions in Indonesia, there are crop failures due to leafhoppers or pests on plants. One of the efforts made, namely by issuing Regulation of the Minister of Agriculture No. 01 of 2019 concerning Organic Fertilizers, Biofertilizers, and Soil Reformers (Minister of Agriculture, 2019). Indonesia has vast and fertile land, agriculture and Indonesia's food security should be the most reliable sectors (Putro, 2022).

The problem found in the agricultural industry lies in the quality of the soil that is damaged due to the repeated use of chemical fertilizers and pesticides that can make the soil harden but there are still users of the chemical-based product (Catriana, 2021). Throughout 2018 urea chemical fertilizer users grew by 5% and NPK chemical fertilizer users grew by 7.88% (Arief, 2019), while biofertilizer users in Indonesia only by 13.5% (Setiono, 2019). Therefore, this has become a concern for PT. Prosper Biotech Indonesia to start marketing its new products to consumers because most consumers are interested in chemical products, and this is difficult to change. Thus, the problem in this study occurred when the ValdisGROW product which is useful for stopping pests and fertilizing the soil can replace chemical pesticides which are the main products of farmers to eradicate pests. ValdisGROW was introduced by the company by providing counseling to farmer groups.

Product knowledge is related to memories or knowledge that is known by consumers, concerning expertise and familiarity with products (Nurhayati & Hendar, 2019). Product is something that can be offered to the market to be noticed, obtained, used, or consumed to satisfy the desires or needs of consumers (Utama, 2016). So from this understanding, companies are asked to make a product that has the attractiveness of consumers and is also in accordance with what consumers need in carrying out their daily activities (Stark, 2022). Furthermore, a product is an offer to the market to be noticed, purchased, used, and consumed, which aims to satisfy the wants and needs of consumers (Mamonto & Tumbuan, 2021). A broad sense of product consists of physical objects, services, people, places, organizations, and ideas.

Product knowledge is a series of information contained in consumer memories, which will help as a basis for consideration for a follow-up by consumers (Sanita, 2019). In understanding consumer behavior, companies must know how much product knowledge is captured and stored in consumers' memories. Consumer knowledge of a product is important because that knowledge underlies consumer behavior decisions that affect purchase intention (Mrkva, Posner, Reeck, & Johnson, 2021).

Product knowledge is important because consumers must know about the characteristics of a product (Suprpto & Susanti, 2016). Each product must have its own characteristics because it is the identity of a product to have differences between one product and another. If consumers do not know the characteristic information of a product, it will be difficult to have an awareness of purchase intention. Product knowledge is a means of communication between companies and consumers to provide product instructions that will be offered to consumers (Wang, Ma, & Bai, 2019). The higher the product knowledge in purchasing activities, the more it will increase the ability of consumers to make choices. Customers with high product knowledge have better memory, recognition, and analysis of products than customers with low product knowledge. If individuals have more knowledge of certain products, then they will purchase the products (IDRUS, Abdussakir, Djakfar, & IDRUS, 2021).

There are several dimensions of product knowledge that will affect consumers' purchase intention as follows: subjective knowledge, objective knowledge, and experience knowledge (Limartha & Erdiansyah, 2018). Subjective knowledge is knowledge in the form of information that consumers have about a product (Shou & Olney, 2021). While objective knowledge is the amount of information stored in the memory of consumers about the brand, attributes, usage situation, type, and class of a product. The last one is experience knowledge as information obtained on the product after purchasing and using the product. The study conducted by Rao and Monroe explain that knowledge of the products is the main factor of purchasing decision (Younus, Rasheed, & Zia, 2015).

Consumers will proceed through the stages of need recognition, information search, and alternative appraisal while making a purchase. When a customer notices an issue and there is a discrepancy between expectations and reality, there will be a need for recognition (García-Salirrosas & Rondon-Eusebio, 2022). When an issue arises, information search starts, and it is finished by meeting client wants. When consumers wish to buy or utilize a product, alternative evaluation is the process of choosing the right one. When making purchases, consumers like to rely on their knowledge. Decisions are based on knowledge, which is tied to the product as an extrinsic cue (Amoako, Dzogbenuku, & Abubakari, 2020). Consumer knowledge influences decision-making processes and purchasing intents and is useful for information retrieval. The systematic method of gathering, analyzing, and integrating various product information or purchasing cues will serve as the foundation for consumer behavior in purchases (Rossanty & Nasution, 2018).

