From concern to consumption: how environmental identity and marital status shape ethical consumption behaviour

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ABSTRACT

Given environment and social problems continue to grow, it is timely to study how to facilitate ethical consumption behaviour. Prior literature mainly examines how environmental concern predicts ethical consumption behaviour. However, environmentally concerned individuals do not necessarily consume ethically. Hence, the research outcome remains inconclusive. Through the dual-layered psychological mechanism and life course-based contextual factors of environmental identity and marital status, this study examines the mediating effect of environmental identity between environmental concern and ethical consumption behaviour to resolve the concern-behaviour gap by extending the Attitude-Behaviour-Context (ABC) theory and integrating marital status as a life course-based contextual moderator in explaining when identity is more likely to facilitate ethical consumption behaviour. This study employed Structural Equation Modelling (SEM) with a sample of 321 working adults from urban cities. The finding confirmed that environmental concern significantly influences ethical consumption behaviour, and this effect was also partially mediated by environmental identity. Additionally, the moderating effect of marital status is confirmed. The findings of this study were expected to shed light on the scant literature on ethical consumption behaviour, especially the mediating effect of EID and the moderating effect of marital status. Overall, it is envisaged that our findings are timely because they offer valuable theoretical and practical implications to policymakers, marketers, and environmental advocates to design targeted strategies to facilitate ethical consumption behaviour, as part of the efforts in alleviating adverse consumption impact. Lastly, this study provides a nuanced theoretical contribution by articulating the mediating role of environmental identity in bridging the concern-behaviour gap and conceptualising marital status as a boundary condition to translate environmental identity into ethical consumption behaviour.

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1. INTRODUCTION

The study of ethical consumption behaviour (ECB) has received considerable attention in both the academic and business worlds due to the unprecedented environmental and social issues caused by modern consumption culture (Stiefenhofer, 2025). ECB is a deliberate consumption effort aligned with environmental protection, social justice, and political responsibility to alleviate the adverse impact of modern consumption culture (Carrington et al., 2021; Sudbury-Riley & Kohlbacher, 2016; Toti & Moulin, 2016). In developing countries, the advancement of industrial development and urbanisation has brought more choices and affordable offerings to customers, promoting a modern consumption culture, which intensifies environmental stress and social externalities. However, consumers are becoming more aware of the impact of their purchasing and consumption patterns through media coverage, consumer activist movements, and ethical accessibility to products. So, these trends should be addressed urgently to understand how environmental concern consumers can be consistently stimulated and translated into ECB.

For decades, environmental concern (EC) has been known as an indispensable attitudinal predictor of ECB (Borusiak et al., 2021; Chen et al., 2022; Xu et al., 2021). Dunlap and Jones (2002) delineate EC as individuals' awareness of environmental problems, the seriousness of environmental degradation, concern about human actions on the natural environment, and willingness to take necessary actions to minimise environmental problems. Past studies steadily show that the more an individual is concerned about the environment, the more they support environmentally and socially responsible consumption (Pong & Tam, 2023; Tan et al., 2026). A recent survey by McKinsey also reveals that about 80 percent of consumers are willing to embrace an ethical and sustainable lifestyle for a just environment and society (Jordan et al., 2024). However, a growing body of literature highlights the discrepancy between EC and ECB (known as the concern-behaviour gap) (Pong & Tam, 2023; Smith & Kingston, 2021; Tam & Chan, 2018), whereby concern does not always translate into action. This suggests that the attitudinal factor of EC is insufficient to explain actual ECB. Researchers (e.g., Gifford, 2014; Jia & Liang, 2025; Lou & Li, 2021) raise an important question about the psychological process against the concern-behaviour gap to convert EC into sustained EBC.

Among those psychological mechanisms, environmental identity (EID) occurs when people view the natural world as a core part of who they are. This self-image naturally guides their behaviour and choices across all areas of life (Clayton, 2003; Gifford, 2007, 2014; Lou & Li, 2021). Therefore, when EC is internalised as an identity, ECB becomes a self-expression behaviour that is consistent with one's self-concept rather than fostered by external pressure. Although EID is theoretically relevant, researchers tend to study EID as a predictor (Clayton et al., 2021; Perera & Johnson, 2021; Sierra-Barón et al., 2023), which limits its mediator role between EC and ECB.

