The Antecedents of Millennial Customers Intention to Purchase Organic Foods: An Application of Theory of Planned Behavior

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Abstract. The lack of knowledge and understanding of organic foods has resulted in very few Indonesians who buy the products, even though the survey shows a high potential market for Indonesian organic food. Generation Y or Millennial is a cohort that has a high concern for health and the environment. This study aims to analyze the factors which influence Millennials' intention to buy organic food products by using the Theory of Planned Behavior (TPB) as the framework. The data were collected using an online survey from 194 Millennials. The data was analyzed using factor analysis with Structural Equation Modeling (SEM). The results show that attitude was significantly and positively affect Millennials' intention to buy organic foods. The higher the environmental concern, knowledge of organic foods, and perceived affordability, the higher the attitude towards organic food products. Furthermore, neither awareness nor knowledge of organic foods moderated the relationship between TPB's three antecedents on intention to purchase.

Keywords: Organic foods, Millennial, Purchase intention, Theory of planned behavior, Perception

1 Introduction

The number of organic food producers in Indonesia increased by about 56 percent from 2014 (Indonesian Organic Agriculture Survey, 2015). Previous study stated that at present we are in the middle of society organic generation 3.0 where organic is not only the needs of farmers, but also consumers [1]. Worldwide, the growth in the organic market is around 15-20 percent. The increase in consumption of organic food products is not only in the generation in their 50s but also young people or Millennials [2]. Previous studies show that Generation Y is a generation that cares about green consumption [3]–[5], namely consumption behavior based on awareness of environmental problems and human health, and about 78% are even eager to pay more for these green products [6]. It can be seen how Millennial consumers tend to consume food products that are not only healthy for them but also friendly for the environment.

In Indonesia, the level of public health consciousness is still low, reaching only around 20 percent (Health Research and Development Agency, 2018). Meanwhile, from the aspect of environmental concerns which is also the character of Generation Y, around 72 percent of Indonesian people care less about the environment [7]. According to Kushwah et al. [8], health consciousness and environmental concern are strong motives for buyers to acquire organic

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foods. Affordability and availability of organic food products are also factors that can affect the level of consumption of organic products. According to Magnusson et al. [9] due to excessive prices, buying organic food is more expensive when compared to traditional foods. Meanwhile, in terms of availability, Boccaletti and Nardella [10] say that access to organic food products is often felt to be more difficult due to the lack of availability in stores. High prices and low availability are known to be factors inhibiting consumers in making organic food purchasing decisions [11].

Previous studies had used TPB [12] as a grand theory to explain the factors that influence consumers in terms of purchase intentions for organic food products. Setyawan et al. [13] stated that the theory of planned behavior can be used as a strong main theoretical framework in analyzing the intention to buy green / environmentally friendly products among young consumers. Caliskan et al. [14] also stated that the theory of planned behavior applies to the behavior of consuming organic products. The theory of planned behavior framework proved appropriate in estimating the aspiration to buy organic food in various cultures, such as in Britain, Italy, and Finland [15] as well as in India [16].

The novelty element in this study lies in how awareness and knowledge of organic foods act as attitude predictors and moderator for the link between attitude, subjective norms, and perceived behavioral control on intention to purchase organic food. Besides that, the function of perceived availability and affordabilty in influencing both awareness and perceived behavioral control is an interesting thing to study as well. The research focused on how those factors affect Millennial's purchase intention of organic foods.

1.1 Theory of Planned Behavior

According to TPB, the behavior performace is a combined purpose of intention and perceived behavioral control. In this theory, Ajzen [12] stated that attitude, subjective norms, and perceived behavioral control are predictors with high accuracy towards the purpose to commit sundry types of behavior.

1.1.1 Attitude

Attitude is an evaluative effect of individual positive and negative feelings towards a product [17]. There is a positive link between attitude and food purchase intentions [18]. Attitude has the strongest direct influence on consume intention of organic food [14].

