

INFLUENCE OF ENVIRONMENTAL CONCERN, ECOLOGICAL KNOWLEDGE ON PURCHASE INTENTION NGELILIN PRODUCTS, WITH GENDER AS A MODERATING

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ABSTRACT

The production of goods and services, driven by human activity, has resulted in significant environmental degradation and pollution. If consumers demonstrate a lack of environmental concern, it will increase environmental exploitation and pollution. Consumers aware of environmental issues will also be concerned for the environment and have a positive attitude towards environmental conservation. Consequently, it will be more straightforward for them to demonstrate interest in purchasing environmentally friendly products. This study aims to ascertain the influence of environmental anxiety and environmental knowledge on the intention to purchase Ngelilin products. The study population comprised men and women aged between 15 and 50 who resided in Surabaya City and demonstrated environmental concern. A total of 153 respondents were selected as the sample for this study, with the purposive sampling technique employed. Questionnaires were distributed via the online platform Google Forms to obtain the requisite data. A quantitative methodology was employed in this study, with data analysis conducted using multiple linear regression via the IBM SPSS 16.0 statistical program. Validity and reliability tests were employed to assess the quality of the sample data, and subsequently, classical assumption tests were conducted, including multicollinearity and autocorrelation tests. The findings of this study indicate that environmental concerns (X1) and environmental knowledge (X2) exert a positive and significant influence on the intention to purchase candle products (Y). Gender does not act as a moderating factor (i.e., it does not weaken or strengthen) the relationship between the variables of environmental concerns and environmental knowledge and purchase intention.

ABSTRAK

Kegiatan manusia yang berlebihan dalam membuat barang yang dibutuhkan untuk mendapatkan nilai membuat lingkungan semakin rusak dan tercemar. Jika konsumen tidak peduli dengan lingkungan, maka akan menyebabkan eksploitasi lingkungan dan pencemaran lingkungan dapat meningkat. Konsumen yang sadar akan masalah lingkungan tentu memiliki kepedulian terhadap lingkungan dan sikap yang baik terhadap pelestarian lingkungan. Akibatnya, akan lebih mudah bagi mereka untuk tertarik untuk membeli Green Product. Tujuan penelitian ini adalah untuk mengetahui bagaimana kecemasan lingkungan dan pengetahuan lingkungan memengaruhi keinginan untuk membeli produk Ngelilin. Dalam penelitian ini, populasi yang digunakan adalah pria dan wanita berusia antara 15 dan 50 tahun yang tinggal di Kota Surabaya dan memiliki kepedulian terhadap lingkungan.

Untuk penelitian ini, 153 responden diambil sebagai sampel, dan teknik pengambilan sampel adalah purposive. Untuk mengumpulkan data sampel, kuesioner didistribusikan melalui Google Forms secara online. Metode kuantitatif digunakan dalam penelitian ini, yang kemudian dianalisis menggunakan regresi linier berganda menggunakan program statistik IBM SPSS 16.0. Uji validitas, dan reliabilitas digunakan untuk menguji kualitas data sampel, dan kemudian dilakukan uji asumsi klasik, termasuk uji multikolinearitas, dan autokorelasi. Hasil penelitian ini menunjukkan bahwa keprihatinan lingkungan (X1) dan pengetahuan lingkungan (X2) memiliki dampak yang positif dan signifikan terhadap keinginan untuk membeli produk lilin (Y), serta gender tidak memoderasi (memperlemah atau memperkuat) hubungan yang tercipta dari variable keprihatinan lingkungan dan pengetahuan lingkungan terhadap niat beli.

INTRODUCTION

Over time, the environment will undergo significant changes, primarily due to human activities to meet daily needs. The growth of the global population has resulted in accelerated industrialization and economic advancement, which are the primary drivers of environmental degradation (Yong et al., 2017). Manufacturing goods and providing services to meet human needs represent a significant catalyst for environmental degradation and pollution. Those unaware of environmental issues may engage in activities that harm the environment and contribute to pollution (Riyanto et al., 2018). The failure to adequately address ecological harm will have a detrimental impact on human well-being.

