

Consumers' Pro-Environmental Behavioral Intentions towards Eco-Friendly Coffee Shops in Davao City

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ABSTRACT. This study aims to assess the level of Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly coffee shops in Davao City. Researchers tend to seek the result of the level of the consumers' pro-environmental intentions towards the eco-friendly coffee shops in Davao City in terms of demographic profile such as sex, age, educational attainment, marital status, and occupation; which was gauged through the indicators Environmental issue, Responsibility, Personal norm, Social environmental, Behavioral intentions; and Green image. By selecting 400 customers as respondents compelling them to answer a questionnaire, data were treated using Frequency Count & percentage, Independent T-test, Mean, Analysis of Variance (ANOVA). The result shows that Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly coffee shops in Davao City were high, with an overall mean of 4.50 (SD=0.501). Second, findings show no significant difference in the consumers', behavioral intentions towards eco-friendly coffee shops when analyzed by age, sex, marital status, and educational attainment. However, there is a significant difference when analyzed by occupation. The result indicates the level of consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City, based on the assessments of the consumers' indicating environmentally aware to the coffee shop they visit. The Consumers' Pro-Environmental Behavioral Intentions towards Eco-Friendly Coffee Shops in Davao City showed a great difference when analyzed by occupation, indicating environmental intentions level. This is opposite to when analyzed by age, sex, marital status, and educational attainment of customer evaluation because it is almost the same environmental intentions level.

Keywords: Consumers' Pro-Environmental Behavioral Intentions, Eco-Friendly Coffee Shops, Davao City, and the Philippines.

INTRODUCTION

Environmental challenges such as climate change, water shortages, and air pollution make some consumers more environmentally conscious. Customers who are environmentally conscious purchase or use environmentally friendly items, which, while convenient, helps to reduce pollution (Han & Hwang, 2016). As a result, the corporation must comprehend the standard and policy to develop environmentally friendly products and management strategy methods to ensure that environmentally friendly products are maintained (Bhuiyan & Sharma, 2017).

The increased demand for coffee on the market results in increased energy resource consumption, ranging from the amount of coffee supply required from harvesting to the percentage of electricity used in the actual operation, increasing waste products and packaging material, both of which cause environmental problems (Jang et al., 2015). As a result, there are environmental sustainability concerns in the coffee shop business regarding throwing away trash, notably on coffee cups (Ur et al., 2017). As a result, consumer awareness is growing. Some coffee shops are providing environmentally friendly products in response to consumer demand and compete with other environmentally conscious coffee shops. 2014 (Chen & Tung). Some environmentally friendly coffee shops do not pay attention to customer behavior intentions, leading to customers refusing to patronize them. As a result, users'

behavior intentions assist in reducing the number of environmental problems such as pollution while also allowing customers to improve their quality of life in a clean environment and develop a sustainable future (Lita et al., 2014). Despite the increased interest in environmentally friendly activities, little attention has been made to identifying the key characteristics influencing pro-environmental customer behavioral intentions in environmentally friendly coffee shops. Customer behavioral intentions that are pro-environmental can assist prevent severe pollution while also helping customers improve their quality of life in a clean environment and progress toward a more sustainable future (Lita et al., 2014). As a result, businesses profit from eco-friendly behavior intentions by increasing consumer visits, raising demand for environmentally friendly products, improving satisfaction, and increasing commitment (Swaim et al., 2014). Few studies have been conducted in Davao City on coffee customers who want to practice their pro-environmental awareness by choosing eco-friendly coffee shops. The researchers' key reason in Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City was to produce research literature to fill the void on the topic within the Davao City.

METHOD

This study's quantitative descriptive analysis design describes the event, which does not formulate questionable rather based on customer perception. Thus, it addresses what the question is all about. It is defined to describe the interest of people and their perception of the event (Shields & Rangarjan, 2013). Thus, the descriptive method determines consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao city.

