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Email : editorijhess@gmail.com

The Role Of The Fogg Behavioural Model In Bridging The Gap Between Intention And Behaviour In The Sustainable Consumption Of Bottled Water In Indonesia

Maria Ramanyani[1)], **Willy Arafah**[2)], **Robert Kristaung**[3)*]
[1)] Program Doktor Ilmu Ekonomi, Universitas Trisakti, Jakarta, Indonesia
[2,3)] Universitas Trisakti, Jakarta, Indonesia

*Corresponding Author
Email: mlimwen2@gmail.com

Abstract

This research aims to analyse the role of the Fogg Behaviour Model in bridging the gap between purchase intention and behaviour on sustainable consumption of bottled drinking water. The research design/plan used is based on hypothesis testing. This research is quantitative and non-experimental. It is based on a questionnaire sent to 228 respondents. The survey was conducted in July 2024, and respondents were consumers of bottled water. Using SPSS and SmartPLS to process and analyse data. The results of the research show that there is a positive and significant influence of green purchase intention on motivation, ability and urge to buy bottled drinking water. Motivation, ability and prompting have been shown to act as a complete mediator to close the gap between green purchase intention and green purchase behaviour. The mediating effects of motivation, ability and prompting can lead to a stronger green purchasing behaviour. There are limitations to this research, including the fact that it is quantitative and conducted over a relatively short period of time, and that it only looks at sustainable purchasing behaviour for bottled water, which is relatively affordable.

Keywords: Green Purchase Intention, Motivation, Ability, Demand, Green Purchase Behaviour.

INTRODUCTION

The presence of pressures and limitations on water resources (water scarcity) has the potential to result in conflicts, thereby rendering clean water a costly commodity. It is imperative to recognise that clean water is the primary source of healthy drinking water. The exploitation of groundwater is a pervasive phenomenon in developing countries, a notable example of this being Indonesia. This practice has been shown to result in numerous detrimental outcomes, including environmental degradation and the deterioration of water ecosystems.

The government's inadequate distribution infrastructure and piped water services are contributing to uncontrolled groundwater withdrawal behaviour. According to the Ministry of PUPR (2023), access to piped water in Indonesia reached only 19.51 per cent of the population in 2022, so well water is still the main source of clean water to meet people's daily needs (Genter et al., 2023).

The highest volume of groundwater withdrawal in Indonesia is for the purpose of meeting the demand for drinking water. REFILLED WATER vendors were identified as the most top ranked, with water collection through boreholes wells/pumps and protected deep wells ranking second and third, respectively. The Central Bureau of Statistics (BPS) has demonstrated that in 2020, refillable drinking water emerged as the predominant source of drinking water utilised by households (29.1%) in Indonesia. The absence of investment capital and the utilisation of simple technology in refillable drinking water treatment, coupled with the convenience of obtaining microbusiness licences, has fostered the proliferation of refillable drinking water depots in densely populated areas. In the pursuit of consumer attraction, businesses frequently implement promotional strategies, including the provision of economical prices.

The drinking water treatment technology of the branded AMDK industry is distinguished by its meticulous attention to the quality of raw water, with the objective of ensuring compliance with drinking water hygiene and health standards as delineated by the Indonesian National Standard (SNI), encompassing physical, chemical and bacteriological requirements as stipulated

in the Decree of the Minister of Health. The introduction of branded AMDK is anticipated to enhance the quality of life within communities by addressing the body's hydration requirements, thereby becoming a pragmatic and readily accessible option, particularly in urban areas due to the comparatively higher levels of consumer activity and mobility. Moreover, there is a prevailing belief that bottled water from a known brand is more hygienic and has a fresher flavour.

The issue of limited water resources in the context of increasing demand for clean and healthy drinking water is a substantial problem. The transition towards sustainability or green consumption behaviour represents a fundamental opportunity to reduce environmental impacts, whilst also promoting economic growth. Furthermore, increased public awareness of environmental issues leads to greater demand for innovation in green products (Han et al., 2017).

The heightened public cognisance of environmental issues has given rise to the emergence of a consumer demographic that has come to be termed 'green consumers'. This group exhibits a deliberate propensity to opt for and procure environmentally sustainable products, with the objective of diminishing pollution and engendering a favourable impact on the global environmental crisis (Nygaard and Silkoset, 2023).

Notwithstanding the auspicious origins of environmental awareness and green marketing, studies have castigated the exaggeration that claims of environmental impact can underpin alterations in actual purchasing behaviour (Gordon et al., 2021). However, it has been demonstrated that an individual's environmental interest does not invariably translate into eco-friendly purchasing behaviour (He et al., 2021; Tawde et al., 2023).