Purchase intention is a process of a consumer evaluating the information received when knowing and listening to clarity on a product (Peña-García, Gil-Saura, & Rodríguez-Orejuela, 2020). Purchase intention is something that grows after the encouragement of the product seen by consumers, then there is a desire to buy and own the product (Hidayat, Elita, & Setiawan, 2012). A consumer's interest in buying a product can be based on several factors, one of which is product knowledge. The existence of product knowledge is very important for the success of a product so that consumers have awareness of the product. So that consumer knowledge of a product will be a basis for consideration and a driver of consumer purchase intention. In product knowledge, there is a customer experience when using the product (Hermawan, 2022). With experience, customers will engage and interact with brands, products, and things experienced by consumers (Setiawan & Hermawan, 2022).

Purchase intention is also part of consumer attitude behavior (Nystrand & Olsen, 2020). Consumer purchase intention is the process by which a consumer chooses between several brands that belong to a set of choices, and then they end up making a purchase on an alternative that is most preferable or the process by which consumers buy a good or service based on various considerations (Annafik, 2012). From some of the understandings above regarding purchase intention, it can be concluded that purchase intention is the presence of awareness and encouragement from consumers to buy a product, after sight, and understanding of the product.

Purchase intention serves as an indication of self to buy a brand or make a purchase action (McClure & Seock, 2020). A purchase intention effort arises with product analysis, in which individuals use their knowledge, experience, and information from outsiders for evaluation (Zhuang, Luo, & Riaz, 2021). The purchase intention parameter is the main indicator in evaluating consumer behavior, which can predict consumer behavior when making a purchase decision, because the stronger the purchase intention, the greater the probability of purchasing (Jasin, 2022).

The solution to the problem in this research is to find out whether the extension of the new ValdisGROW product is effective in increasing farmers' product knowledge so that it can increase purchase intention or not sell these products. So, this can be an evaluation for companies to maintain this method or find other ways to introduce products. The reason for researchers in researching the topic of product knowledge is that purchase intention is an effort to solve the above problems so that farmers have awareness of environmentally friendly products, especially bio-pest products produced by PT. Prosper Biotech Indonesia. Currently, the business is carried out by PT. Prosper Biotech Indonesia, among others, by counseling farmer groups spread across several regions in Indonesia, especially the Special Region of Yogyakarta. This extension does not feel easy because the product offered is a new product with a composition that is not commonly used in chemical agricultural products. The uniqueness of this research is that it is accompanied by counseling for farmer groups in the Yogyakarta area. Thus, researchers can see directly the product introduction process to consumers which underlie knowledge of bio-pest products from consumers to see the purchase intention of farmer groups who take part in counseling.

This research explores product knowledge from the farmer's point of view, where this discussion is still little discussed. Research on product knowledge revolves around beauty products (Lavuri, Jabbour, Grebinevych, & Roubaud, 2022), halal products (Ozturk, 2022), and organic food

(Cavite, Mankeb, & Suwanmaneepong, 2022). This research provides a new perspective regarding the impact of product knowledge on users of anti-pest products, as well as the right approach to increase farmers' buying interest regarding ValdisGROW.

This counseling serves to change the behavior of farmers in their agricultural activities in order to get the knowledge that keeps up with the times so that farmers enter a life well with sustainability (Sundari, Yusra, & Nurliza, 2015). Extension services have benefits in increasing agricultural production in Indonesia, as well as having a role in the process of building agriculture which is one of the components of national development. Currently, agricultural production has developed and undergone a transformation from traditional to agriculture that relies on the power of technology, so farmers need to adjust to these changes.

This research can be expected to help companies in conducting product knowledge on biological pest products created by PT. Prosper Biotech Indonesia. Providing this product knowledge will build a customer experience. The consumer experience is one way to provide interaction, communication, and impressions to consumers with the aim of being the initial stage to generate consumer interest (Hermawan, Redefining Customer Experience in the COVID-19 Pandemic: Empirical Approach of Home Furnishings Retailer, 2022). This research is useful for companies to find out the level of influence of their counseling whether it is successful in increasing product knowledge of farmers or not and whether this can increase consumer purchase intentions or not.