As data from the National Garbage Management System (2021) indicates, the aggregate quantity of municipal waste generated by the country's regencies and cities reached 21.45 million tons in 2021. The highest quantity of waste is produced in Central Java, with a total of 3.17 million tons, followed by East Java with 2.63 million tons. The highest rate of waste generation was observed in DKI Jakarta, with an estimated 2.59 million tons, followed by West Java with 2.1 million tons, North Sumatra with 1.23 million tons, and Banten with 3.17 million tons. The data above is corroborated by the LIPI Study (Indonesian Institute of Sciences, 2018), which estimates that approximately 0.26 million to 0.59 million tons of plastic are introduced into the ocean annually. Furthermore, a study by Jambeck

(2018) identified Indonesia as the second-largest source of marine plastic waste globally.

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In 2021, the National Solid Waste Management System reported that the combined regencies and cities in the country produced 21.45 million tons of municipal waste. The highest quantity of waste is produced in Central Java, with a total of 3.17 million tons, followed by East Java with 2.63 million tons. The highest waste generation rates were observed in DKI Jakarta, amounting to 2.59 million tonnes, followed by West Java with 2.1 million tonnes, North Sumatra with 1.23 million tonnes, and Banten with 3.17 million tonnes.

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ocean annually. Furthermore, a study by Jambeck (2018) identified Indonesia as the second-largest contributor to global marine plastic pollution.

The environmental impact of online shopping is exacerbated by the necessity to utilize substantial quantities of packaging materials to ensure safe and secure transportation. A considerable number of e-commerce enterprises utilize disposable plastic packaging, whereas consumers are demonstrating a growing inclination towards environmentally conscious alternatives. The deterioration of the natural environment has given rise to concerns among a diverse range of societal groups, including the general public and business owners, who advocate for developing more sustainable products to address this pressing issue. In light of these concerns, individuals and organizations with a solid commitment to environmental stewardship have proactively undertaken efforts to minimize waste, as it is widely acknowledged to be a significant contributor to environmental deterioration. Moreover, Kusuma et al. (2017) conducted a study demonstrating the use of environmentally friendly products. Such products facilitate the formation of sustainable consumption habits, enabling customers to guarantee that their actions do not result in environmental harm (Ryantari, 2020).

"eco-friendly" describes products that do not harm humans or the environment, conserve resources, reduce waste, and prevent animal cruelty. This can be attributed to the utilization of recyclable raw materials. There is mounting evidence that consumers are becoming more aware of the significance of environmental stewardship, as evidenced by their increasing inclination to purchase environmentally friendly products and services. This incentive is not solely based on environmental conservation but on the preservation of physical well-being and physiological processes. Green products include batik manufactured with natural dyes, cloth napkins, cloth diapers that are environmentally friendly, recyclable and biodegradable plastics, organic agricultural products, and cosmetics (Kasali, in Lukiarti, 2019). An individual's

personal gender identity is also likely to influence their perception of the surrounding environment.

Theoretical explanations for gender differences in this context include, for example, the Gender Socialisation Theory and the Theory of Planned Behaviour (TPB). The Gender Socialisation Theory posits that men and women are socialized with different values, norms, and social roles, subsequently influencing their responses to various situations. In general, women are often associated with values such as empathy, caring, and social responsibility, which are typically regarded as higher than men's. This results in women being more likely to demonstrate concern about environmental issues than men. Consequently, women with elevated environmental concerns are more likely to demonstrate a greater inclination towards purchasing environmentally friendly products than men, who exhibit an equivalent level of environmental concern.

The TPB posits that individual behavior is influenced by three main factors: attitude, subjective norm, and perceived behavioral control. Gender can influence these three factors, as men and women may perceive green products differently. For example, women may have a more positive attitude towards green products, seeing them as contributing to their family and children's future. In contrast, men may prioritize the price or functionality aspects of the product so that environmental concerns may be less intense and influence their purchase intention.