H1: Attitude has a significant positive impact on the intention to buy organic food.

1.1.2 Subjective Norms

Subjective norms are interpreted as the influence of reference groups or individuals in purchasing products [17]. Subjective norms significantly affect the buying intention of organic food [19] [20].

H2: Subjective norms have a positive impact on purchase intentions of organic food.

1.1.3 Perceived Behavioral Control

Perceived behavioral control is the ease or difficulty felt by consumers in purchasing products (Ajzen, 1991). Organic food buying intention was significantly predicted by perceived behavioral control [20] [21].

H3: Perceived behavioral control has a positive impact on purchase intentions of organic food.

1.1.4 Purchase Intention

According to Spears and Singh [22], purchase intention is a plan of individuals who consciously try to buy a brand or product. Intention to buy a certain brand can change influenced by both price and individual perceptions of standard and worth (Ghosh, 1990). Gogoi (2013) said that buyers are influenced by inner and outer stimulations during the purchasing process.

1.2 Awareness

According to Aziz and Chok (2013), awareness can be defined as understanding and information about certain things. Consumer awareness of a product can affect consumer attitudes toward the product [24]. Awareness acts as a significant moderator in influencing the connection between attitude, subjective norms, and perceived behavioral control towards the organic food purchase intention [25].

H4: Awareness of consumers positively affects their attitude towards organic food.
H5, 6, 7: Awareness significantly and positively moderated the connection between attitude, subjective norms, and perceived behavioral control on organic food buying intention.

1.3 Health Consciousness

Health consciousness is an awareness of health that is integrated into daily activities by individuals [26]. The higher consumers' awareness of health, the more positive their attitude towards purpose of acquiring foods (Paul & Rana, 2012). Health consciousness had a noteworthy effect on consumer attitudes towards organic food [27].

H8: Health consciousness of consumers positively affects their attitude towards organic food.

1.4 Environmental Concern

According to Dunlap and Jones [28], environmental concern is an individual's concern for the environment by showing a willingness to contribute. Environmental concern is the main motivator behind the intention to acquire organic food products (Kushwah et al., 2019). Environmental concern is an indicator of individual attitudes towards purchasing organic food products [29].

H9: Environmental concern of consumers positively affects their attitude towards organic food.

1.5 Perceived Availability

Perceived availability is the extent to which individuals feel that products are easy to obtain in the market [27]. Unavailability can be a major obstacle in purchasing organic food [10]. Limited availability can negatively affect attitude of customers and buying intentions of organic food [30]. Perceived availability can be a potential barrier to individual control (perceived behavioral control) [31].

H10: Perceived availability of consumers positively affects their attitude towards organic food.
H11: Perceived availability in consumers positively affects their perceived behavioral control towards purchasing organic food.

1.6 Perceived Affordability

According to Singh and Verma [27], perceived affordability can be interpreted as the extent to which individuals feel that a product is affordable, that is, it is priced reasonably. Consumer attitudes towards organic food can be influenced by the price of the product [27]. Price can be an indicator of perceived behavioral control [31]. Low affordability makes consumers may feel less control over the purchase of food products [32].

H12: Perceived affordability of consumers positively affects their attitude towards organic food.
H13: Perceived affordability of consumers positively affects their perceived behavioral control towards purchasing organic food.

1.7 Knowledge of Organic Foods

Knowledge of organic foods can be interpreted as how far individuals know about organic food products [27]. Knowledge of organic food is a significant and positive predictor of consumer attitudes formed on organic food products [27]. Knowledge of organic foods significantly moderate the link between subjective norms and attitudes with buying intention but did not become moderator of the association between perceived behavioral control with buying intentions [33].

H14: Knowledge of organic foods positively affects their attitude towards organic food.
H15, 16, 17: Knowledge or Organic Foods significantly and positively moderates the connection linking attitude, subjective norms, and perceived behavioral control on organic food buying intention.

The hypotheses of this research are summarized in Figure 1.