2. RESEARCH METHOD

This research uses mixed methods with a sequential design, starting from quantitative by using a questionnaire and qualitatively by using interviews, namely explanatory design (Bungin, 2020). This study aims to determine how much influence product knowledge has on purchase intention in ValdisGROW products. The data collection process used in this study uses the survey method through the use of questionnaires, observations, and interviews so that the research results are more complete. The statements in questionnaires were made using a Likert scale which would then be processed to become data in this study (Sugiyono, 2017). This questionnaire will be distributed to groups of farmers who are domiciled in Yogyakarta according to the minimum number of samples using a purposive technique sampling amounted to 100 respondents. In addition, we also made a list of interview questions for two farmer group leaders in Yogyakarta to add information to this research.

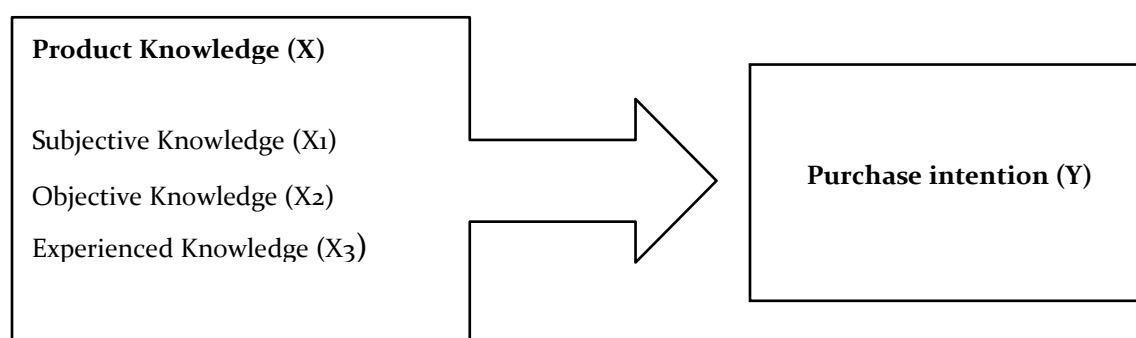


Figure 1. Research Model

The purpose of this study is to ascertain whether product knowledge has an impact on purchase intention either partially or simultaneously. This study investigates the relationship between purchase intention and the aspects of product knowledge—subjective knowledge (x_1), objective knowledge (x_2), and experience knowledge (x_3). Simultaneously, the research explores the effect of product knowledge as a combination of three dimensions that have been previously mapped to the interest in buying ValdisGROW products in Yogyakarta. The author presents the characteristics of the respondents and descriptive analysis. The author analyzes the results of research that have been carried out in the form of validity and reliability tests, classical assumption tests, multiple linear regression analysis tests,

hypothesis testing, and test the coefficient of determination. In conducting the analysis, the authors use the SPSS version 22 program.

Table 1. Variable Operationalization

Variable	Definition	Dimension	Indicators
Product Knowledge	Product knowledge is whole series the information contained in the memory of consumers, who will help as a basic consideration for the existence of an act next by a consumer (Sanita, 2019)	Subjective Knowledge	1. Know about product after getting information.
			2. Have a perception of product information.
		Objective Knowledge	1. Know about the composition of the product.
			2. Knowing about product size.
			3. Knowing about how to using the product.
		Experience Knowledge	1. Know about product benefit.
			2. Knowing about the effect side or impact product use.
Purchase Intention	Purchase intention is a drive in a person and will be recorded in the consumer's memory which will become a desire at a time when consumers have the imperative to meet their needs, so they will express those in those memories (Hidayat, Elita, & Setiawan, 2012)	Transactional Interest	1. Have an intention in purchase after seeing the product.
			2. Remake a transaction to such products.
		Referential Interest	1. Have a desire in recommending products.
			2. Recommend the superiority of the products to the people around.
			3. Get recommendation for shop the products.
		Preferential Interest	1. Have an interest in buying to mske ends meet.
			2. Have an untestrest in buying because of the product in the top choice.
		Exploratory Interest	1. Looking for information from people around about the product.
			2. Happy to explore and search know about information a product.