Drawing on attitude-behaviour-context (ABC) theory by Guagnano et al. (1995), EC is conceptualised as the attitudinal factor, EID is positioned as a psychological contextual mechanism, while ECB is the behavioural outcome. ABC theory posits that attitude alone is insufficient to bring about behaviour. Notably, the presence of a contextual condition leads to an attitude towards subsequent behaviour. The present study extends the ABC framework by integrating marital status as a socio-demographic boundary condition that may strengthen identity-based behaviour. Marital status potentially reshapes individuals' responsibility, future planning, and consumption priorities (Nagargoje et al., 2022), which may echo the intensity in translating EID into ECB.

Following the identified gaps as discussed, the direct relationship between consumers' EC and ECB among working adults in Malaysia is first examined. Second, the mediating effect of EID between EC and ECB is examined. Third, assess the moderating effect of marital status on EID and ECB. The integration of EID and marital status into the ABC theory could advance the body of knowledge of the ECB while minimising the concern-behaviour gap. Nonetheless, the findings from this study are also beneficial to marketers, policymakers, and NGOs to discover when and how EC can be translated into sustained ECB.

2.   LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1   Attitude-Behaviour-Context (ABC) Theory

ABC theory was first proposed by Stern and Oskamp (1987) and further refined by Guagnano et al. (1995), articulating that the combination of environmental attitude (i.e., concern, worldview, belief) and contextual factors determines subsequent behaviour. Yadav and Kumari (2024) highlight that the contextual factor is also considered a mediator. In the ABC theory, attitude reflects individuals' beliefs, values, and worldviews that influence behaviour (Jia & Liang, 2025; Maduku, 2024; Pong & Tam, 2023; Zhou et al., 2022). Meanwhile, contextual factors serve as mediators that may aid and inhibit certain behaviours (Aral & López-Sintas, 2023; Xing et al., 2022).

In this study, EC represents the attitudinal factor reflecting a broad environmental attitude that encompasses individuals' beliefs and worldviews about environmental issues and perceived urgency to address them (Duong et al., 2026; Jia & Liang, 2025; Lou & Li, 2021). While EID is a psychological contextual mechanism that internalises EC as part of their self-concept (Clayton & Karazsia, 2020; Udall et al., 2021). Individuals with strong EID are more likely to react consciously not to harm the environment while aligning with their environmental worldviews (Items et al., 2019; Olivos & Clayton, 2017) to promote ECB.

To advance the ABC theory, marital status is introduced as a socio-demographic moderator that functions as a boundary condition to examine the strength and direction of the EID-ECB relationship. In the study of the human life-course, marital status potentially influences the decision-making process (Nagargoje et al., 2022; Wang & Kang, 2019; Wu et al., 2024), which affects consumption patterns.

2.2   The relationship between EC and ECB

ECB is a deliberate form of consumption behaviour driven by attitudes related to environmental safety, employee welfare, child labour, animal rights, and resource conservation (Arman & Mark-Herbert, 2024; Casais & Faria, 2022; Hasan et al., 2023). Newholm et al. (2015) delineate that the ECB mirrors humanity's consumption by respecting cultural diversity and biodiversity, which is paramount for sustainable development and human well-being. Zollo (2021) further emphasises that society's resilience can be improved by achieving a balanced ecosystem through ECB. For years, the study of the ECB has emphasised different aspects of phenomena like green consumption (Joshi & Rahman, 2015; Lou et al., 2022; Yadav & Kumari, 2024), sustainable consumption (Maduku, 2024; Tomşa et al., 2021), mindfulness consumption (Items et al., 2019), and fair trade and boycott (Berki-Kiss & Menrad, 2022), which are linked to the ECB. Therefore, the ECB is related to an individual's supportive actions towards products, brands, or companies that align with their ethical concerns and to boycotting those that contradict them (Arman & Mark-Herbert, 2024).