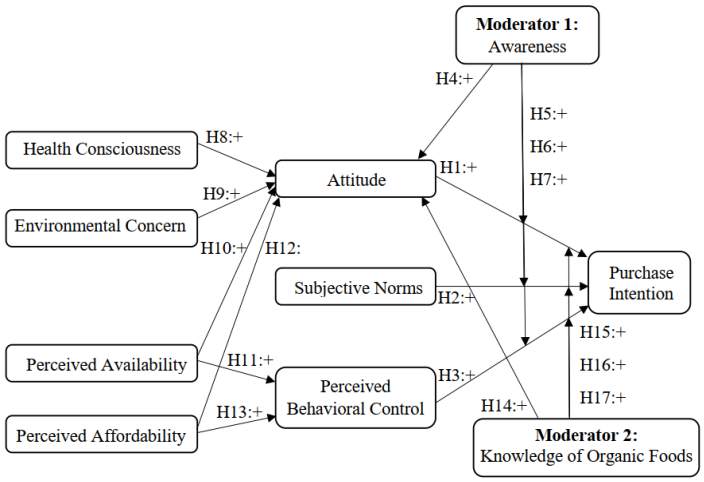

Fig 1. Model of Research

2 Method

In this quantitative research, primary data was obtained through an electronic survey using Google Forms, which will be distributed via social platform such as WhatsApp, LINE, Instagram, Facebook, etc. The itemized rating scale applied in this testing was the scale of 5-point Likert, 1 (strongly disagree) to 5 (strongly agree) [34].

Respondents in this study were Millennials in Indonesia, aged 20-40 years, who have never bought organic food products or are not aware of the types of food products they purchased in the last three months. Data was collected from 194 respondents who passed the screening question of Millennial age range and organic food purchase. The data in this research was processed utilizing partial least square structural equation modeling (PLS-SEM) to test the hypotheses.

The respondents' demographic profile is presented in Table 1.

Table 1. Respondents' Demographic Profile

Variable		Frequency	Percentage
Gender			
	Male	79	40,72%
	Female	115	59,28%
Age			
	20 – 25	121	62,37%
	26 – 30	38	19,59%
	31 – 35	20	10,31%
	36 – 40	15	7,73%
Occupation			
	Student	51	26,29%
	Government employee	2	1,03%
	State-owned enterprises employee	8	4,12%
	Private employee	108	55,67%
	Entrepreneur	15	7,73%
	Housewife	5	2,58%
	Others	5	2,58%
Average monthly expenses (including installments and other monthly bills) in the past year			
	<= Rp. 5.000.000	98	50,52%
	Rp. 5.000.001 – Rp. 10.000.000	60	30,93%
	Rp. 10.000.001 – Rp. 15.000.000	23	11,86%
	Rp. 15.000.001 – Rp. 20.000.000	8	4,12%
	> Rp. 20.000.000	5	2,58%
Average monthly expenses to purchase only food products / ingredients in the past year			

Variable		Frequency	Percentage
	<= Rp. 1.000.000	61	31,44%
	Rp. 1.000.001 – Rp. 3.000.000	92	47,42%
	Rp. 3.000.001 – Rp. 5.000.000	29	14,95%
	Rp. 5.000.001 – Rp. 7.000.000	9	4,64%
	> Rp. 7.000.000	3	1,55%
Education			
	High school	40	20,62%
	Diploma	19	9,79%
	Bachelor	126	64,95%
	Master	8	4,12%
	Others	1	0,52%
Status			
	Married	39	20,10%
	Not yet married	155	79,90%
Children in household (n = 39)			
	0	12	30,77%
	1	13	33,33%
	2	12	30,77%
	> 2	2	5,13%

3 Result and Discussion

3.1 Result

The analysis was done to identify the significance of the connection linking the independent variable and the dependent variable, by looking at the P Values value on SmartPLS for value of 0.05 or lower. In addition to the significance test, a mediation test was also conducted on the TPB's three antecedents to see if they mediate the relationship of other additional variables with organic food purchase intention.