Source: Processing by Author

Hypothesis testing aims to determine the influence of product knowledge variables on purchase intention in ValdisGROW bio-pest products. This test uses simultaneous tests to determine the effect of product knowledge on purchase intention. In addition, it uses testing with partial tests by looking at variables dimensionally, namely subjective knowledge, objective knowledge, and experience knowledge. Here is the formulation of the hypothesis in the test: H_{a1} : There is an influence

of subjective knowledge on purchase intention; Ho₁: There is no influence of subjective knowledge on purchase intention; Ha₂: There is an influence of objective knowledge on purchase intention; Ho₂: There is no influence of objective knowledge on purchase intention; Ha₃: There is an influence of experience knowledge on purchase intention; Ho₃: There is no influence of experience knowledge on purchase intention; Ha₄: There is an influence of product knowledge on purchase intention; Ho₄: There is no influence of product knowledge on purchase intention.

3. RESULTS AND DISCUSSIONS

Respondents in this study amounted to 100 people. Respondents in this study were dominated by men as much as 96%, with the most age in the range of 46-55 years as much as 42%, dominated by married people as much as 96%, with high school education level as much as 47%, monthly yields as much as 44% above 40kg, monthly income Rp. 1,000,000.00-Rp. 5,000,000.00 as much as 65%, and monthly expenses of Rp. 1,000,000.00-Rp. 5,000,000.00 as much as 69%.

Table 2. Questionnaire Result

Demographic	Majority	Percentage
Gender	Men	96 (96%)
Age	46-55 years	42 (42%)
Marital Status	Married	96 (96%)
Education Level	Senior High School	47 (47%)
Harvest Quantity	>40kg	44 (44%)
Monthly Income	1,000,000.00 - 5,000,000.00 IDR	65 (65%)
Monthly Expenses	1,000,000.00 - 5,000,000.00 IDR	69 (69%)

Source: Processing by Author

On the dependent variable, purchase intention, the independent variable, product knowledge (x), is broken down into three dimensions: subjective knowledge (x₁), objective knowledge (x₂), and experienced knowledge (x₃).

3.1. Multiple Linear Analysis

The results of multiple linear analysis can be seen in the table below:

Table 3. Multiple Linear Analysis Result

Coefficients ^a						
Type		Unstandardized Coefficients		Standardized Coefficients	T	Sig
		B	Std. Error	Beta		
1	(Constant)	-.188	.205		-.918	.361
	Subjective Knowledge	.164	.055	.175	2.972	.004
	Objective Knowledge	.146	.077	.406	4.970	.000
	Experience Knowledge	.250	.063	.249	3.958	.000

a. Dependent Variable: Purchase intention

Source: Processing by Author

Based on Table 3, the multiple linear regression model is:

$$Y = -0.188 + 0.164X_1 + 0.146X_2 + 0.250X_3 + 0.05$$

The following is an explanation of the equation model above:

- The constant value is -0.188, meaning that if the dimensions of product knowledge, namely subjective knowledge (X₁), objective knowledge (X₂), and experience knowledge (X₃) are zero or have no effect, then the value of the dependent variable purchase intention (Y) is -0.188.
- The regression coefficient value of the subjective knowledge dimension (X₁) has a positive value of 0.164, which means that if subjective knowledge (X₁) is increased, then buying interest (Y) will increase by 0.164.

- c. The regression coefficient value of the dimension of objective knowledge (X_2) is positive by 0.146, which means that if objective knowledge (X_2) is increased, then buying interest (Y) will increase by 0.146.
- d. The regression coefficient value of the experience knowledge dimension (X_3) has a positive value of 0.250, which means that if experience knowledge (X_3) is increased, then buying interest (Y) will increase by 0.250.

It is clear from the regression coefficient that experiential knowledge, objective knowledge, and subjective knowledge all positively influence purchase intention. From this, we can also infer that the dimension of experience and knowledge has the greatest impact on consumer desire in purchasing the biological pest control product ValdisGROW from PT. Prosper Biotech Indonesia.

3.2. t Test Result

The purpose of the t test is to ascertain the significance of each variable, specifically product knowledge (X), consisting of subjective knowledge (X_1), objective knowledge (X_2), and experience knowledge (X_3), on purchase intention for farmers who participate in counseling and are residents of Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region. This t-test is tested by performing a value comparison t calculate with t table or look at its significance value. The result of the test was with the criterion if t count is greater than t table or significance value < 0.05 , then H_0 is rejected. This means that free variables affect bound variables. Whereas if the t count is smaller than the t table or the significance value > 0.05 , then H_0 is accepted. This means that free variables do not have a significant influence on bound variables. In this study, a table of 1.660 obtained from df (100 – 2 = 98) with a significance value of 0.05.