Candles are green aromatherapy products made from paraffin, a refined petroleum product that serves as the main element. Nevertheless, burning petroleum releases harmful pollutants, such as carbon dioxide (CO₂) and carbon monoxide (CO), which contribute to the greenhouse effect and global warming. In addition, carbon monoxide is responsible for the formation of acid rain, which negatively impacts aquatic plants and animals and contributes to a higher incidence of respiratory diseases, especially in children and the elderly. Candles are well recognized as one of the most common aromatherapy products. Aromatherapy candles

are readily accessible for purchase in brick-and-mortar and online retail establishments, which has significantly contributed to their widespread popularity among consumers, owing to their convenience and ease of access.

However, additional research is necessary to acquire a more profound comprehension of the utilization of raw materials, specifically paraffin wax, in the production procedure of aromatherapy candles. Persistent utilization of this substance has the potential to harm human well-being. Paraffin wax is a frequently utilized primary substance in producing aromatherapy candles. The production of these candles from petroleum gives rise to worries regarding their potential long-term health hazards when utilized. The process may lead to the generation of toxic substances that can impair human well-being and the natural surroundings. The lack of safety guidelines for using aromatherapy candles raises concerns about their safety. Hence, it is crucial to carefully choose the raw materials for candle manufacturing, prioritizing the safety of both human health and the environment. Soy wax is often regarded as a highly safe raw ingredient. The production process of soy wax entails extracting soybean oil from soybeans and combining it with a hydrogen solution. This blending process triggers the soybean oil's solidification, leading to wax formation.

Ngelilin is a soy wax aromatherapy candle produced using eco-friendly packaging. According to Lukiarti (2019), an eco-friendly product is defined as one that is not detrimental to human or environmental health, conserves resources, minimizes waste, and is not associated with animal cruelty. Given the criteria above, Ngelilin can be classified as an eco-friendly product. Ngelilin contributes to environmental protection by utilizing sustainable raw materials and packaging that benefit the environment.

As Chen's study (Lukiarti, 2019) posited, the term "ecological knowledge" is defined as the aggregate of information individuals possess regarding the natural environment. As Banyte notes in Lukiarti (2019), individuals with more excellent environmental knowledge are more

likely to discern the quality of environmentally friendly items and exhibit a stronger inclination to purchase them. Ecological knowledge comprises a fundamental understanding of the methods and strategies employed to advance environmental conservation, fostering a commitment to buying environmentally friendly products (Lee in Lukiarti, 2019). This concept will likely impact consumers and serve as a means of stimulating their intention to make a purchase.

One practical approach to enhancing consumer environmental awareness is to utilize visual representations to illustrate the extent of ecological pollution in natural environments. This technique can serve as a benchmark for consumers in their efforts to conserve the surrounding environment. The inclination to purchase a product is significantly influenced by environmental consciousness and customer awareness regarding ecological matters (Ali, 2013, p. 161), as evidenced by Lukiarti (2019). Recently, many corporations have been driven to enhance their understanding of and engagement with environmental issues by developing initiatives that address these challenges. It is incumbent upon every corporation to educate the public about the environment and to incorporate this knowledge into the products they sell to customers. This is evidenced by the growing number of consumers becoming more aware and concerned about environmental issues. This prompted Ngelilin to engage with the demographic of environmentally concerned consumers knowledgeable about environmental issues. Ngelilin utilizes ecologically friendly materials and packaging, which aligns with the preferences of this consumer group. This study aims to examine the influence of environmental concern and ecological knowledge on consumer purchasing intentions for ecologically friendly gelatin products. This investigation is based on an analysis of observed phenomena and an evaluation of existing theoretical frameworks.

LITERATURE REVIEW

Environmental Concern

The mounting and troubling state of the environment has prompted a heterogeneous cohort of individuals and organizations, including community members and businesspeople, to articulate their unease and engage in efforts to enhance the sustainability of their products. This has resulted in a new cohort of individuals concerned about environmental issues. Those who demonstrate concern take action to minimize waste, which significantly contributes to environmental harm, and adopt environmentally friendly items (Kusuma et al., 2017). The growth in consumer awareness has a considerable effect on customer behavior. A growing number of individuals are adopting environmentally friendly behaviors, leading to the emergence of a new consumer segment, the 'green consumer.' In light of the heightened public awareness, it is incumbent upon companies that produce products to provide consumers with assurances that their products are safe and ecologically friendly (Elvierayani & Choiroh, 2020).