Following are the results of the main test data testing, which includes validation tests, reliability tests, and significance tests using the SmartPLS software:

Table 2. Validity and Reliability Result

Variable		Indicator	Standardized Loading Factor	Composite Reliability	Average Variance Extracted (AVE)
Awareness	AW1	I hear a lot about organic farming methods.	0,527*	0,728	0,498
	AW2	Many of the food products I realized could be produced using organic farming methods.	0,985		
	AW3	I know which food products on the market have been produced using organic farming methods.	0,496*		

Variable		Indicator	Standardized Loading Factor	Composite Reliability	Average Variance Extracted (AVE)
Knowledge of Organic Foods	KOF1	I know which food is organic or non-organic.	0,574*	0,733	0,591
	KOF2	I know the method of producing organic foods.	(item deleted)		
	KOF3	I know the consumption of organic food is safer.	0,923		
Health Consciousness	HC1	I meticulously determine food to secure nutritious health.	0,885	0,862	0,677
	HC2	I am a health alert buyer.	0,860		
	HC3	I frequently ruminate about complication associated to health.	0,712		
Environmental Concern	EC1	The natural balance is very fragile and can easily be disturbed.	0,836	0,840	0,572
	EC2	Humans overexploit the nature.	0,762		
	EC3	Humans should preserve a stability with nature in order to live.	0,831		
	EC4	Human interference with Mother Earth can frequently have devastating outcomes.	0,564*		
Perceived Availability	PAV1	Large selection of organic fruit and vegetable products available at a local grocery store.	0,822	0,820	0,607
	PAV2	A large selection of organic rice products is available at the grocery store near me.	0,863		
	PAV3	I can buy organic food online.	0,634*		
Perceived Affordability	PAF1	Organic food price is appropriate when compared to the benefits.	0,892	0,904	0,758
	PAF2	Organic food price is in line with my expectations.	0,830		
	PAF3	Organic food price is worth the benefits when compared to non-organic food products.	0,888		
Attitude	AT1	I trust organic food is very beneficial to meet nutritional demands.	0,846	0,874	0,699
	AT2	I trust organic food has better quality than conventional food.	0,820		
	AT3	I believe consuming organic food is a sensible action.	0,841		
Subjective Norms	SN1	My family and close friends consume organic food.	0,812	0,897	0,745
	SN2	My family and close friends wish me to buy more organic food for them.	0,892		
	SN3	A lot of people convinced me that I must buy organic products for a healthier life.	0,882		
Perceived Behavioral Control	PBC1	If I want to, I could purchase organic food rather than conventional food.	0,786	0,818	0,601
	PBC2	In my opinion, buying organic food is easy.	0,844		
	PBC3	I'm the one who decide whether to buy organic food or not.	0,688		
Purchase Intention	PI1	I desire to buy organic food products if the product is obtainable.	0,868	0,926	0,758
	PI2	I envisage to buy organic food products if the product are	0,873		

Variable		Indicator	Standardized Loading Factor	Composite Reliability	Average Variance Extracted (AVE)
		obtainable.			
	PI3	I scheme to consume organic food products if the product can be purchased.	0,903		
	PI4	To the max I consume organic food products if the product can be purchased.	0,836		

The KOF2 indicators were eliminated because they had low Standardized Loading Factor values, weak both in construct and content validity. With the elimination of the variable, the value of Average Variance Extracted (AVE) from knowledge of organic foods (KOF) which was previously 0.447 becomes 0.591. No indicators were eliminated in awareness (AW) variable because each item had both strong construct and content validity.