Based on Table 3, the t test results from the intermediate regression analysis subjective knowledge (X_1), objective knowledge (X_2), and experience knowledge (X_3) to purchase interest (Y) in ValdisGROW bio-resistant products from PT. Prosper Biotech Indonesia is as follows:

- a. Testing the effect of the subjective knowledge dimension (X_1) on purchase intention (Y) resulting in a calculated t value of $2.972 > 1.660$ and a significance value of $0.04 < 0.05$ which means H_0 is rejected and H_a is accepted, so it can be concluded that the dimension of subjective knowledge partially has a significant effect on the interest in buying ValdisGROW bio-pest products from PT. ValdisGROW Prosper Biotech Indonesia.
- b. Testing the effect of objective knowledge dimension (X_2) on purchase intention (Y) resulting in a calculated t value of $4.970 > 1.660$ and a significance value of $0.00 < 0.05$ which means H_0 is rejected and H_a is accepted, so it can be concluded that the objective knowledge dimension partially has a significant effect on the interest in buying ValdisGROW bio-pest products from PT. ValdisGROW. Prosper Biotech Indonesia.
- c. Testing the effect of the experience knowledge dimension (X_3) on purchase intention (Y) resulting in a calculated t value of $3.958 > 1.660$ and a significance value of $0.00 < 0.05$ which means that H_0 is rejected and H_a is accepted, so it can be concluded that the dimension of experience knowledge partially has a significant effect on the interest in buying ValdisGROW bio-pest products from PT. ValdisGROW Prosper Biotech Indonesia.

3.3. F Test Result

The F test aims to test the influence of free variables, namely product knowledge on bound variables, namely purchase intention. This F test is tested by comparing the calculated F with table F. The result of the test was that if F counts smaller than F or the significance value > 0.05 , then H_0 is accepted. This means that free variables have no effect on bound variables. Whereas if F counts greater than F of the table or significance value < 0.05 , then H_0 is rejected. This means that free variables affect bound variables. In this study, an F table of 2.70 was obtained from df1 = K-1 (3-1 = 2) and df2 = N-K (100-2 = 98) with a significance value of 0.05.

Table 4. F Test Result

ANOVA						
	Type	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	570.641	3	190.214	2163.257	.000 ^b
	Residual	8.441	96	.088		
	Total	579.082	99			

a. Dependent Variable: Purchase intention

b. Predictors: (Constant), Subjective Knowledge, Objective Knowledge, Experience Knowledge

Source: Processing by Author

Based on Table 4. calculated F value obtained is 2163.257 with a significance value of 0.000, where $0.000 < 0.05$. Judging from the calculated F value compared to table F, the result F count $>$ the table is obtained, which is at the value of $2163.257 > 2.70$. This means that H_0 is rejected, and H_a is accepted, so it can be concluded that the variable product knowledge simultaneously has a significant influence on the interest in buying ValdisGROW bio-resistant products at PT. Prosper Biotech Indonesia.

3.4. Coefficient of Determination Test Result (R^2)

Coefficient of determination test results can be in the table below:

Table 5. Coefficient of Determination Test Result (R^2)

Model Summary				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793 ^a	.785	.785	.29653

a. Predictors: (Constant), Subjective Knowledge, Objective Knowledge, Experience Knowledge

Source: Processing by Author

Based on the results of the determination coefficient test, it is known that the R square value obtained is 0.785. Then it can be concluded that the product knowledge consisting of the dimensions of subjective knowledge, objective knowledge, and experienced knowledge has a strong influence on the purchase intention of ValdisGROW biological pest products produced by PT. ValdisGROW. Prosper Biotech Indonesia at 78.5%. Meanwhile, 21.5% of purchase intention in ValdisGROW bio-pest products was influenced by other factors that were not studied in this study.

3.5. Interview Result

Based on the results of interviews that have been conducted with farmers who have participated in the extension program organized by PT. Prosper Biotech Indonesia, there is a discussion that is in accordance with variables and then developed into several questions that strengthen the answers. In this interview, there were two speakers who are farmers in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region. These resource persons were Mrs. Yani and Mr. Sugiyarto, both of whom used products from PT. Prosper Biotech Indonesia is currently participating in counseling for a new product, namely ValdisGROW bio-pests. The following are the results of interviews with the two farmers:

Product understanding.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"After the counseling earlier, I felt that I understood better and knew what ValdisGROW products are, because this kind of product is rarely found by us farmers in Bantul, usually we only know and understand pesticides with chemicals only. In this counseling, it was delivered using impressions so that we could read and see pictures of the product so that we have a picture."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said:

"I understand ValdisGROW products enough after counseling, but I am an old farmer so there are difficulties in understanding more deeply compared to young farmers."