EC is one of the primary predictors of ECB (Borusiak et al., 2021; Chen et al., 2022; Maduku, 2024; Xu et al., 2021). Researchers define Environmental Concern (EC) as a broad attitude that includes awareness and emotional reactions to ecological issues. This mindset aligns with Dunlap's New Ecological Paradigm (NEP) and drives behaviours that mitigate environmental damage (Duong et al., 2026; Jia & Liang, 2025; Lou & Li, 2021). Moreover, Amérigo et al. (2012) argue that EC reflects an individual's attitude towards the human-nature relationship when the person interprets environmental issues. So, when a person has positive attitudes, they tend to engage in environmental protection measures (Maduku, 2024; Pong & Tam, 2023). Against this backdrop, individuals concerned about the current state of environmental and social conditions incline to ECB (Borusiak et al., 2021; Chen et al., 2022; Shin et al., 2017).

Past researchers (e.g., Borusiak et al., 2021; Chen et al., 2022; Shin et al., 2017) affirmed that EC significantly predicts ECB through empirical studies. For instance, Shin et al. (2017) report that EC consumers prefer to visit locally sourced restaurants because this could shorten transportation distances and

reduce greenhouse gas emissions. Chen et al. (2022) asserted that enhancing EC among consumers significantly affects the ecological purchasing behaviour among Chinese adults. Similarly, Borusiak et al. (2021) affirm that Spanish speakers concerned about the environment prefer to buy from second-hand shops. This signifies that when people become more concerned about the environment, this could lead to greater ECB. Hence, the researcher hypothesises that:

H$_1$: Environmental concern positively influences ethical consumption behaviour.

2.3   The Mediating Effect of EID between EC and ECB

Researchers have been studying EID since the 1990s to understand the psychological process that inspires environmental behaviour (Gifford, 2014; Jia & Liang, 2025; Lou & Li, 2021). EID is grounded in identity theory, which connects attitudes to the identities based on individuals' roles and their role-related behaviour. EID aids individuals in forming self-concepts by connecting them with humans and nonhumans in the environment, emotionally attaching to them, feeling important and belonging to them (Pong & Tam, 2023). Similar to another collective identity, such as place identity, EID explains a sense of connection, as a part of the whole, and recognising a similarity between oneself and others. In this regard, EID expounds on the relationship between humans and various environments, including nature, built, and society, that influence how they perceive their surroundings and behave responsibly towards them (Clayton, 2003; Rahmani et al., 2022). According to Clayton (2003, p.45), EID is defined as "…*a sense of connection to some part of the human and nonhuman environment that affects the way we perceive and act towards the world; the belief that the environment is important to us and an important part of who we are*."

Udall et al. (2021) point out that different aspects of identity that a person holds could influence their behaviour in different contexts. The linkage between identity and role is called "role identities." For instance, familial identities include spouse, parents, and professional identities. These role identities will eventually influence behaviour because each role carries different meanings and expectations for the individuals. In the meta-analysis of Udall et al. (2021) affirm that human behaviour and choices are well predicted through identity. Researchers (e.g., Clayton et al., 2021; Pong & Tam, 2023; Sierra-Barón et al., 2023) further argue that individuals tend to behave consistently with identity, which refers to identity-based behaviour.

EID is not only a strong predictor of behaviour and action (Rahmani et al., 2022) but also a mechanism to link attitude and behaviour to minimise the gap (Bamberg et al., 2021; Clayton & Karazsia, 2020; Lou et al., 2022; Udall et al., 2021). A meta-analysis by Zhuo et al. (2022) contends that individuals may not necessarily behave consistently with their attitude in the green consumption context if the psychological connection of self-concept is absent. On this basis, Perera et al. (2021) disclose the mediating role of EID between anthropocentric and egobiocentric values and intention to buy green products. The study of Javaid et al. (2024), which used 367 young adults, also confirms the mediating role of EID to convert mindfulness to environmental satisfaction. Additionally, Ahmed et al. (2025) reveal that the relationship between environmental commitment, green motivation, and green purchase intention is mediated by EID. Given that the psychological contextual mechanism role of EID can enhance the understanding of attitude-behaviour, we hence hypothesised that,

H$_2$: Environmental identity positively mediates the relationship between environmental concern and ethical consumption behaviour.

2.4   The Moderating Effect of Marital Status on EID and ECB

Marital status refers to the civil status of an individual related to the marriage laws or customs of a country (Central Statistics Office, 2025), which functions as a life-stage maker. The previous literature on the ECB documented that marital status was a predictor or control variable, but merely considered it as a social-demographic boundary condition moderator (Shaw & Shiu, 2003; Wang & Kang, 2019; Wu et al.,

2024). For instance, marital status is being studied as a predictor in studies related to social engagement and depression symptoms by Wu et al. (2024) and seniors' disaster resilience by Kwan and Walsh (2017). Both studies reveal that marital status significantly and positively improves individuals' social engagement and life satisfaction. The studies indicate that being unmarried and living without a partner worsens disaster-related results.