This study uses an adapted questionnaire from Yun and Kim's (2019) study. The Questionnaire was forwarded to the research adviser and panel experts for possible comments suggestions for reliability and validity. The Questionnaire was divided into two (2) parts. The first part was the demographic profile of the respondents consisting of age, sex, occupation, marital status, and educational attainment. The second part was the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly coffee shops in Davao City, measured through indicators of environmental issue, responsibility, personal norm, social environment, environmental intentions, and green image.

The researchers retrieved the survey questionnaires by asking the respondents to forward their answered questionnaires online, collated and tabulated all the data, and then subjected them to statistical computation through the school statistician. The following statistical tools were used in the statistical computation of data Frequency Count & Percentage, Mean, T-test, and Analysis of Variance (ANOVA).

RESULT AND DISCUSSION

Level of Consumers' Pro-Environmental Behavioral Intentions

Table 2 exhibited the level of Consumers' Pro-Environmental Behavioral Intentions towards Eco-Friendly Coffee Shops in Davao City, with mean scores ranging from 4.43 to 4.57 and an overall mean score of 4.50 described as very high. The standard deviation is 0.501 indicating homogeneous responses from the respondents for not surpassing 1.0. From highest to lowest mean scores of the indicators, the respondents claimed that in terms of environmental intentions, they rated it very high with a mean score of 4.57 and a standard deviation of 0.510. This indicates that eco-friendly coffee shop customers would buy, make favorable comments about, encourage, and suggest an eco-friendly coffee shop to friends and family to contribute to environmental protection. This demonstrates that customers are conscious of environmental issues even when purchasing their favorite coffee beverages. The result

confirmed the statement of Murphy & Dowding (2017), who accentuated sustainable coffee shops that have a profound impact on the environmentalist consumer.

Regarding environmental issues, the garnered mean score is 4.53 or a very high level with a standard deviation of 0.573. This means that coffee consumers avoid buying from coffee shops that strongly pollute and choose the ones with the lowest negative impact on the environment. Regardless of the brand quality, the one that less pollutes is preferable. This indicates that the respondents always choose coffee shops that practice environmental protection. The findings support the statement of Oliver (2017) stated that human consumption is a major problem if people do not pay attention to environmental practices.

Table 2. Level of Consumers' Pro-Environmental Behavioral Intentions Towards eco-friendly Coffee Shops in Davao City

Indicators	Mean	Std. Deviation	Descriptive Level
Environmental issue	4.53	0.573	Very High
Responsibility	4.43	0.584	Very High
Personal Norm	4.49	0.575	Very High
Social Environmental	4.46	0.618	Very High
Environmental Intentions	4.57	0.510	Very High
Green Image	4.52	0.561	Very High
Overall	4.50	0.501	Very High

Based on the green indicator image, the mean score is 4.52, described as a very high level with a standard deviation of 0.561. This suggests that the respondents are more inclined to frequent environmental coffee shops, which is vital even during a pandemic, and are still planning to visit environmental coffee shops for the first time. This implies that coffee drinkers prefer to visit environmentally friendly coffee businesses. According to Han (2015), the environmental concern can increase awareness of environmental effects, which leads to environmental intentions such as visiting green coffee shops and making promises.

Regarding the personal indicator norm, the mean score is 4.49, a very high level and a standard deviation of 0.575. This means that the respondents patronize environmentally responsible coffee shops that harm the wider environment. This implies that coffee consumers support sustainable coffee shops and ignore coffee shops that neglect green practices. The result coincides with the idea of Caddy (2018), emphasizing the high amount of coffee produced by green coffee shops resulting from paying higher prices of quality coffee products.

As one of the indicators, social environmental garnered a mean score of 4.46 labeled as very high with a standard deviation of 0.618. This means that people close to the respondents encourage them to patronize and visit an environmentally coffee shop to enjoy their coffee. This indicates that the coffee consumer circle of friends and relatives appreciates the green practices of environmentally responsible coffee shops. The findings are incongruent with the statement of Arun (2016), who stressed that consumers frequenting coffee shops are encouraged by parents to choose sustainable coffee shops.