Product detail understanding.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"During the counseling, the presentation was very detailed starting from the composition, size of the product, and how to use each product that was introduced, especially in the counseling, introducing ValdisGROW. So farmers like me are easier to understand the contents and details of products from ValdisGROW because this product is different from the products that usually circulate in the market."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said:

"For composition, I don't really understand because I use such terms, I only understand that it is an activated microbe, but I understand the size of the product and how to use it because the way it is used is easy to just dissolve and spray on land."

Understanding product benefits and impacts.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"With the explanation in the counseling, I personally became aware of the many benefits of ValdisGROW products, because pesticides themselves, it is usually only to kill pests. Unlike ValdisGROW which has long-term effects in its use."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak Subdistrict, Bantul Regency, Yogyakarta Special Region says:

"After participating in this counseling, I quite know the huge benefits for agricultural land and have an influence on pest expulsion at the time of the pest outbreak, but as far as I know because at first, I used chemical products, this chemical product was faster in eradicating hama, but after this counseling, I came to know that biological products require a process but the result is not just for the expulsion of pests."

Product purchase intention.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"After knowing and understanding the product from ValdisGROW I there was interested in buying the product and trying to use it in my personal rice field. In addition, I am also interested because of the testimonials on counseling by providing knowledge and understanding to farmers."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said:

"If I personally want to try this product with the understanding I have, because this product has good value in me."

Recommended products.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"I will try this product first, and after I know the results and how it works in my fields, then I recommend to my farmer friends. I would recommend this product because it has so many benefits that I know from the counseling."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak Subdistrict, Bantul Regency, Yogyakarta Special Region says:

"I want to recommend this bio-pest product but I don't really understand to explain it, at most I give testimonials to fellow farmers."

Featured products.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"After the counseling, this product can be said to be good and unique because I know about a product like this for the first time, and to overcome pests with many benefits, I said this product can be an option for young farmers like me."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said:

"If it's from myself for now, it's not the main choice because I'm changing from a chemical product to a biological product."

Product information.

According to Mrs. Yani, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said that:

"I enjoyed listening to the counseling and wanted to find out more about the ValdisGROW product because it's a good product and its long-term usefulness."

According to Mr. Sugiyarto, a farmer in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region said:

"If I just know enough about this bio-pest product because I don't understand its composition but I know and care more about its benefits."

3.6. Discussion

Based on the analysis of the results of processing the questionnaire data, the researcher obtained findings in the form of a partial significant effect of the product knowledge variable and the purchase intention variable on the ValdisGROW biopest product produced by PT Prosper Biotech Indonesia which was socialized to farmers in Caturharjo Village, Pandak District, Bantul Regency, Yogyakarta Special Region. Simultaneously the product knowledge variable with the dimensions of subjective knowledge, objective knowledge, and experiential knowledge has a significant effect on the purchase intention of ValdisGROW bio-pest products. This result supported by Singhal, Jena, & Tripathy (2019), which emphasized the role product knowledge in purchase intention.

From the results of this study it can be seen that experience knowledge greatly influences purchase intention, meaning that the counseling held by PT. Prosper Biotech Indonesia greatly influences consumer memory of ValdisGROW products, such as the benefits of the product and also the effects after using the product by looking at testimonials. This is something important because if farmers recognize their products, they will be interested in buying them. From the results of the interviews conducted by the authors, it was stated that experience knowledge in terms of how to use the product was very successful during counseling because they saw the instructor's experience in using ValdisGROW products. In line with Jun (2020) emphasized experience as one of the important factors in purchase intention.

The purchase intention variable on the referential interest dimension means that it is highly likely that farmers will recommend this product to other farmers, where farmers have farmer groups so that in one group they can see each other's testimonials in using this bio-pest product. Testimonials also trusted as one of the important factors in purchase intention in Tanprajna & Ellyawati (2020). The results of the interview also stated that the testimonials would be a means to recommend this ValdisGROW bio pest product. Based on these results, it means that farmers are at first glance convinced that ValdisGROW's biological anti-pest products are good for pest control, fertilizing plants, and for long-term effects, namely avoiding soil damage, so farmers have the desire to recommend ValdisGROW's biological anti-pest products to their fellow farmers.