Since its introduction more than a decade ago, the Fogg behaviour model (FBM) has attracted considerable attention from researchers in various fields, including psychology, marketing, technology design and product development. According to FBM, the occurrence of behaviour is contingent upon the presence of three factors: motivation, ability, and the presence of appropriate triggers (Fogg, 2009).

A plethora of studies have been conducted that have examined the implementation of FBM in a variety of contexts. These studies have demonstrated the model's capacity for adaptability and its significance in comprehending human behaviour in diverse scenarios (Agha et al., 2019). FBM can be applied to the intention-action gap phenomenon by highlighting three key elements required to trigger behaviour. These elements are motivation, ability, and trigger (prompt) (Nascimento & Loureiro, 2022).

Recent research employing FBM has been demonstrated to encompass a broad spectrum of disciplines and applications, as evidenced by the work of Jyothy et al. (2024) within the domain of learning, teaching and research. Plak et al. (2023) utilised FBM in an educational context, while Adekanmbi et al. (2022) employed it within the domain of public health. Additionally, Aldrige et al. (2021) promoted preventive behaviours during the course of the pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Despite its extensive implementation across diverse disciplines, there remains a paucity of research specifically addressing the utilisation of FBM in influencing green purchase behaviour. A substantial body of research has been dedicated to the fields of education, health, psychology and fashion, with a paucity of attention being paid to the potential of these disciplines to raise pro-environmental awareness and encourage pro-environmental action. This finding indicates a lacuna in the extant research concerning the adoption of FBM as an intervention strategy to promote behavioural change in support of environmental sustainability.

Citing the paucity of extant literature and empirical phenomena in this area, the present study aims to provide a more detailed formulation of the research problem. This is achieved by posing and then investigating the following research questions:

1. What is the relationship between motivation, ability and prompt in relation to green purchase behaviour?
2. How do green purchase intentions influence motivation, ability and prompt?

3. How do green purchase intentions, motivation, ability and prompt influence green purchase behaviour in relation to environmentally friendly drinking water?

RESEARCH METHODS

The present research employs a quantitative methodology, specifically hypothesis testing. The data was collected using a cross-sectional method, and the approach employed in this study was a survey method through primary data collection in the field.

The present study focuses on consumers residing in major Indonesian cities. The study sample comprised residents of several provincial capitals in Indonesia who still use other water sources (such as refill water, tank water or well water) for consumption. It is imperative to be aware of and consume a national drinking water brand whose water source is environmentally friendly and does not cause damage to the ecosystem. It is imperative to be cognizant of the technological processes employed in the treatment of water, including distillation (a process of water evaporation), filtration (a process of water purification through reverse osmosis), and desalination (a process of water deionization through distillation).

The data reveals that the majority of respondents identified as female (61%), while the male demographic constituted 39% of the sample. The survey revealed that more than half of the respondents, 129 people (56%), reside in Jabodetabek, 61 people (26%) live in Java and Bali, and the remaining 38 people (17%) live outside Java & Bali. This distribution indicates that the survey's dissemination was quite even and that the practice of using underground water or refill water is still prevalent in various regions across Indonesia.

The majority of respondents were in the age group of 25 to 45 years old, meaning that the respondents were of productive age. A mere 59 respondents (26%) were housewives, students, or retirees, suggesting that the majority of respondents possess sufficient income to purchase and consume environmentally friendly bottled water, despite the majority reporting expenditures of up to IDR 5 million per month.

RESULT AND DISCUSSION

The results of the hypothesis testing are presented in the following table:

Table 1
Hypothesis Test

H	***Path***	***Beta***	***T Statistics***	***P Values***	**Conclusion**
1	*Green Purchase Intention → Motivation*	0.770	17.882	0.000	Supported
2	*Green Purchase Intention → Ability*	0.593	8.565	0.000	Supported
3	*Green Purchase Intention → Prompt*	0.458	6.461	0.000	Supported
4	*Motivation → Green Purchase Behavior*	0.398	3.686	0.000	Supported
5	*Ability → Green Purchase Behavior*	0.290	2.541	0.011	Supported
6	*Prompt → Green Purchase Behavior*	0.261	3.366	0.001	Supported

7	*Green Purchase Intention → Green Purchase Behavior*	-0.048	0.503	0.616	Not Supported
8	*Green Purchase Intention → Motivation → Green Purchase Behavior*	0.307	3.745	0.000	Supported
9	*Green Purchase Intention → Ability → Green Purchase Behavior*	0.172	2.695	0.007	Supported
10	*Green Purchase Intention → Prompt → Green Purchase Behavior*	0.120	2.858	0.004	Supported

Source: Processing Results with SMARTPLS 3

Discussion of Research Results

Hypothesis 1: The Effect of Green Purchase Intention on Motivation

The findings of the study indicate a direct impact of Green Purchase Intention on Motivation, as evidenced by a T Statistics value of 17.882 (P Value ≤ 0.05). This outcome provides substantial evidence in support of Hypothesis 1. Furthermore, the study reports a significant relationship between Green Purchase Intention and Resource-Based View, with a value of 0.770.

