

# THE EFFECT OF PERCEIVED PRODUCT-SIMILARITY TOWARDS DECISION MAKING DIFFICULTY WITH CONSUMER INVOLVEMENT AS MODERATION: A STUDY TOWARDS COFFEE CONSUMERS IN BANJARNEGARA

Kuswoyo <sup>1\*</sup>, Suliyanto<sup>2</sup>, Refius Pradipta Setyanto<sup>3</sup>

<sup>123</sup>Faculty of Economy and Business, Jenderal Sudirman University Purwokerto, Indonesia

**Abstract.** The purpose of this study is to analyze the results of thinking on the difficulty of making decisions moderated by consumer involvement. The Banjarnegara coffee brand is in a broad category and more and more similar products, some of which have high similarities, making it increasingly difficult for consumers to distinguish between types of coffee brands. In addition, increasing brand approval needs to increase consumer decisions to buy what is needed. One factor that also influences decision making is consumers who involve consumers. This type of research is quantitative research, the sample of this study was coffee connoisseurs directly from the Banjarnegara region, Purbalingga and Banyumas who collected 61 people and were consumers who used coffee from Banjarnegara at least twice a week. Hypothesis testing is done using moderation regression analysis. The test results show that the difficulty of making decisions is influenced by perceptions of significant products and consumer participation moderates the causality relationship.

**Keywords:** *Perceived Product-Similarity, Decision difficulty, Involvement, coffee, consumer*

## 1. INTRODUCTION

For the past three decades, coffee produced by small farmers continually increased in export, with development at 4% each year (Akiyama & Larson, 2004:196). Currently, almost 92% of coffee production in Indonesia are at the hands of the small farmers and cooperatives (Gumulya & Helmi, 2017:155).

Banjarnegara is an area in Central Java known for its fertile lands fit for agriculture. Such is the case for coffee farming in Banjarnegara. Coffee in Banjarnegara began to develop and become known nationally. The total land area (PR) : 1.890 Ha Robusta coffee production : 865 Ton, Productivity : 755 Kg/ Ha Number of Farmers : 11.757 aside from that, the data for Arabica coffee are total land area (PR) : 553 Ha Production : 201 Ton Productivity : 805 Kg/ Ha Number of farmers: 1.494 (KK) (data sourced from Banjarnegara Department of Agriculture and Plantation, 2014)

Each village developed a coffee type according to the height of the land, from 2010 until 2019 coffee plants are being developed by Banjarnegara's local government, PT Indonesia Power Banjarnegara and the Purwokerto chain of Bank Indonesia. Coffee production that is not dominated by any one of these agents are spread across many small farmers, implying a variety of coffee products, which also happens at Banjarnegara. The harvesting steps for coffee has been sown by coffee farmers in Banjarnegara, beginning with Arabica and Robusta coffee. Afterwards, Banjarnegara coffee brands became known by the names

---

<sup>1</sup>\*Email : woyo.progres@gmail.com

Ratamba, Leksana, Kubang, Balun, Kalibening and Babadan coffee, which are named after the villages where the coffee was produced, and names the small farmers branded their coffee with.

Coffee brands in Banjarnegara are in a large category with increasing numbers of similar products, some more similar than others, making it difficult for consumers to differentiate between brands, which could create many errors and misinformed purchases. Aside from that, the increasing levels of product similarity might affect the result of a consumer's decision to buy what is needed.

Consumers decide based on the availability of choice, price, and benefits of the product and services constantly (Bettman, et.al., 1998:50). Consumers are often times faced with many alternatives that constantly change and develop as technology develops and pressure from competition exists. There are many studies and theories that were developed regarding the process of consumer decision making. Two aspects that are heavily studied in consumer decision making are: information acquisition and information integration.

One factor that also affects consumer decision making is involvement. Laurent and Kapferer (1985:42) explains that in theory, involvement is considered as an individual differing variable. The aforementioned variable can be a casual variable or a motivating variable with a consequence on consumer behavior. Therefore, the consumer's involvement level affects consumer decision making.