On the other hand, Nagargoje et al. (2022) report that marital status moderates the relationship between social participation and life satisfaction among older adults in India. The researcher points out that even older adults feel redundant social participation, but living with a spouse improves overall life satisfaction compared with those without a spouse. Wu et al. (2024) also confirm the moderating effect of marital status in their study in China.

Although marital status has rarely been tested as a moderator in ethical consumption studies, it aligns with the ABC theory, which highlights the contribution of boundary conditions in examining behaviour and action, as suggested by Yadav and Kumari (2024). The researchers articulate that married individuals may demonstrate greater ethical concern by prioritising family welfare, future generations, and social responsibility, showing the necessity to further examine the moderating role of marital status between EID and ECB. Hence, we postulate that,

H_3: Marital status moderates the relationship between EID and ECB, so that, when marital status is positive, it strengthens the relationship between EID and ECB.
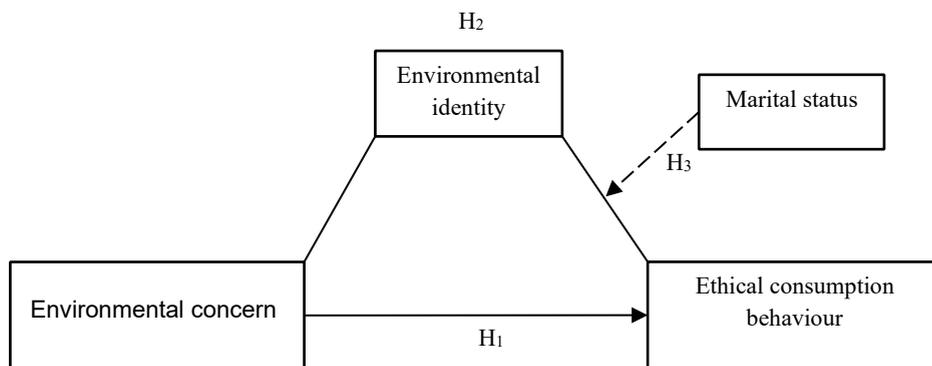
2.5 Proposed Research Framework

Fig. 1. Research Framework

3. RESEARCH METHODOLOGY

3.1 Participants and Procedures

For this study, a self-administered questionnaire survey was adopted. Data were collected physically from working adults aged 25 to 64 in the top 5 urban cities in Malaysia, namely Putrajaya, Kuala Lumpur, Selangor, Malacca, and Penang (Department of Statistics Malaysia, 2023). Among these five cities, 100 percent of the population in Putrajaya and Kuala Lumpur lives in urban areas. This was followed by Selangor (95.8 percent), Penang (92.5 percent), and Malacca (90.9 percent) (Shah & Iskandar, 2023). Quota sampling was used to balance the proportion of working adults across these cities (Simkus, 2023; Tan et al., 2026). Quota sampling was used by calculating the number of respondents required from each city. To calculate sample size, G-power analysis with the effect size (f^2) of 0.15, 80% of statistical power, and a significant level of (α) 0.05, which indicates the minimum requirement of 85 samples. However, to

generalise the findings of this study, 500 questionnaires were distributed, and 358 were received following the suggestion of Kang (2021) and Memon et al. (2020). After removing missing data and outliers, 321 completed and valid questionnaires were used for final analyses.

The questionnaire comprises five sections. First, one qualifying question was used to ensure that the correct respondents were reached. Second, in sections two to four, the respondents were asked questions about ECB, EC, and EID. Third, the respondents' demographic profile is in section five.

EC, EID, and ECB were measured by using a seven-point Likert scale because it is a valid and appropriate measurement scale to provide a spectrum of choices for the respondents and captures a more nuanced perspective of their opinions (Clayton et al., 2021; Tomşa et al., 2021; Toti et al., 2021). EC was measured using the revised NEP scale by Dunlap et al. (2000). The EID was adapted from Clayton's (2003) 11-item scale. Meanwhile, the ECB's scale was adapted from Toti and Moulins (2016). EID and ECB were measured as unidimensional constructs using a reflective measurement model.