The present study investigates the relationship between Green Purchase Intention and Motivation, with a particular focus on the role of environmentally sustainable bottled water in driving consumer behaviour. The results of the study indicate a positive and significant effect of Green Purchase Intention on Motivation. The hypothesis suggests that the stronger the respondent's intention to purchase environmentally friendly bottled water, the more they will feel motivated to consume it. This is due to the fact that the production of such bottled water aligns with the principles of maintaining the sustainability of water resources, and the sourcing of the water is from protected springs. The study also finds that respondents who consume environmentally friendly bottled water are motivated by its fresher taste and its beneficial effect on body hydration.

Hypothesis 2: The Effect of Green Purchase Intention on Ability

The findings of the study indicate a direct impact of Green Purchase Intention on Ability, as evidenced by a T Statistics value of 8.565 (P Value ≤ 0.05). This outcome provides substantial evidence in support of Hypothesis 2. The magnitude of the effect of Green Purchase Intention on Ability is determined to be 0.593.

The present study explores the relationship between Green Purchase Intention and Ability, with the hypothesis being tested of whether the stronger the intention to purchase environmentally friendly bottled water, the more respondents feel able or easy to buy such products because of their portability and ease of purchase and consumption in everyday life.

Hypothesis 3: The Effect of Green Purchase Intention on Prompt

The results obtained demonstrate that Green Purchase Intention exerts a direct effect on Prompt, as evidenced by a T Statistics value of 6.461 (P Value ≤ 0.05). This finding provides substantiation for Hypothesis 3. The magnitude of the influence of Green Purchase Intention on Prompt is determined to be 0.458.

The present study investigates the impact of Green Purchase Intention on Prompt, with the hypothesis being tested of whether the higher the intention to purchase environmentally friendly bottled water, the stronger the trigger to make a purchase. It is predicted that respondents will feel more inclined to make a purchase due to the convenience of receiving a delivery service, given the widespread availability of environmentally friendly bottled water in their vicinity.

Hypothesis 4: The Effect of Motivation on Green Purchase Behaviour

The findings of the study indicate a direct impact of motivation on green purchase behaviour, as evidenced by a T-statistic value of 3.686 and a P-value of less than 0.05. This outcome provides substantial evidence in support of hypothesis 4. The magnitude of the effect of motivation on green purchase behaviour is estimated to be 0.398.

The present study explores the relationship between motivation and green purchase behaviour. The hypothesis is that there is a positive and significant effect of motivation on green purchase behaviour. The study finds that respondents who feel happy to consume environmentally friendly bottled water due to its fresher taste and its benefits for body hydration, sourced from protected springs, are more likely to feel able to make actual purchases of environmentally friendly bottled water products. Furthermore, if the bottled water product is processed in accordance with the principles of preserving water resources, given that it is sourced from protected springs and is accompanied by an environmentally friendly label, then the purchase of environmentally friendly bottled water can be considered a valid transaction.

Hypothesis 5: The Effect of *Ability* on *Green Purchase Behaviour*

The findings of the study indicate a direct impact of ability on green purchase behaviour, as evidenced by a T-statistic value of 2.541 and a P-value of less than 0.05. This outcome provides substantial evidence in support of hypothesis 5. The magnitude of ability's influence on green purchase behaviour is estimated to be 0.290.

The impact of ability on green purchase behaviour is positive and significant. The more respondents perceive that it is convenient to carry and purchase environmentally friendly bottled water products, the more likely they are to make actual purchases. Furthermore, if AMDK products are processed in accordance with the principles of water resource sustainability, given their provenance from protected springs, and are accompanied by an environmentally friendly label, then consumers will be more inclined to purchase environmentally friendly AMDK products.

Hypothesis 6: The Effect of *Prompt* on *Green Purchase Behaviour*

The findings of the study indicate a direct impact of Prompt on Green Purchase Behaviour, as evidenced by a T Statistics value of 3.366 (P Value ≤ 0.05). This outcome lends support to Hypothesis 6. The influence of Prompt on Green Purchase Behaviour is estimated to be 0.261.

The present study explores the impact of Prompt on Green Purchase Behaviour, with a particular focus on the role of environmental awareness and access to delivery services in influencing consumer decisions. The findings indicate a positive and significant relationship between respondents' perceptions of available options and their propensity to make actual purchases of environmentally friendly bottled water products. Specifically, it is observed that an increase in respondents' perception of available options, particularly in relation to environmentally friendly bottled water, is associated with a corresponding increase in the number of respondents who make purchases of these products. Furthermore, if the bottled water product is processed in accordance with the principles of preserving water resources, given that it is sourced from protected springs and is accompanied by an environmentally friendly label, then the purchase of environmentally friendly bottled water can be considered a valid transaction.