Based on the background and formulation of the problem, the writer has several purposes that are intended to be fulfilled with this study as follows:

1. To analyze how perceived product similarity affects decision difficulty
2. To analyze the effect of consumer involvement on the relationship between perceived product similarity and decision difficulty with coffee

## **2. LITERATURE REVIEW AND HYPOSTHESIS**

### **2.1 *Perceived Product-Similarity (PPS)***

Walsh and Mitchel defines *perceived product similarity* (PPS) as a consumer's decision to view products from the same category as similar. Walsh *et al.* (2010:147) "*the consumer's self-rated propensity to see products within the same category as similar*". According to Walsh and Mitchel there are four factors that affect a consumer's tendency to view products as similar, which are: 1. the pioneer manufacturer's brand was copied by a retailer brand, 2. the pioneer manufacturer's brand was copied by another manufacturer brand, 3. a pioneer retailer's brand was copied by a manufacturer brand, 4. a pioneer retailer's brand was copied by another retailer brand (Walsh *et al.*, 2010:147).

### **2.2 *Decision difficulty***

Consumers constantly make decisions based on the availability of choice, price, and benefits of the product and services (Payne *et al.*, 1991:50). The writers split decision making into several categories. Lych and Srull (1982) categorizes decision making into: *stimulus-based*, *memory based*, and *mixed*. *Stimulus based decision* is a decision making where all relevant information necessary is external from men, for example information in a catalogue, food menu. If a decision is made based only from information stored in someone's memory, then it is a *memory based decision*. And, *mixed decision* uses information provided externally or from memory.

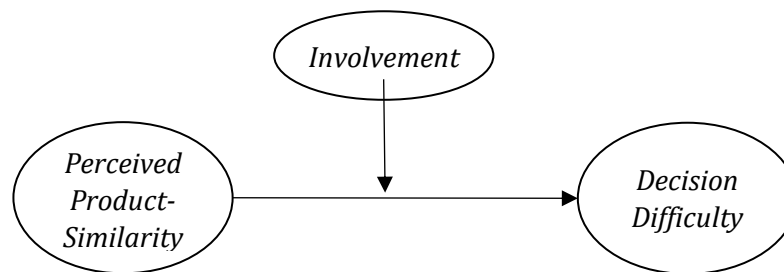
Decision difficulty comes from many factors related to the decision environment and the individual's decision maker. To streamline our discussion on how consumer empowerment affects decision difficulty, we focus on three main sources of decision difficulty: task complexity, tradeoff difficulty, and preference uncertainty (Anderson, 2003 dan Payne *et al.*, 1991).

### **2.3 *Involvement***

Laurent and Kapferer (1985:42) explains that in theory, involvement is considered as an individual difference variable. The aforementioned variable can be a casual variable or a motivating variable with a consequence on consumer behavior. Therefore, the consumer's involvement level affects consumer decision making. "*Involvement is considered as an individual difference variable. It is a casual or*

*motivating variable with a number of consequences on the consumer purchase and behavior. Thus, depending on their level of involvement, consumer will differ greatly in the extensiveness of their purchase decision process.*" Laurent and Kapferer (1985:42).

In *high involvement*, consumers feel that the product in question is essential to fulfil their personal goals. Consumers will try to find information regarding the product they will purchase. In low involvement, a consumer does not have a high personal relationship with a product so much so they do not expend more effort and find information regarding the product in question (Siahaan, 2011). Chin (2002) in Lin and Chen (2006) puts forward that in *high involvement*, consumers will find more information regarding a certain product, including making evaluations about a product and a higher purchase intention for a product that originates from a country with a good image compared to other countries.



**Image 1. Study Model Design**

#### Hypothesis Development

H1. Does *perceived product similarity* affect *decision difficulty* in a positive manner.

H2. Does consumer involvement affect the relationship between *perceived product similarity* and *decision difficulty* with coffee

### 3. STUDY METHOD

The type of research used in this study is the *explanatory research*. According to Williams (2007) *explanatory research* is a research intended to explain the causal relationship between research variables and test the formulated hypotheses. The population in this study are 65 coffee connoisseurs from the Banjarnegara area and Banyumas who consume coffee at least twice a week. The sampling method used is the *purposive sampling*, which is choosing based on the availability of elements planned beforehand and with certain conditions set by the writers in consideration. The number of samples in this study are determined using the Taro Yamme formula (Akdon and Riduan, 2005). The number of samples in this study are 61 respondents. The data of this study is collected using the *Perceived Product-Similarity* (PPS), *Decision difficulty* and *Involvement* questionnaires on the Coffee in Banjarnegara case. The collected data is analyzed using the moderated interaction regression model with assistance from the SPSS v.19 Software.

### 4. RESULTS AND DISCUSSION

The demographic of respondents are described in Table 1. In this study, the majority of coffee connoisseurs are male, which are 82% of respondents. The age range of respondents are mostly younger than 36 years, with 22 respondents aged below 25 years. The respondents of this study encompasses a variety of professions.