The data was analysed using PLS-SEM using SmartPLS 4.0. PLS-SEM is widely acknowledged in business marketing research, particularly if a relatively complex model is examined (Guenther et al., 2023). PLS-SEM focuses on prediction and facilitates explanation (Becker et al., 2023; Guenther et al., 2023) with a minimum amount of unexplained variance in the indicators (measurement model) and dependent constructs (structural model) (Cheah et al., 2024) to maximise the explained variance (R^2) of dependent constructs. Besides, PLS-SEM is ideal for exploratory research and theory development (Guenther et al., 2023; Sarstedt et al., 2022). Henceforth, PLS-SEM is preferred.

4. DATA ANALYSIS AND RESULTS

4.1 Demographic Profile

The demographic profile is demonstrated in Table 1. The model developed for this study is tested using partial least squares (PLS). PLS is used because first, it can assess the measurement and structural models simultaneously; second, this study focuses on explanatory and predictive of the dependent variable; and third, the dimensionality of EC requires a two-stage approach to modelling EC as a multidimensional construct, which uses latent variable (LV) scores for predictive relevance in subsequent analysis (Hair & Alamer, 2022; Hair et al., 2020). For measurement model assessment, the relationship between constructs and the indicators was assessed, while the structural model assessment aims to minimise the error variance. SmartPLS 4.0 was used to analyse the data collected. The bootstrapping approach (10, 000 resamples) was applied to determine the significance levels for loadings, weights, and path coefficients (Hair et al., 2020; Hair et al., 2022).

4.2 Assessment of the Measurement Model

4.2.1 First-order Measurement Model

In validating the measurement model, convergent validity was computed following Hair et al. (2020, 2022). The standardised factor loadings for each item should be greater than 0.5, AVE should be greater than 0.5, and the CR should be greater than 0.7 (Hair & Alamer, 2022). As shown in Figure 1, the three variables passed the assessment of convergent validity. Given that EC was modelled as a second-order construct as suggested, the disjoint two-stage approach was used (refer to 4.3.2 second-order measurement model). Table 2 shows the result of the first-order measurement model. Taken together, these results provided support for the convergent validity of the measurement model.

Next, the assessment of discriminant validity takes place by using the Heterotrait-monotrait ratio (HTMT) following Henseler et al. (2015). The threshold value for HTMT should be smaller than 0.9 (Henseler et al., 2015). The result of the discriminant validity analysis is presented in Table 3. Since the HTMT values for all the LV are smaller than 0.9, this indicates that the constructs in this study are distinct and meet the criteria for discriminant validity.

4.2.2   *Second-order Measurement Model*

To assess the second-order measurement model, LV scores generated from the first-order measurement model were used. Table 4 indicates the correlation between the first-order construct. Given the high correlation value among the EC of the first-order construct, we decided to estimate the second-order measurement model for EC as formative mode A, which is the correlation weight.

Table 1. Demographic profile of the respondents

Items	Frequency	Percentage
Gender		
Male	172	53.6
Female	149	46.4
Age		
25 – 34 years old	87	27.1
35 – 44 years old	95	29.6
45 – 54 years old	72	22.4
55 – 64 years old	67	20.9
Ethnicity		
Malay	160	49.8
Chinese	95	29.6
Indian	42	13.1
Others	24	7.5
Marital Status		
Single	70	21.8
Married with kid(s)	177	55.1
Married without kid	35	10.9
Divorced with kid(s)	16	5.0
Divorced without kid	13	4.0
Other	10	3.1
Education		
SPM or its equivalent	40	12.5
Diploma or its equivalent	98	30.5
Bachelor's degree or its equivalent	96	29.9
Master's degree or its equivalent	69	21.5
Doctorate or its equivalent	15	4.7
Other	3	0.9
Income		
Below RM1, 500	0	0
RM1, 501 – RM3, 000	53	16.5
RM3, 501 – RM4, 500	75	23.4
RM4, 501 – RM6, 000	52	16.2
RM6, 001 – RM7, 500	52	16.2
RM7, 501 – RM9, 000	44	13.7
Above RM9, 001	45	14.0