The indicator with the lowest mean score is the responsibility with the mean score of 4.43 or a very high level with a standard deviation of 0.584. This suggests that the respondents believe they are collectively responsible for energy difficulties, energy exhaustion, global warming, and the energy dilemma and can help mitigate, if not eliminate, such environmental issues. This shows that coffee drinkers and coffee establishments protect the environment. The findings support Brown's (2017) assertion that coffee drinkers should reconsider what's in their

cups and how it can assist conserve the ecosystem for future coffee production and other essential purposes.

Significant Difference in the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City when analyzed according to the Profile of Respondents

Table 3 Displays the significant Difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by sex. All the indicators showed no significant difference, wherein the p-values are all higher than the level of significance of 0.05, which means each variable accepts the null hypothesis. Overall, t-test computation showed that male and female respondents showed a very high level of assessment on their user environmental intentions towards green coffee shops with a mean score of 4.50 each. The computed t-value is .095, while the p-value of .924 is higher than the significance level of 0.05, indicating no significant difference and the acceptance of the null hypothesis. This means that male and female respondents expressed the same level of assessment on their consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City. As a result, it is acceptable to conclude that when consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City are studied by sex, there is no significant difference. The findings back up Leary et al.'s (2014) assertion that the coffee shop business is adopting sustainable management because of increased awareness of environmental effects in the larger market, inspiring men and women, customers, to adopt environmental actions or intentions.

Table 3. Significant Difference in the Significant Difference in the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City when Analyzed by Sex

Indicators	Sex		t-value	p-value	Decision on H ₀
	Male	Female			
Environmental issue	4.54	4.51	.588	.556	Accept
Responsibility	4.44	4.43	.207	.836	Accept
Personal Norm	4.47	4.51	.765	.445	Accept
Social Environmental	4.48	4.56	.758	.449	Accept
Environmental Intentions	4.56	4.58	.536	.592	Accept
Green Image	4.53	4.52	.131	.896	Accept
Overall	4.50	4.50	.095	.924	Accept

*p<0.05

Table 4 presents the significant Difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by age. All the indicators showed no significant difference as evidenced by the p-values, higher than the level of significance of 0.05, thereby accepting the null hypothesis for each indicator. The Analysis of Variance overall computation displayed an F-value of .665. At the same time, the p-value of .574 is higher when compared with the level of significance of 0.05, indicating no significant difference resulting in the acceptance of the null hypothesis. This means that the respondents with various age brackets manifested almost the same level of assessment on their consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops indicating parity of perspectives. Therefore, it can be surmised that there is no significant difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by age. According to research by the Korea Consumer Agency (2018), 87.1 percent of coffee shop customers of all ages agree that coffee

shops should reduce disposable products, while only 3.0 percent believe there is no need for coffee shops to restrict disposable products.

Table 4. Significant Difference in the Significant Difference in the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City when Analyzed by Age

Indicators	F-value	p-value	Decision on H ₀
Environmental issue	1.888	.131	Accept
Responsibility	.969	.407	Accept
Personal Norm	.505	.679	Accept
Social Environmental	.554	.646	Accept
Environmental Intentions	.087	.967	Accept
Green Image	.943	.420	Accept
Overall	.665	.574	Accept

*p<0.05

Table 5 shows the significant difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by occupation. Two indicators disclosed no significant differences, namely responsibility and personal norm, while four indicators manifested significant differences as follows: Environmental issue (p-value=.021<0.05), social environmental (p-value=.012<0.05), environmental intentions (p-value=.010<0.05), and green image (p-value=.009<0.05) indicating the rejection of null hypothesis by each of these four indicators. Overall Analysis of Variance (ANOVA) computation showed an F-value of 4.854. At the same time, the p-value of .008 is lower than the significance level of 0.05, indicating a significant difference and the rejection of the null hypothesis. This means that the respondents with different occupations showed a disparity in assessing their consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops. This implies that most of those who showed low environmental intentions are self-employed. It can be stated, therefore that there is a significant difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by occupation. The result is congruent with the statement of Turner (2019), who mentioned that baby boomers had driven the success of coffee shops. Yet, many showed lesser awareness in environmental protection, particularly those engaged in small businesses.