Table 3. Discriminant Validity

Fornell-Larcker Criterion

	Awareness (AW)	Health Consciousness (HC)	Environmental Concern (EC)	Knowledge of Organic Foods (KOF)	Perceived Availability (PAV)	Perceived Affordability (PAF)	Attitude (AT)	Subjective Norms (SN)	Perceived Behavioral Control (PBC)	Purchase Intention (PI)
Awareness (AW)	0.706									
Health Consciousness (HC)	0.296	0.823								
Environmental Concern (EC)	0.125	0.015	0.756							
Knowledge of Organic Foods (KOF)	0.218	0.138	0.464	0.769						
Perceived Availability (PAV)	0.405	0.252	0.176	0.232	0.779					
Perceived Affordability (PAF)	0.296	0.225	0.287	0.299	0.373	0.870				
Attitude (AT)	0.237	0.182	0.395	0.431	0.230	0.465	0.836			
Subjective Norms (SN)	0.221	0.258	0.073	0.267	0.378	0.351	0.350	0.863		
Perceived Behavioral Control (PBC)	0.377	0.208	0.300	0.291	0.560	0.452	0.511	0.384	0.775	
Purchase Intention (PI)	0.212	0.288	0.251	0.247	0.221	0.300	0.510	0.317	0.418	0.871

Furthermore, in terms of Discriminant Validity, which is the square root of the AVE, all variables have shown values above 0.7 so that the sample data can be accepted. In Table 3, for each latent variable, the variance that is divided into the indicator block has a greater value than the variance of the other latent variables. In the Standardized Loading Factor section, all indicators and variables have values above 0.7, except for some variables such as AW1, AW3, KOF1, EC4, PAV3, and PBC3. According to Moores and Chang (2006), Standardized Loading Factor value of 0.6 or less is still acceptable if the convergent validity of the model is good. In this case, because the Discriminant Validity values for all variables have met the criteria, the Standardized Loading Factor for each indicator can be accepted and it can be concluded that all these variables are valid. In Table 2, Composite Reliability was already above 0.7 for all variables, so each variable is reliable.

Table 4. Summary of Causal Relationship Analysis

Hypotesis	Path	Original Sample (O)	T Statistics	P Values	Result
H1	Attitude -> Purcase Intention	0,356	4,509	0,000	Accepted
H2	Subjective Norms -> Purcase Intention	0,142	1,736	0,083	Rejected
H3	Perceived Behavioral Control -> Purcase Intention	0,143	1,696	0,091	Rejected
H4	Awareness -> Attitude	0,056	0,571	0,568	Rejected
H5	(Awarness moderation) Attitude -> Purchase Intention	0.192	1.819	0.069	Rejected
H6	(Awarness moderation)	0,028	0,226	0,821	Rejected

	Subjective Norms -> Purchase Intention				
H7	(Awareness moderation) Perceived Behavioral Control -> Purchase Intention	-0.009	0.073	0.942	Rejected
H8	Healt Conciousness -> Attitude	0,064	0,950	0,343	Rejected
H9	Environmental Concern -> Attitude	0,193	2,490	0,013	Accepted
H10	Perceived Availability -> Attitude	-0,014	0,202	0,840	Rejected
H11	Perceived Availability -> Perceived Behavioral Control	0,454	6,351	0,000	Accepted
H12	Perceived Affordability -> Attitude	0,315	4,130	0,000	Accepted
H13	Perceived Affordability -> Perceived Behavioral Control	0,282	4,240	0,000	Accepted
H14	Knowladge of Organic Foods -> Attitude	0,230	2,750	0,006	Accepted
H15	(Knowladge of Organic Foods moderation) Attitude -> Purchase Intention	-0.135	1.881	0.061	Rejected
H16	(Knowladge of Organic Foods moderation) Attitude -> Purchase Intention	0.045	0.477	0.634	Rejected
H17	(Knowladge of Organic Foods moderation) Attitude -> Purchase Intention	-0.068	0.926	0.355	Rejected