Table 2: Convergent validity

First-order constructs	Items	Loadings	AVE	CR
Limit to Growth (LTG)	LTG1	0.912	0.735	0.892
	LTG3	0.911		
	LTG2	0.737		
Anti-anthropocentrism (AA)	AA1	0.787	0.574	0.802
	AA3	0.767		
	AA2	0.719		
Nature's Balance (NB)	NB3	0.929	0.747	0.897
	NB1	0.924		
	NB2	0.724		
Anti-exceptionalism (AE)	AE1	0.865	0.698	0.874
	AE2	0.786		
	AE3	0.854		
Eco-crisis (ECri)	ECri1	0.933	0.750	0.899
	ECri2	0.727		
	ECri3	0.923		
EID	EID1	0.662	0.549	0.930
	EID2	0.708		
	EID3	0.683		
	EID4	0.670		
	EID5	0.834		
	EID6	0.785		
	EID7	0.718		
	EID8	0.778		
	EID9	0.828		
	EID10	0.708		
	EID11	0.749		
ECB	ECB1	0.701	0.591	0.941
	ECB2	0.776		
	ECB3	0.742		
	ECB4	0.804		
	ECB5	0.847		
	ECB6	0.825		
	ECB7	0.729		
	ECB8	0.683		
	ECB9	0.823		
	ECB10	0.729		
	ECB11	0.781		

Table 3: Discriminant validity

	AA	AE	ECri	ECB	EID	LTG	NB
AA							
AE	0.734						
ECri	0.549	0.666					
ECB	0.500	0.439	0.437				
EID	0.486	0.439	0.481	0.694			
LTG	0.491	0.861	0.878	0.534	0.500		
NB	0.466	0.659	0.892	0.389	0.432	0.883	

Table 4: Latent Variable Correlations

	AA	AE	ECri	ECB	EID	LTG	NB
AA	1	0.506	0.379	0.387	0.375	0.341	0.315
AE	0.506	1	0.533	0.383	0.380	0.684	0.523
ECri	0.379	0.533	1	0.393	0.425	0.736	0.753
ECB	0.387	0.383	0.393	1	0.649	0.474	0.352
EID	0.375	0.380	0.425	0.649	1	0.435	0.382
LTG	0.341	0.684	0.736	0.474	0.435	1	0.738
NB	0.315	0.523	0.753	0.352	0.382	0.738	1

4.2.3   *Multicollinearity*

VIF values were computed to ensure there is no collinearity problem. Based on the results in Table 5, the VIF values were below the threshold value of 5 (Hair et al., 2019). Hence, it can be concluded that there was no collinearity problem in any of the formative constructs, so there is no issue with the estimation of the PLS path model.

Table 5: Measurement properties for the second-order construct

Construct	Items	VIF	Weights
EC	LTG	3.433	0.284
	AA	1.396	0.237
	NB	2.784	0.230
	AE	2.235	0.238
	ECri	2.856	0.256

4.3   **Assessment of the Structural Model**

SmartPLS 4.0 software was used to assess the hypothesised structural model. The structural model analysis result is demonstrated in Table 6. The analysis found that EC (ß = 0.247, p < .05) was positively related to ECB, H_1 supported. The statistical result reveals that individuals who are concerned about the environment will then lead to the ECB.

The mediating path analysis reveals the mediating effect of EID on the relationship between EC and ECB. The indirect effect (ß = 0.264, p < .05) was significant. Therefore, H_2 is accepted. According to Zhao et al. (2010), when the direct and indirect effects have the same sign (as found in this study), this

indicates a complementary partial mediation effect is found. This expounds the existence of another potential mediator in the direct effect.

The results indicated that the marital status was positively moderating the relationship between EID and ECB (ß = 0.072, p < .05), H_3 is accepted. A simple slope analysis is illustrated in Figure 2 to explain the significant moderation relationship. Based on Hair et al. (2022), the effect size of the moderator ranges from small to medium.