The results of this study as a whole are that product knowledge with dimensions of subjective knowledge, objective knowledge, and experiential knowledge has a strong influence of 78.5% on the purchase intention of ValdisGROW biological anti-pest products in Caturharjo Village, Pandak District, Bantul Regency, Special Region of Yogyakarta. While 21.5% are interested in buying ValdisGROW biological pest products from PT. ValdisGROW Prosper Biotech Indonesia is influenced by other factors. Thus, the counseling activities carried out by PT. Prosper Biotech Indonesia to farmers who aim to provide successful product knowledge.

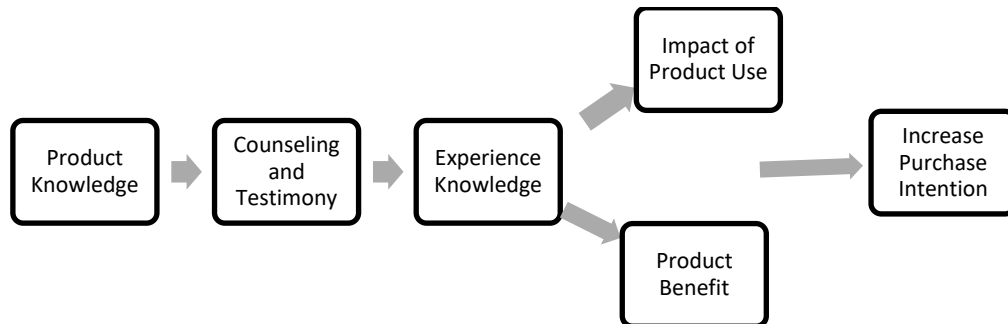


Figure 2. Research Findings
Source: Processing by Author

Product knowledge related to products that are routinely used by farmers provides a perspective regarding the role of experience knowledge in providing an understanding regarding the impact of product use and product benefits. Sharing experiences in the form of testimonials or sharing from fellow farmers regarding the quality of a product has an important role to play in buying interest in anti-pest products such as ValdisGROW. The results of this study can be an example for marketing similar products to provide optimal buying interest for buyers.

4. CONCLUSION

In the test the coefficient of determination (R^2) is 0.785 or 78.5%. So it can be concluded that product knowledge which has dimensions of subjective knowledge, objective knowledge, and experiential knowledge has a strong influence of 78.5% on the intention to buy ValdisGROW biological pest products in Caturharjo Village, Pandak District, Bantul Regency, Special Region of Yogyakarta. While 21.5% are interested in buying ValdisGROW pest biology products from PT. ValdisGROW Prosper Biotech Indonesia is influenced by other factors.

Knowledge of how to use the product can also be seen in the interviews because the two farmers mentioned that during the counseling, extension workers provided details on how to use the product using a display so that farmers could easily digest and remember the process. However, some farmers who participated in this counseling did not have information about ValdisGROW products, because this product is a new product and has a high degree of differentiation so the dissemination of information has not been widespread.

The overall results show that product knowledge has an influence on purchase intentions, especially on the experience knowledge dimension. This means that consumers have more memories in themselves about the benefits and effects of using ValdisGROW products that are displayed by extension agents and testimonials. While other dimensions also have a significant effect on purchase intention. Thus, the counseling activities carried out by PT. Prosper Biotech Indonesia to farmers who aim to provide knowledge about successful products.

The limitations of this study, the authors only examine farmers' product knowledge about a biological pest control product called ValdisGROW and how farmers' purchase intentions for these products after conducting counseling.

From the results of this study, we can recommend something for PT. Prosper Biotech Indonesia. The following are recommendations based on the results of the research that has been done. The author recommends PT. Prosper Biotech Indonesia, especially in the field of marketing, so that there is more friendship in conducting counseling that conveys material about these products because these extension workers will grow the product knowledge possessed by prospective consumers about their interest in buying products produced by the company.

Implications for PT. Prosper Biotech Indonesia, namely delivering products to farmers over 40 years of age, needs to make grammar easier and attract the attention of young farmers to use these products to create testimonials for other farmers. After that, provide more demonstration plots for

farmers to prove how ValdisGROW bio-pest products work on plants so that farmers know the timeframe and results of using the product.

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