Furthermore, positive customer attitudes towards green products do not always translate into action. Investigate human attitudes influence on consumer green coffee purchase behavior. Thus, the gap between human attitude and buying behavior influences product price, availability, and social. These variables resolve these concerns and encourage customers to purchase green coffee products (Asif et al., 2018).

Table 5. Significant Difference in the Significant Difference in the Consumers' Pro-Environmental Behavioral Intentions towards Eco-friendly Coffee Shops in Davao City when Analyzed by Occupation

Indicators	F-value	p-value	Decision on H ₀
Environmental issue	3.891	.021*	Reject
Responsibility	2.897	.056	Accept

Personal Norm	2.701	.068	Accept
Social Environmental	4.458	.012*	Reject
Environmental Intentions	4.601	.010*	Reject
Green Image	4.748	.009*	Reject
Overall	4.854	.008*	Reject

*p<0.05

Table 6 displays the significant Difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by marital status. All the indicators manifested no significant differences except indicator environmental issues, wherein singles, married, and widow(er) indicated disparity of assessment (p-value=0.43<0.05). This means that singles, married, and widow(er) respondents shared the same perspectives on their environmental intentions towards green coffee shops. Therefore, it can be surmised that there is no significant difference in the user environmental intentions towards green coffee shops in Davao City when analyzed by marital status. The result supports the statement of Yun, & Kim (2019) that more individualized environment coffee shop is increasing drastically to attract more customer, young and old alike, married or not, by their unique concept.

Table 6. Significant Difference on the Significant Difference in the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City when Analyzed by Marital Status

Indicators	F-value	p-value	Decision on H0
Environmental issue	3.170	.043*	Reject
Responsibility	2.123	.121	Accept
Personal Norm	.678	.508	Accept
Social Environmental	.650	.523	Accept
Environmental Intentions	.577	.562	Accept
Green Image	1.237	.291	Accept
Overall	1.334	.264	Accept

*p<0.05

Table 7 displays the significant Difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by educational attainment. Three indicators manifested no significant difference while the other three showed significant Differences as follows: Environmental issue (p-value=.041<0.05), Personal Norm (p-value=.014<0.05), Environmental intentions (p-value=.026<0.05). Elementary respondents showed lower consumers' pro-environmental intentions towards eco-friendly coffee shops.

Overall, computation through Analysis of Variance (ANOVA) yielded an F-value of 2.294. At the same time, the p-value of .077 is higher compared to the level of significance of 0.05, indicating no significant difference and the acceptance of the null hypothesis. This means that the respondents with different educational levels showed parity in their assessment of consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops. Therefore, there is no significant difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City when analyzed by educational attainment. The study findings are consistent with Chen and Lee's (2015), which reveal a favorable association between Taiwanese Starbucks green image and customer buy intent regardless of literacy level.

Table 7. Significant Difference in the Significant Difference on the Consumers' Pro-Environmental Behavioral Intentions towards eco-friendly Coffee Shops in Davao City when Analyzed by Educational Attainment

Indicators	F-value	p-value	Decision on H ₀
Environmental issue	2.775	.041*	Reject
Responsibility	1.047	.371	Accept
Personal Norm	3.586	.014*	Reject
Social Environmental Behavioral Intentions	.899	.442	Accept
Green Image	3.107	.026*	Reject
Overall	1.711	.164	Accept
	2.294	.077	Accept

*p<0.05

CONCLUSIONS AND IMPLICATIONS

The study's main objective was to determine the user environmental intentions towards green coffee shops in Davao City consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City. The level of consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City was very high. There is no significant difference in the consumers' pro-environmental behavioral intentions towards eco-friendly coffee shops in Davao City; when analyzed by age, age, marital status, and educational attainment. However, there is a significant difference when analyzed by occupation. The level of Consumers' Pro-Environmental Behavioral Intentions Towards Eco-Friendly Coffee Shops In Davao City, based on the assessments of the user indicating they are environmentally aware of the coffee shop they visit. The Consumers' Pro-Environmental Behavioral Intentions towards Eco-Friendly Coffee Shops in Davao City showed a great difference when analyzed by occupation, indicating environmental intentions level. This is opposite to when analyzed by age, sex, marital status, and educational attainment of customer evaluation because it is almost the same environmental intentions level. The coffee shop owners and managers may go green to the highest level and influence their customers to practice the same by raising their awareness through posters and messages on their advertisements and orient their customers while ordering coffee. The coffee shop customers should cater to coffee shops that practice eco-friendly activities, particularly the cups they are using to serve the customers and their appropriate way of disposing of their waste. The students of HRM-CHE should commit into their memory things that would help augment their sales in the future as food entrepreneurs and practice eco-friendly behavior that would attract aware customers. Future researchers may pursue similar studies, particularly factors affecting the sales of Coffee Shops in Davao City.