Based on the type of coffee consumed, there are more robusta and arabica consumers compared to exclusively robusta or arabica consumers. 80% of respondents consume coffee more than twice a week and 72,1% of respondents consume more than 3 brands of coffee. The type of coffee serving that the respondents chose and are as a result most favorable are ground coffee (22 respondents) and filtered coffee (24 respondents). Whereas regarding the habit of drinking coffee, more than half of the entire number of respondents drink at a coffee shop, while the remaining 26 respondents drink at home and 2 respondents drink at home and also at a coffee shop.

Table 1. Respondent Demographics

		<b>Frequency</b>	<b>Percent</b>
Gender	Male	50	82,0
	Female	11	18,0
Age	< 25 years	22	36,1
	26 - 35 years	26	42,6
	36 - 55 years	11	18,0
	> 55 years	2	3,3
Type of Coffee Consumed	Arabica	26	42,6
	Robusta	7	11,5
	All	28	45,9
Profession	Prefer not to say	2	3,3
	Student	4	6,6
	TNI/POLRI	2	3,3
	Consultant	5	8,2
	University student	8	13,1
	ASN	3	4,9
	Entrepreneur	9	14,8
	Lecturer	1	1,6
	PT employee	7	11,5
	Other	20	32,8
Consumption in a Week	Once	6	9,8
	Twice	6	9,8
	> Twice	49	80,3
Number of Coffee Brands Consumed	2 Merk	11	18,0
	3 Merk	6	9,8
	>3 Merek	44	72,1
Type of Coffee Serving	Ground Coffee	22	36,1
	Milk Coffee	14	23,0
	Filtered Coffee	24	39,3
	Espresso	1	1,6
Coffee Drinking Habit	Coffee shop	33	54,1
	Home	26	42,6
	Coffee shop and Home	2	3,3

The data analysis results (Table 2) shows that consumer involvement, perceived product similarity and interaction between the effect of consumer involvement with perceived product similarity are able to determine the change in decision difficulty as much as 72,1%, while the remaining 27,9% is affected by other variables that are not researched in this study. The effect of these three variables simultaneously on decision difficulty are significant, as shown by the significant F statistic value ( $P < 0,05$ ).

Table 2. Data Analysis Results

Variable	Min.	Max.	Mean	St. Dev	B	Std. Error	t	Sig.
(Constant)					-20,458	8,496	-2,408	,019
Consumer Involvement	52	106	78,03	12,93	,383	,122	3,149	,003
Perceived Product Similarity	16	49	34,61	7,56	,687	,224	3,064	,003
Moderator					-,006	,003	-2,008	,049
Decision Difficulty	7	25	16,69	4,33				

R Square = 0,721  
 F statistics = 49,211  
 Sig. = 0,000

Perceived product similarity has a significant effect on decision difficulty in choosing certain products of coffee ( $P < 0,05$ ). Respondents feel that coffee products in the market have many similarities and that it is difficult to differentiate from the type of coffee to its producer. Respondents tend to use price levels to determine the difference between one coffee product with another, where the more expensive the coffee, the better quality it is.

Walsh *et al.* (2009) mentions that the tendency to perceive a product to be similar can originate from four scenarios: (1) the pioneer manufacturer's brand was copied by a retailer brand, (2) the pioneer manufacturer's brand was copied by another manufacturer brand, (3) a pioneer retailer's brand was copied by a manufacturer brand, (4) a pioneer retailer's brand was copied by another retailer brand. Consumers become confused and find it difficult to differentiate between one brand of coffee with another. The difficulty that consumers face in differentiating between brands can be a result from their cognitive inability to effectively process any information obtained during the process of decision making (Walsh *et al.*, 2010).

Walsh *et al.* (2007) states, the similarity between difference products will make it difficult for consumers to detect a difference between brands, and they will find little reason to make another brand as an alternative. According to Baker *et al.* (2002), an introduction to new brands will have a significant effect on a similarity rating made by consumers for products that are already in the market, so it will ease consumers in deciding which product to choose.

Aside from that, it is also known that consumer involvement that interacts with perceived product similarity has a significant effect on decision difficulty ( $P < 0,05$ ). This proves that consumer involvement moderates the effect of perceived product similarity on decision making. Respondents feel a need for coffee products and understand their features to evaluate the coffee brands in question because coffee products can define and express the respondents' identity. Respondents usually buy the same brand from the coffee product class, so if they receive information that is the opposite with the consumer's choice in the coffee product class, then the respondent will hold on to their decision. As a result, the coffee product is important to a respondent because it could help them achieve a life they desire. Respondents feel that they could make plenty of

connections or relations between experiences in their lives with this coffee product. The use of this coffee product helps respondents act how they wish to act. This shows that the larger the consumer involvement, then the more difficult it is to make a decision in purchasing a coffee product.