Hypothesis 7: The Effect of *Green Purchase Intention* on *Green Purchase Behaviour*

The findings of the study indicate that Green Purchase Intention does not exert a direct influence on Green Purchase Behaviour, as evidenced by a T Statistics value of 0.503 (P Value > 0.05). This outcome refutes Hypothesis 7. The effect of Green Purchase Intention on Green Purchase Behaviour is -0.048.

The impact of Green Purchase Intention on Green Purchase Behaviour is found to be non-significant. The increase in Green Purchase Intention is indicative of a strong intention to purchase environmentally friendly bottled water, as it is processed in accordance with the

principles of maintaining the sustainability of water resources. Respondents express a willingness to purchase environmentally friendly bottled water sourced from protected springs; however, they do not necessarily feel compelled to purchase bottled water with an environmentally friendly label, nor do they consistently purchase environmentally friendly bottled water from protected springs.

Hypothesis 8: The Effect of *Green Purchase Intention* on *Green Purchase Behaviour* mediated by *Motivation*

The findings of the study indicate that the impact of Green Purchase Intention on Green Purchase Behaviour, moderated by Motivation, is 0.307. This is supported by a T-statistic of 3.745, with a P-value of less than 0.05. This finding provides evidence in support of Hypothesis 8.

The present study hypothesises that there is a positive and significant mediating effect of Motivation between Green Purchase Intention and Green Purchase Behaviour. The propensity to procure eco-friendly bottled water is contingent on the perception of its taste and hydration benefits, which are attributed to its sourcing from protected springs. The strength of the purchase intention for eco-friendly bottled water is directly proportional to the respondents' level of contentment in consuming it. Furthermore, if the bottled water product is processed in accordance with the principles of preserving water resources, given that it is sourced from protected springs and is accompanied by an environmentally friendly label, then the purchase of environmentally friendly bottled water can be considered a valid transaction.

Hypothesis 9: The Effect of *Green Purchase Intention* on *Green Purchase Behaviour* mediated by *Ability*

The results obtained demonstrate that the effect of Green Purchase Intention on Green Purchase Behaviour, mediated by Ability, is 0.172. This is supported by a T Statistics value of 2.695 (P Value ≤ 0.05), thus providing evidence in support of Hypothesis 9.

The present study finds that there is a positive and significant mediating effect of Ability between Green Purchase Intention and Green Purchase Behaviour. The correlation between respondents' perceptions of the ease of handling environmentally friendly bottled water for daily use and the ease of finding and buying it, and their intention to purchase it, is significant. Furthermore, if the bottled water product is processed in accordance with the principles of preserving water resources, given that it is sourced from protected springs and is accompanied by an environmentally friendly label, then the purchase of environmentally friendly bottled water can be considered a valid transaction.

Hypothesis 10: The Effect of *Green Purchase Intention* on *Green Purchase Behaviour* mediated by *Prompt*

The results obtained demonstrate that the effect of Green Purchase Intention on Green Purchase Behaviour is mediated by Prompt to the extent of 0.120, and that the value of the T-Statistic is 2.858 (P Value ≤ 0.05). This finding provides support for Hypothesis 10.

The present study finds that there is a positive and significant mediating effect of Prompt between Green Purchase Intention and Green Purchase Behaviour. The findings of the study indicate a positive correlation between respondents' perception of the delivery service and their neighbourhood's environmental impact, and their inclination to purchase environmentally friendly bottled water. Furthermore, if the bottled water product is processed in accordance with the principles of preserving water resources, given that it is sourced from protected springs and is accompanied by an environmentally friendly label, then the purchase of environmentally friendly bottled water can be considered a valid transaction.

CONCLUSION

The present study demonstrates a positive and significant relationship between green purchase intention and motivation, as well as a positive and significant relationship between green purchase intention and ability. Furthermore, the study shows a positive and significant relationship between green purchase intention and promptness.

The findings of this study demonstrate a positive and significant relationship between motivation and green purchase behaviour. Furthermore, the results indicate a positive and significant relationship between ability and green purchase behaviour. In addition, the study shows a positive and significant relationship between promptness and green purchase behaviour. However, the study does not reveal a significant relationship between green purchase intention and green purchase behaviour.

The mediating effect of motivation has been demonstrated to increase the influence of green purchase intention on green purchase behaviour. Similarly, the mediating effect of ability has been shown to increase the influence of green purchase intention on green purchase behaviour, and the mediating effect of prompt has been demonstrated to increase the influence of green purchase intention on green purchase behaviour.

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