As defined by Dunlap and Jones (in Hernomo, 2021), environmental concern is a multidimensional construct comprising three key elements: awareness of environmental issues, willingness to support or take action to address these concerns, and readiness to contribute to environmental solutions. The growing awareness of environmental issues prompts consumers to demonstrate environmental consciousness, influencing a change in consumer purchasing patterns towards eco-friendly products (Adialita, 2022).

As posited by Angelovska (in Lukiarti, 2019), environmental concern may serve as a predictive instrument for consumer purchasing behavior with regard to environmentally friendly products. It may constitute a significant factor in the consumer decision-making process. Weigel (in Lukiarti, 2019) posits that environmental concern can be conceptualized as focusing on environmental facts and personal actions with attendant environmental consequences. Onurlubas (2018) posits that an individual's

motivation, in this case, environmental concern, does influence the purchasing behavior of environmentally conscious consumers, who are inclined to purchase environmentally friendly products to make a positive and significant impact.

Bagher et al. (2018) define *environmental concern* as the emotional level of individuals' emotional involvement towards environmental issues. This reflects the intention to purchase environmentally friendly products in order to protect the Earth. The environmental concern indicators employed in this study, as outlined by Yadav and Pathak (2015), Bagher et al. (2018), and Onurlubas (2018) in Ryantari & Giantari (2020), can be observed through the following indicators: 1) Concern for the state of the planet. 2) It is imperative that humans maintain environmental balance in order to survive. 3) Humans frequently disrupt natural ecosystems, often with severe and irreversible consequences. 4) It is crucial to take action to reduce environmental damage.

Ecological Knowledge

As Chen (in Sukaatmaja and Giantari, 2017) demonstrates, environmental knowledge or ecological knowledge can be defined as a series of ecological knowledge individuals possess about the environment. Lee (in Sukaatmaja and Giantari, 2017) posits that ecological knowledge represents a fundamental understanding possessed by consumers regarding how they can contribute to environmental protection activities, contingent upon a behavioral commitment to purchasing green products. Ecological knowledge reflects consumer awareness of various ecological problems and issues and the actions that can be taken to prevent or resolve these problems. The ecological knowledge indicators were adapted from the works of Arbuthnot & Lingg (1975) and Akbar et al. (2014) in Rahmi et al. (2017). They are as follows: 1) Environmental knowledge is a prerequisite for environmental care. 2) Environmental knowledge affects activities that lead to environmental care. 3) Environmental knowledge leads to knowledge about green products. 4) Consumers with high environmental

knowledge will increase their interest in green products.

Purchase Intention

Ajzen (1985, in Liang, 2021) posits that intention is a deliberate and conscious individual plan or tendency to engage in certain behaviors. In consumer behavior, purchase intention is instrumental in understanding and predicting an individual's likelihood of purchasing a product or service. Ajzen's (1991, in Pacho, 2020) theory of planned behavior (TPB) posits that an individual's intention to perform a given behavior can exert control over their subsequent actions. These elements are of particular significance in predicting and elucidating individual behavior.

The research findings indicated that purchase intention plays a significant role in actual purchasing behavior, functioning as a conduit between evaluating a product and purchasing it. In essence, purchase intention represents the initial phase of the consumer decision-making process, wherein individuals assess the likelihood of purchasing. *Green purchase intention* can be defined as the desire or intention of consumers to consume products or services with minimal environmental impact. This signifies a consumer inclination to consume products or services that do not adversely impact the environment (Akbar et al.; Rahmi et al., 2017).

In Kusumawati (2019), Chen and Chang define the intention to purchase environmentally friendly products as the desire of consumers to buy certain products due to environmental needs. As evidenced by research conducted by Basha et al. (2015), Yadav & Pathak (2015), and Hanjani & Widodo (2019), as referenced in Ryantari & Giantari (2020), purchase intention can be measured by several indicators. One such indicator is the interest consumers express in acquiring environmentally friendly candles. 2) Regarding benefits, there is a willingness to consider purchasing environmentally friendly candle products. 3) There is a preference for soy wax candles over paraffin-based alternatives. 4) Consumers desire to gain further knowledge

about the soy wax candles they intend to purchase.