Other consumers' involvement, that shows a feeling of involvement or personal interests that the consumers have in a message or a persuasive act (Karmarkar and Tormala, 2010) also play a part in determining the a consumer makes a decision in purchasing. If a consumer has a strong argument, a larger involvement has to grow a larger persuasion because of the increased cognitive elaboration. However, if the message contains a weak argument, then the larger involvement must decrease, erase or even reverse this effect.

The decision making difficulty in choosing coffee products caused by product similarity between one product with another, in addition to consumer involvement, can be resolved with one approach. An approach to the consumer's characteristic assumes that consumers follow the nature of certain decision making to handle their purchases. Several characteristic features that have been identified are, for example, awareness of quality or loyalty to a brand and store (Bauer *et al.*,2006).

## 5. CONCLUSION

Based on the results of this study, it is known that the more similar a coffee brand, it will increase decision difficulty in choosing a certain product. Consumer involvement on coffee products similarity that exists will make the process of decision making difficult. This proves that as a moderating variable, consumer involvement heavily affects how consumers decide on which products have similarities.

## REFERENCES

- Akdon and Riduwan. (2005). *Rumus dan Data dalam Aplikasi Statistik*, Bandung: Alfabeta.
- Akiyama, T. & D. F. Larson. (2004). *Development and Agricultural Growth in Indonesia, The Philippines and Thailand*. World Bank Publications, The World Bank.
- Anderson, J. E. (2003). *Public policymaking: An introduction*. Boston: Houghton Mifflin Company, pp. 1 – 34.
- Baker, T. L., Hunt, J. B., & Scribner, L. L. (2002). The Effect of Introducing a New Brand on Consumer Perceptions of Current Brand Similarity: The Roles of Product Knowledge and Involvement. *Journal of Marketing Theory and Practice*, 10(4), 45–57.
- Bauer, H. H., Sauer, N. E., & Becker, C. (2006). Investigating the relationship between product involvement and consumer decision-making styles. *Journal of Consumer Behaviour*, 5(4), 342–354.
- Bettman, J. R., Mary Frances Luce, and John W. Payne. (1998). Constructive Consumer Choice Processes. *Journal of Consumer Research*, 25(3), 187-217.
- Gumulya, D., Helmi, I.S., 2017. Kajian Budaya Minum Kopi Indonesia. *Jurnal Universitas Pelita Harapan Jakarta*.
- Karmarkar, U. R., & Tormala, Z. L. (2010). Believe Me, I Have No Idea What I'm Talking About: The Effects of Source Certainty on Consumer Involvement and Persuasion. *Journal of Consumer Research*, 36(6), 1033–1049.
- Laurent, G., & Kapferer, J.-N. (1985). Measuring Consumer Involvement Profiles. *Journal of Marketing Research*, 22(1), 41.

- Lin, L., & Chen, C. (2006). The influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions: an empirical study of insurance and catering services in Taiwan. *Journal of Consumer Marketing*, 23(5), 248–265.
- Lynch, J. G., & Srull, T. K. (1982). Memory and attentional factors in consumer choice: Concepts and research methods. *Journal of Consumer Research*, 9(1), 18-37.
- Payne, J. W., Bettman, J. R., Coupey, E., & Johnson, E. J. (1992). A constructive process view of decision making: Multiple strategies in judgment and choice. *Acta Psychologica*, 80(1-3), 107–141
- Walsh, G., T. Henning-Thurau & V-W. Mitchell. (2007). Consumer confusion proneness: Scale development, validation, and application. *Journal of Marketing Management*, 23, 697-721.
- Walsh, G., V.-W. Mitchell, T. Kilian, and L. Miller. (2009). Measuring consumer vulnerability to perceived product-similarity problems and its consequences. *Journal of Marketing Management*, 00(00), 1–17.
- Walsh, G., V. W. Mitchell, T. Kilian, and L. Miller. (2010). Measuring consumer vulnerability to perceived product-similarity problems and its consequences. *Journal of Marketing Management*, 26(1-2), 146–162.
- Williams, C. (2007) Research Methods. *Journal of Business & Economic Research*, 5, 65-72.