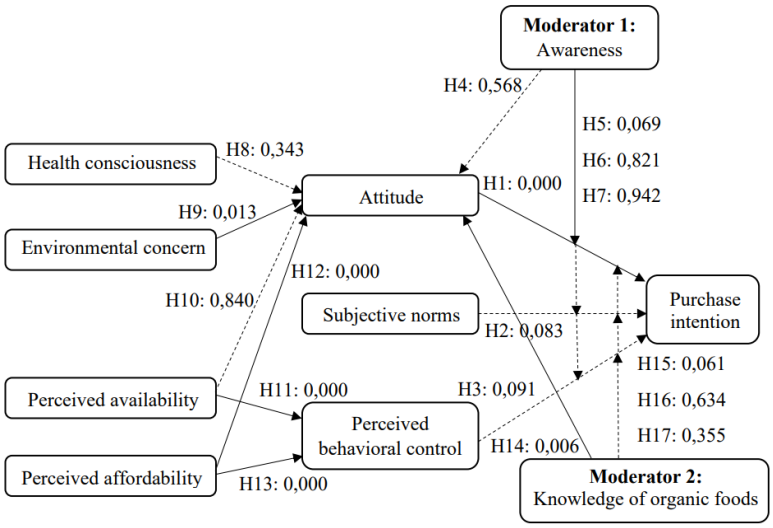

Fig 2. Causal Relationship Analysis Result on Research Model

Based on Table 4, it is found that there are six accepted hypotheses. The six hypotheses have P Values that were smaller than 0.05, so they had a significant effect on the path. Figure 2 show the accepted hypothesis was connected with a continuous line and the rejected hypothesis with a dotted line.

Table 5. Summary of Mediation Analysis

Path	Original Sample (O)	T Statistics	P Values	Result
Awareness → Attitude → Purchase Intention	0,020	0,564	0,573	Not Significant
Health Consciousness → Attitude → Purchase Intention	0,023	0,893	0,372	Not Significant
Environmental Concern → Attitude → Purchase Intention	0,069	2,141	0,033	Significant
Knowledge of Organic Foods → Attitude → Purchase Intention	0,082	2,273	0,023	Significant
Perceived Availability → Attitude → Purchase Intention	-0,005	0,202	0,840	Not Significant
Perceived Affordability → Attitude → Purchase Intention	0,112	2,987	0,003	Significant
Perceived Availability → Attitude → Perceived Behavioral Control	0,065	1,646	0,100	Not Significant
Perceived Affordability → Attitude → Perceived Behavioral Control	0,040	1,479	0,140	Not Significant

3.2 Discussion

Based on the analysis of the hypothesis, it was shown that the heartening belief of consumers towards organic food can have a good evaluative effect, thereby increasing the intention to purchase the product. Also, the more a person has a good concern for the environment, the better the attitude formed. Furthermore, the more consumers have in-depth knowledge of organic food, the more favorable attitudes towards organic food will be formed.

The result show that the more Millennials perceive that the affordability of organic food products is good, then the attitude formed towards organic food products is also positive. Good availability and affordable prices of organic food also can make consumers feel that it is easier to obtain those food products. From moderation side, the result show that even though Millennials have better awareness and knowledge of organic food, purchase intention was not necessarily higher when the positive attitude formed is also higher.

4 Conclusion

Based on the results of the analysis of the hypothesis, attitude has an outstanding and constructive on the organic food buying intention. Attitude towards purchasing organic food was significantly and positively influenced by environmental concern, knowledge of organic foods, and perceived affordability. In terms of mediation, the better the environmental concern, knowledge of organic food, and perceived affordability possessed by consumers, the more positive attitudes towards organic food will be formed. This positive attitude can increase organic food buying intention.

The perception of availability and affordability were indeed proven to significantly affect perceived behavioral control. However, the result show that perceived affordability can also affect attitude significantly. Furthermore, in the matter of moderation, neither awareness nor knowledge of organic foods was found to act as moderator in the relationship between purchase intention with its antecedents.