Table 6. Hypothesis testing

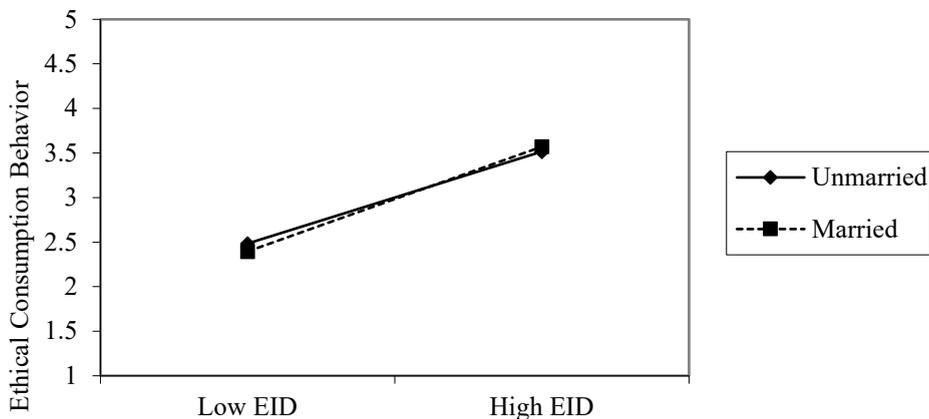| Hypothesis	Std. Beta	Std. Dev	T values	P values	PCI LL	PCI UL	f^2/V^2	Result
Direct effect H₁: EC -> ECB	0.247	0.051	4.870	0.000	0.160	0.329	0.086	Supported
Mediation effect H₂: EC -> EID -> ECB	0.264	0.036	7.303	0.000	0.204	0.323	0.071	Supported
Moderation effect H₃: Marital x EID -> ECB	0.072	0.040	1.800	0.036	0.007	0.139	-	Supported

Fig. 2. Moderating role of marital status on the relationship between EID and ECB

Table 7: Result of R^2 and Q^2

Endogenous latent constructs	R^2	Q^2
ECB	0.462	0.252
EID	0.250	0.239

The explanatory power of the structural model is determined by the coefficient of determination (R^2) (Hair et al., 2019). Referring to Table 7, EC explained 25.0% of the variance in EID, while EC and EID explained 46.2% of ECB. The assessment of effect size (f^2) represents the magnitude of the exogenous

construct to explain a particular endogenous. The f^2 of 0.086 implies that the effect size of EC on ECB falls within the range of modest to medium size (Cohen, 2013), as depicted in Table 6. While the mediating effect size (V^2) was reported as 0.071 (refer to Table 6), which falls within the range of small to medium (Kenny, 2010). Furthermore, Q^2 was computed to assess the predictive power. Following the rule of thumb by Hair et al. (2019), the result in Table 7 shows that the Q^2 for ECB was 0.267, which implied a medium effect size, while EID was 0.133, which denoted a small effect.

5.   DISCUSSION AND IMPLICATIONS

It has been pointed out that there is a paucity of studies that comprehensively address the concern-behaviour gap (Ahmed et al., 2025; Aral & López-Sintas, 2023; Xing et al., 2022; Zhuo et al., 2022). Arman and Mark-Herbert (2025) suggest that an ECB framework should be designed based on the ADO (antecedent-decision-outcome) framework. On this basis, the proposed framework of this study consists of EC (antecedent), EID (decision), marital status (decision), and ECB (outcome). As such, this study examined the psychological contextual mechanism of EID between EC and ECB and the moderating effect of marital status as a boundary condition on EID and ECB. This study draws on the ABC theory to extend the research scope of the ECB and advances the literature of the ECB, particularly in addressing the concern-behaviour gap.

The result from this study is evidence that EC (ß = 0.247, $p < .05$) is positively related to ECB, which indicates that EC among Malaysian working adults leads to ECB. Hence, H_1 is supported. This result is consistent with previous empirical findings, which signify a significant and positive relationship between EC and ECB (Borusiak et al., 2021; Chen et al., 2022; Maduku, 2024; Xu et al., 2021). This suggests that individuals with a high level of awareness and consciousness concerning the environment and social impacts are more likely to consume ethically. Previous studies that adopt the NEP measurement scale to represent EC have also confirmed that individuals who are aware of the environmental problems and their consequences demonstrate an intrinsic desire to engage in ethical and sustainable consumption (Borusiak et al., 2021; Chen et al., 2022; Shin et al., 2017). However, it is important to highlight that this study used a multi-dimensional scale to capture the multifaceted nature of EC through the NEP, which is different from past studies (e.g., Lou et al., 2022; Tan et al., 2026). Hence, EC offers a more nuanced understanding of its impact on the ECB and advances the literature by contemplating the multifaceted nature of EC.