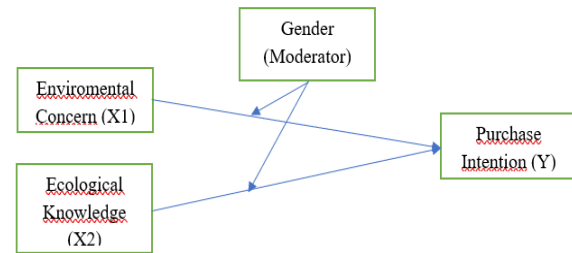


Figure 1 Conceptual Framework

The following hypothesis is proposed:

H1: The environmental concern variables (X_1) significantly influence purchase intention (Y) with the Ngelilin product.

H2: The ecological knowledge variables (X_2) significantly influence purchase intention (Y) with the Ngelilin product.

H3: The gender variable exerts a significant moderating influence on the environmental concern variable (X_1) about the purchase intention (Y) of Ngelilin products.

H4: The gender variable exerts a significant moderating influence on the ecological knowledge variables (X_2) about the purchase intention (Y) of Ngelilin products.

RESEARCH METHODS

This approach uses quantitative methods. Data is processed and analyzed using multiple regression analysis with moderation variables. This research uses actual research, directly interviewing respondents to see the effect. The sampling method used in this study is non-probability sampling. This study uses respondents with the following characteristics and requirements: 1. Male and female respondents between the ages of 12 and 60. 2. Students, public or private employees, entrepreneurs. 3. Respondents who care about the environment. 4. Respondents who are familiar with Ngelilin products.

This questionnaire was distributed to respondents online using Google Forms media. The total number of respondents obtained after distributing the questionnaire was 198; 17 respondents did not meet the criteria during the

screening test. Then, the data were processed in IBM Statistic 26, and the respondents who did not pass the outlier test were 18 people. Then, 10 respondents with inconsistent responses were deleted to obtain reliable results, leaving 153 respondents for analysis.

RESULTS AND DISCUSSION.

The data processing results indicate that the most significant % of respondents are in the 21-30 age group, at 58.8%. The second largest group of respondents is comprised of individuals aged 15-20 years, representing a percentage of 35.9%. The third largest group of respondents is individuals aged 31-40, representing 5.3% of the total sample. The percentage of respondents who identified as female was 61.4%, while the percentage of respondents who identified as male was 38.6%.

The most significant percentage of respondents are students or employed in a student role, at 70.6%. The second largest category of respondents is those in private or self-employed employment, representing 25.5%. The third-largest category is respondents with other employment arrangements, representing 2.6%. The final category comprises homemakers and civil service employees, representing 1.3% of the sample.

Tabel 1. Result of the Validity and Reliability Test

Indicator	Significance	r calculate	r table	Cornbach's Alpha	Result of Validity dan Reliability Test
Environmental Concern					
(X1.1)	0.000	0.829	0.1620	0.711	Valid and Reliable
(X1.2)	0.000	0.648	0.1620		Valid and Reliable
(X1.3)	0.000	0.688	0.1620		Valid and Reliable
(X1.4)	0.000	0.767	0.1620		Valid and Reliable
Ecological Knowledge					
(X2.1)	0.000	0.753	0.1620	0.660	Valid and Reliable
(X2.2)	0.000	0.676	0.1620		Valid and Reliable
(X2.3)	0.000	0.729	0.1620		Valid and Reliable
(X2.4)	0.000	0.661	0.1620		Valid and Reliable
Purchase Intention					
Y1	0.000	0.754	0.1620	0.746	Valid and Reliable
Y2	0.000	0.727	0.1620		Valid and Reliable
Y3	0.000	0.800	0.1620		Valid and Reliable
Y4	0.000	0.732	0.1620		Valid and Reliable

The results presented in Table 1, obtained from the Environmental Concerns and Ecological Knowledge variables' validity test, demonstrate that all items on these variables are declared valid, as the r-count is greater than the r-table value (0.1620) at the 0.05 significance level.