References

[1] Indonesia Organic Alliance, "Trends in Consumption and Organic Lifestyle in Indonesia," *AOI Website - Welcome*, 2019. https://aoi.ngo/web/tren-konsumsi-dan-gaya-hidup-organik-di-indonesia/ (accessed Apr. 17, 2021).

[2] Kumparan, "Consumption of Organic Food in Indonesia is Increasing," *Kumparan*, 2019. https://kumparan.com/kumparanfood/konsumsi-makanan-organik-di-indonesia-kian-meningkat-1rirKBsleoa (accessed Apr. 17, 2021).

[3] S. H. Hassan, L. W. Yee, and K. J. Ray, "Purchasing intention towards organic food among generation Y in Malaysia," 2015.

[4] S. Molinillo, M. Vidal-Branco, and A. Japutra, "Understanding the drivers of organic foods purchasing of millennials: Evidence from Brazil and Spain," *Journal of Retailing and Consumer Services*, vol. 52, p. 101926, 2020.

[5] P. Průša and T. Sadílek, "Green consumer behavior: The case of Czech consumers of generation Y," *Social Marketing Quarterly*, vol. 25, no. 4, pp. 243–255, 2019.

[6] N. Leerattanakorn, "Determinants of Green Consumption of Generation Y in Chiang Mai, Thailand," *MFU Connexion: Journal of Humanities and Social Sciences*, vol. 6, no. 2, pp. 1–21, 2017.

[7] CNN Indonesia, "KLHK: 72 Percent of People Don't Care About Plastic Waste," *teknologi*, 2019. https://www.cnnindonesia.com/teknologi/20190821164641-199-423470/klhk-72-persen-masyarakat-tak-peduli-dengan-sampah-plastik (accessed Apr. 17, 2021).

[8] S. Kushwah, A. Dhir, and M. Sagar, "Ethical consumption intentions and choice behavior towards organic food. Moderation role of buying and environmental concerns," *Journal of Cleaner Production*, vol. 236, p. 117519, 2019.

[9] M. K. Magnusson, A. Arvola, U. K. Hursti, L. Åberg, and P. Sjödén, "Attitudes towards organic foods among Swedish consumers," *British food journal*, 2001.

[10] S. Boccaletti and M. Nardella, "Consumer willingness to pay for pesticide-free fresh fruit and vegetables in Italy," *The International Food and Agribusiness Management Review*, vol. 3, no. 3, pp. 297–310, 2000.

[11] S. Kushwah, "Understanding consumer resistance to the consumption of organic food. A study of ethical consumption, purchasing, and choice behaviour," *Food Quality and Preference*, p. 14, 2019.

[12] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179–211, Dec. 1991, doi: 10.1016/0749-5978(91)90020-T.

[13] A. Setyawan, N. Noermijati, S. Sunaryo, and S. Aisjah, "Green product buying intentions among young consumers: extending the application of theory of planned behavior," 2018.

[14] A. Caliskan, D. Celebi, and I. Pirnar, "Determinants of organic wine consumption behavior from the perspective of the theory of planned behavior," *International Journal of Wine Business Research*, 2020.

[15] A. Arvola *et al.*, "Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour," *Appetite*, vol. 50, no. 2–3, pp. 443–454, 2008.

[16] R. Yadav and G. S. Pathak, "Intention to purchase organic food among young consumers: Evidences from a developing nation," *Appetite*, vol. 96, pp. 122–128, Jan. 2016, doi: 10.1016/j.appet.2015.09.017.

[17] I. Ajzen and M. Fishbein, "Attitude-behavior relations: A theoretical analysis and review of empirical research.," *Psychological bulletin*, vol. 84, no. 5, p. 888, 1977.

[18] T. Hansen, J. M. Jensen, and H. S. Solgaard, "Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behavior," *International Journal of Information Management*, vol. 24, no. 6, pp. 539–550, 2004.

[19] A. Al-Swidi, S. M. R. Huque, M. H. Hafeez, and M. N. M. Shariff, "The role of subjective norms in theory of planned behavior in the context of organic food consumption," *British Food Journal*, 2014.