REFERENCES

- Arun, A. (2016). Study on sales of coffee preferred by customers. *International Journal of Advanced Research in Management and Social Sciences*, 5(12), 2278-6236
- Asif, M., Wang, X., Nasiri, S., & Ayyub, S. (2018). Determinant factors are influencing organic food purchase intention and the moderating role of awareness: A comparative analysis. *Food Qual. Prefer*, 63, 144–150.
- Bhuiyan, S. & Sharma, J.K. (2017). Predicting consumer pro-environmental behavioral intention: The moderating role of religiosity. *Rev. Int. Bus. Strategy*.27, 352-368.

- Brown, V. (2017). Coffee part 1: How your cup affects the environment. Retrieved from <https://livablefutureblog.com/2017/08/coffee-part-1-environment>
- Caddy, T. (2018). Latte levy: UK coffee drinkers want to go green, but price is a barrier. Retrieved from <https://www.mintel.com/press-centre/food-and-drink/latte-levy-uk-coffee-drinkers-want-to-go-green-but-price-is-a-barrier>
- Chen, M.F., & Lee, C.L. (2015). The impacts of green claims on coffee consumers' purchase intention. *Br. Food J.* 117, 195–209.
- Chen, M.F., & Tung, P.J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 3, 221–230.
- Energy Economy (2018). Eco-Friendly straws, Blue Starbucks' by utilizing individual cups. Retrieved from <http://www.ekn.kr/news/article.html?no=434101>
- Han, H.S. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. *Tourism Management*, 47, 164–177.
- Han, H.S., & Hwang, J.S. (2016). Cruise travelers' environmentally responsible decisionmaking: An integrative framework of goal-directed behavior and norm activation process. *International Journal of Hospitality Management*, 53, 94–105.
- Jang, Y.J., Woo, G.K., & Lee, H.Y. (2015). Coffee shop consumers' emotional attachment and loyalty to green stores: The moderating role of green consciousness. *International Journal of Hospitality Management*, 44, 146–156.
- Lita, R.P., Surya, S., Maruf, M., & Syahurl, L. (2014). Green attitude and behavior of local tourists towards hotels and restaurants in West Sumatra, Indonesia. *Procedia Environmental Science*, 20, 261–270.
- Murphy, M. & Dowding, T.J. (2017). The coffee bean: A value chain and sustainability initiatives analysis. Retrieved from <https://global.business.uconn.edu/wp-content/uploads/sites/1931/2017/01/The-Coffee-Bean.pdf>
- Oliver, M. (2017). How does your coffee habit affect the environment? Retrieved from <https://www.wellbeing.com.au/at-home/planet/coffee-habit-affect-environment.html>
- Swaim, J.A., Maloni, S.A., & Napshin, S.A. (2014). Influences on student intention and behavior toward environmental sustainability. *Journal Business Ethics*, 124, 465–484.
- Turner, A. (2019). Is roasting your own coffee beans worth the time & effort? Coffee Channel. Retrieved from <https://coffee-channel.com/is-roasting-your-own-coffee-beans-worth-the-time-effort/>
- Ur, R., Ihsan, H., & Ishaq, Z. (2017). The impact of brand image on purchase intention: Moderating role of store image in Pakistan's retail sector. *IUP Journal of Brand Management*, 14, 54–66.
- Yun, S.M., & Kim, T.U. (2019). What do coffee shop entrepreneurs need to do to raise pro-environmental customer behavioral intentions? *Sustainability*, 11, 2666