As evidenced in Table 1, the reliability test results demonstrate that all variables, including environmental concern, ecological knowledge, and purchase intention, exhibit a Cronbach's alpha value exceeding 0.6, satisfying the requisite threshold for reliability. In order to satisfy the requisite conditions for the reliability test, Cronbach's alpha value must attain a value of at least 0.6 or greater. All variables in this study are reliable.

Table 2. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Rata_X1	1.000	1.000
2	(Constant)		
	Rata_X1	.603	1.659
	Rata_X2	.603	1.659
3	(Constant)		
	Rata_X1	.550	1.819
	Rata_X2	.603	1.659
	RataX1_JK	.863	1.159
4	(Constant)		
	Rata_X1	.079	12.706
	Rata_X2	.067	14.942
	RataX1_JK	.007	143.991
	RataX2_JK	.007	143.873

Table 2 indicates that independent variables, specifically environmental concern and ecological knowledge, exhibit a tolerance value exceeding 0.1, while all independent variables demonstrate a VIF value below 10. Consequently, the regression model does not manifest symptoms of multicollinearity in this test.

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Durbin Watson
1	.589 ^a	.346	.342	2.148
2	.728 ^b	.530	.524	
3	.730 ^c	.533	.523	
4	.730 ^d	.534	.521	

As illustrated in Table 3, the Durbin-Watson value is 2.148. The comparison employs a significance value of 0.05, a sample size of 153 (n), and two independent variables (k = 2). Consequently, the Durbin-Watson table will yield a dU value of 1.7662 and a dl value of 1.7093. It can thus be identified that the Durbin-Watson value is within the range of (du < dw < (4-dl)). Thus, the equation can be formulated as 1.7662 < 2.148 < (4-1.7093), which produces the following: 1.7662 < 2.148 < 2.2907. It can therefore be concluded that no positive or negative correlation exists in this study.

Furthermore, the R² value is between 0.530 and 0.534, indicating that environmental concern and ecological knowledge significantly influence consumers' intention to purchase Ngelilin products. These factors account for between 53% and 53.4% of the total variation. The remaining 46.2% to 47% is due to other variables not included in the current model.

Table 4. Coefficients Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.141	.358		3.184	.002
Rata_X1	.705	.079	.589	8.947	.000
2 (Constant)	.276	.325		.848	.398
Rata_X1	.288	.086	.240	3.336	.001
Rata_X2	.627	.082	.552	7.666	.000

3 (Constant)	.302	.326		.925	.356
Rata_X1	.264	.090	.221	2.922	.004
Rata_X2	.627	.082	.553	7.662	.000
RataX1_JK	.021	.024	.053	.882	.379
4 (Constant)	.296	.328		.904	.367
Rata_X1	.156	.240	.130	.650	.517
Rata_X2	.740	.246	.653	3.008	.003
RataX1_JK	.153	.270	.382	.566	.572
RataX2_JK	-.137	.279	-.330	-.490	.625

The initial hypothesis proposed in this study is as follows: The variable of Environmental Concern (X1) is posited to influence the dependent variable of Purchase Intention (Y). Table 4 demonstrates that the t-test indicates a statistically significant correlation between environmental concern and the dependent variable, with a t-value of 3.336 and a p-value of 0.001. This is inconsistent with the t-table at the 0.05 significance level, which yields a t-value of 1.655. As the t-value (3.336) exceeds the t-table value (1.655) and the p-value is less than 0.05, it can be concluded that H1 is accepted. Environmental concern has a positive effect on purchase intention.

The second hypothesis put forth in this study is that ecological knowledge affects purchase intention. Table 4 demonstrates that the t-test yields a t-count of 7.666 with a p-value of 0.000, whereas the t-table at the 0.05 significance level is 1.655. As the t-count value (7.252) is greater than the t-table value (1.655) at the 0.05 significance level (0.000 < 0.05), it can be concluded that H2 is accepted. Theoretical knowledge has a positive effect on purchase intention.

The third hypothesis which states that the gender variable has a significant moderating effect on the environmental concern variable (X1) on the purchase intention (Y) of Ngelilin products is rejected. This is evident from the significance value which is greater than the significance limit of 0.005. The significance value of gender moderation is 0.572.