[20] A. Tarkiainen and S. Sundqvist, “Subjective norms, attitudes and intentions of Finnish consumers in buying organic food,” *British food journal*, 2005.
[21] Y. Zhou, J. Thøgersen, Y. Ruan, and G. Huang, “The moderating role of human values in planned behavior: the case of Chinese consumers’ intention to buy organic food,” *Journal of Consumer Marketing*, 2013.
[22] N. Spears and S. N. Singh, “Measuring attitude toward the brand and purchase intentions,” *Journal of current issues & research in advertising*, vol. 26, no. 2, pp. 53–66, 2004.
[23] Y. A. Aziz and N. V. Chok, “The role of Halal awareness, Halal certification, and marketing components in determining Halal purchase intention among non-Muslims in Malaysia: A structural equation modeling approach,” *Journal of International Food & Agribusiness Marketing*, vol. 25, no. 1, pp. 1–23, 2013.
[24] D. L. Alden, J.-B. E. Steenkamp, and R. Batra, “Consumer attitudes toward marketplace globalization: Structure, antecedents and consequences,” *International Journal of Research in Marketing*, vol. 23, no. 3, pp. 227–239, 2006.
[25] M. Asif, W. Xuhui, A. Nasiri, and S. Ayyub, “Determinant factors influencing organic food purchase intention and the moderating role of awareness: A comparative analysis,” *Food Quality and Preference*, vol. 63, pp. 144–150, Jan. 2018, doi: 10.1016/j.foodqual.2017.08.006.
[26] R. K. Jayanti and A. C. Burns, “The antecedents of preventive health care behavior: An empirical study,” *Journal of the academy of marketing science*, vol. 26, no. 1, pp. 6–15, 1998.
[27] A. Singh and P. Verma, “Factors influencing Indian consumers’ actual buying behaviour towards organic food products,” *Journal of Cleaner Production*, vol. 167, pp. 473–483, Nov. 2017, doi: 10.1016/j.jclepro.2017.08.106.
[28] R. E. Dunlap and R. E. Jones, “Environmental concern: Conceptual and measurement issues,” *Handbook of environmental sociology*, vol. 3, no. 6, pp. 482–524, 2002.
[29] R. S. Hughner, P. McDonagh, A. Prothero, C. J. Shultz, and J. Stanton, “Who are organic food consumers? A compilation and review of why people purchase organic food,” *Journal of Consumer Behaviour: An International Research Review*, vol. 6, no. 2-3, pp. 94–110, 2007.
[30] W. Young, K. Hwang, S. McDonald, and C. J. Oates, “Sustainable consumption: green consumer behaviour when purchasing products,” *Sustainable development*, vol. 18, no. 1, pp. 20–31, 2010.
[31] A. Scalco, S. Noventa, R. Sartori, and A. Ceschi, “Predicting organic food consumption: A meta-analytic structural equation model based on the theory of planned behavior,” *Appetite*, vol. 112, pp. 235–248, 2017.
[32] A. Singh and L. M. Kathuria, “Understanding drivers of branded food choice among low-income consumers,” *Food Quality and Preference*, vol. 52, pp. 52–61, Sep. 2016, doi: 10.1016/j.foodqual.2016.03.013.
[33] X. Wang, F. Pacho, J. Liu, and R. Kajungiro, “Factors Influencing Organic Food Purchase Intention in Developing Countries and the Moderating Role of Knowledge,” *Sustainability*, vol. 11, no. 1, p. 209, Jan. 2019, doi: 10.3390/su11010209.
[34] N. K. Malhotra and S. Dash, *Marketing research: An applied orientation*. Pearson, 2016.
[35] T. T. Moores and J. C.-J. Chang, “Ethical decision making in software piracy: Initial development and test of a four-component model,” *Mis Quarterly*, pp. 167–180, 2006.