The fourth hypothesis which states that the gender variable has a significant moderating effect on the ecological knowledge variable (X2) on the purchase intention (Y) of Ngelilin products is rejected. This is evident from the significance value which is greater than the significance limit of 0.005. The significance value of gender moderation is 0.625.

Discussion

The Effect of Environmental Concern on Purchase Intention

In essence, environmental concern denotes a concern for the environment. Those aware of environmental problems tend to feel responsible for the surrounding environment. Consequently, they are inclined to make efforts to help solve environmental problems by selecting products that are more environmentally friendly. The analysis findings in this study demonstrate that environmental concern has a positive and statistically significant impact on purchase intention. Thus, an individual's level of environmental concern will likely increase their intention to purchase Ngelilin products. Consequently, companies must focus their marketing efforts on individuals who demonstrate environmental concern.

The findings of this study align with those of the research conducted by Gusti Ayu Winda Ryantari and I Gusti Ayu Ketut Giantari (2020), entitled "Green Knowledge, Green Attitude, and Environmental Concern Affect Purchase Intention," which serves as a reference journal for this research. The study posits that environmental concern positively and significantly affects purchase intention. A study conducted by Rini et al. (2017) entitled "The Effect of Environmental Knowledge and Environmental Concern on Attitudes and Purchase Intentions of The Body Shop Green Products in Denpasar City" The findings of this study demonstrate that knowledge and concern for the environment have a positive and significant impact on attitudes and purchase intentions. Furthermore, attitudes have a positive and significant effect on purchase intentions.

The Effect of Ecological Knowledge on Purchase Intention

Ecological knowledge, also known as ecological or environmental knowledge, is a series of ecological facts and information individuals possess about the environment. Ecological knowledge represents consumers' fundamental understanding regarding how they can contribute to environmental protection by purchasing environmentally friendly products. This study's findings demonstrate a positive and statistically significant relationship between ecological knowledge and purchase intention. Therefore, an increase in ecological knowledge among Ngelilin consumers can result in a corresponding increase in the purchase intention for the Ngelilin product.

The findings of this study are corroborated by the results of a study conducted by Rahmi et al. (2017), entitled "Green brand image, green awareness, green advertisement, and ecological knowledge in improving green purchase intention and green purchase behavior on creative industry products." The study revealed a significant relationship between ecological knowledge and purchase intention. Research conducted by Rini et al. (2017) entitled "The Effect of Environmental Knowledge and Environmental Concern on Attitudes and Purchase Intentions of The Body Shop Green Products in Denpasar City" supports this finding. The results of this study indicate that knowledge and concern for the environment have a positive and significant effect on attitudes and purchase intentions, and attitudes have a positive and significant effect on purchase intentions.

The Effect of Gender as a Moderating Variable between Environmental Concern and Purchase Intention

The hypothesis that the gender variable exerts a significant moderating effect on the environmental concern variable (X1) and the purchase intention (Y) of Ngelilin products is rejected. This finding is not aligned with the research conducted by Echavarren (2023), which suggests that women tend to demonstrate a higher level of environmental concern than men. Such roles frequently place women in positions of

responsibility for managing household resources, childcare and the well-being of their families. It is more probable that women will prioritise altruistic and biospheric values, which encourage them to support green products and act pro-environmentally.

As a moderating variable, gender can reinforce or attenuate the relationship between environmental concern and purchase intention. To illustrate, women who exhibit a high level of environmental concern are more likely to translate that attitude into a purchase intention for green products than men with an equivalent level of environmental concern. This indicates that the positive effect of environmental concern on purchase intention will be more pronounced for women than men (Li et al., 2021; Saut and Saing, 2021).

This may occur because, when gender is used as a moderating variable, it is possible to evaluate whether the relationship between environmental concern and purchase intention is stronger or weaker depending on the consumer's gender. This is due to the differences in perceptions, values, and attitudes towards the environment between men and women. In theory, gender influences how an individual processes information and makes decisions about the consumption of green products.

The Effect of Gender as a Moderating Variable between Ecological Knowledge and Purchase Intention

The hypothesis that the gender variable exerts a significant moderating effect on the Ecological Knowledge variable (X2) and the purchase intention (Y) of Ngelilin products is rejected. This finding is not aligned with the research conducted by Diekman and Eagly (2008) emphasize that women are more predisposed to participate in environmentally-conscious behaviors than men, owing to their perceived greater sensitivity to social and ecological issues. In contrast, men may be more predisposed to evaluate pragmatic variables such as efficiency and product quality. This research indicates that gender-based motivational differences may modify the link

between ecological knowledge and the intention to purchase green items (Swim et al., 2020).

CONCLUSION

Environmental concern has a positive and significant effect on purchase intention, so it can be concluded that the higher one's concern for the environment, the higher the purchase intention for Ngelilin products. Thus, hypothesis 1 or H1, which states that environmental concern has a significant effect on purchase intention for Ngelilin products, is accepted. Ecological knowledge has a positive and significant effect on purchase intention. The higher a person's knowledge of the environment, the higher the purchase intention of Ngelilin products. Thus, hypothesis 2 or H2, which states that ecological knowledge significantly affects the purchase intention of Ngelilin products, is accepted. The hypothesis 3 or H3 that the gender variable exerts a significant moderating effect on the environmental concern variable (X1) and the purchase intention (Y) of Ngelilin products is rejected. The hypothesis 4 or H4 that the gender variable exerts a significant moderating effect on the ecological knowledge variable (X2) and the purchase intention (Y) of Ngelilin products is rejected.

Ngelilin products that are environmentally friendly should contribute to helping improve the environment for the better and will take the hearts of consumers who care about the environment. The marketing strategy for Ngelilin can be done using campaigns with the theme of greening or environmental awareness, which will attract consumers and help prevent environmental damage. The indicator with the first most significant influence is respondents who understand that maintaining environmental balance is a must; from here, Ngelilin can implement products and all product equipment that do not cause harmful waste to the environment.

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LAMPIRAN

Pernyataan mengenai *Environmental Concern* :

No	Pernyataan	STS	TS	N	S	SS
1	Saya peduli terhadap kelestarian di bumi. Maka dari itu saya mengikuti aturan atau gerakan mencegah lingkungan.					
2	Saya sadar bahwa menjaga keseimbangan lingkungan adalah suatu keharusan					
3	Saya tahu bahwa Sebagian besar tindakan manusia menyebabkan gangguan pada alam					
4	Saya ingin melakukan aksi untuk mengurangi kerusakan lingkungan					

Pernyataan mengenai minat beli *ecological knowledge* :

No	Pernyataan	STS	TS	N	S	SS
1	Saya paham akan lingkungan sekitar saya					
2	Saya peduli terhadap lingkungan karena saya paham akan kondisi lingkungan					
3	Saya akan mencari informasi tentang bahan produk yang akan saya beli					
4	Ketika seseorang mempunyai pengetahuan yang tinggi akan lingkungan, mereka akan memiliki ketertarikan untuk membeli produk yang ramah lingkungan					

Pernyataan mengenai *purchase intention* :

No	Pernyataan	STS	TS	N	S	SS
1	Saya tertarik untuk membeli produk Ngelilin yang ramah lingkungan					
2	Saya akan mencari informasi tentang manfaat lilin ramah lingkungan					
3	Saya mengetahui tentang produk yang ramah lingkungan					
4	Saya akan mencari tahu lebih dalam mengenai lilin berbahan <i>soy wax</i>					

Jenis_Kelamin

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Pria	59	38.6	38.6	38.6
Wanita	94	61.4	61.4	100.0
Total	153	100.0	100.0	

Usia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 15-20 tahun	55	35.9	35.9	35.9
21-30 tahun	90	58.8	58.8	94.8
31-40 tahun	8	5.2	5.2	100.0
Total	153	100.0	100.0	

Profesi

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Pelajar/Mahasiswa	108	70.6	70.6	70.6
Swasta/Wiraswasta	39	25.5	25.5	96.1
Ibu Rumah Tangga	2	1.3	1.3	97.4
Lain-lain	4	2.6	2.6	100.0
Total	153	100.0	100.0	