Additionally, this study affirms the complementary mediating effect of EID (ß = 0.264, $p < .05$) on EC and ECB, given that both direct and indirect effects are significant and point in the same direction (Hair et al., 2022). The finding demonstrates that the mediating role of EID suggests a more nuanced pathway to bridge the concern-behaviour gap. Hence, H_2 is supported. This distinctive finding is valuable because EC reflects an attitude towards an external object, which is the environment. EID reflects an internal self-definition that functions as internalisation and identity salience to drive consistent behavioural choice. Accordingly, EC is internalised as environmental responsibility and preservation of self-concept through individuals' EID, leading to ECB as individuals behave consistently with their identity (Brieger, 2019; Clayton & Kilinç, 2013; Pong & Tam, 2023). The EID discourse that human beings are part of the fragile planetary entity has brought humans to unite with a larger natural force and deepen the interconnection with the world (Clayton et al., 2021). So, the internalisation process serves as an internal psychological bridge that translates EC into ECB, as explained by ABC theory. Thus, individuals with higher EC develop transcendental self-concept (e.g., environmental stewardship) by practicing ECB to validate their self-conception, but not only because they care about the planet. Udall et al. (2021) also disclose that EC individuals tend to say no to certain brands (e.g., unfair treatment of employees) to express their identity. All in all, this study implies that translating ethical behaviour through the lens of EID is more likely to overcome situational barriers, such as premium price and accessibility.

The findings of this study support the discourse that socio-demographic factors, that is, marital status (ß = 0.072, *p* < .05), influence the degree to which EID translates into ECB. Thus, H₃ is supported. This denotes that marital status is a significant moderator of the relationship between EID and ECB, especially among married individuals (e.g., Lou & Li, 2021; Nagargoje et al., 2022; Zhuo et al., 2022). The moderating effect of marital status can be understood using Belk's (1988) extended self. For married individuals (i.e., parents and spouses), they extend their self-concept from "I" to "we", which moves from expression of self-identity to caregiving and responsibility for others when making decisions (Brieger, 2019; Shapiro & Keyes, 2008; Smith & Kingston, 2021). Wu et al. (2024) argue that marriage introduces new social and familial roles. These responsibilities shift behaviour towards protecting the health of spouses and children, ultimately increasing the likelihood of sustainable consumption. The translation of EID into actual behaviour, such as consuming ethically, is mainly intended to provide and ensure family well-being due to a higher sense of responsibility for the future environment and society (Hariani et al., 2022; Shapiro & Keyes, 2008). Similarly, Nagargoje et al. (2022) elucidate that married couples tend to be more active in social activity participation and increase their willingness to engage in new behaviour. In a family context, identity-driven motivation of parents and spouse responsibility are more likely to engage in ethical behaviour compared to those who just rely on generalised environmental appeal (Nagargoje et al., 2022; Zhou et al., 2022). Henceforth, marital status enriches the relationship between EID and ECB, advancing the understanding of human life-stage interaction on identity-behaviour.

Furthermore, this study's outcome also provides a contingent validation of the ABC theory. This study enriched Guagnano et al.'s (1995) ABC theory by confirming EID as the psychological contextual mechanism in driving EC to ECB. Notably, as a psychological contextual mechanism, EID demonstrates the internalisation process via the identity element that links an individual's attitude and behaviour, which is crucial in promoting ECB. Clayton et al. (2019) argue the significance of this internalisation process, which outweighs attribute-based contextual factors such as price and convenience because EID causes individuals to intensely identify and care about environmental issues and their societal consequences, which leads them to prioritise ethical consumption. Perera and Johnson (2021) also postulate the importance of EID to transform EC into a persistent attitude and belief to consistently motivate ECB. Moreover, individuals strive to behave consistently with their identity even when doing so requires extra effort or resources. Thus, EID acts as a psychological contextual mechanism to enhance the effect in transforming individuals' attitudes into a sustainable behaviour (Guagnano et al., 1995; Zhuo et al., 2022). Based on the ABC theory, this psychological contextual mechanism is imperative to overcome the attitude-behaviour inconsistency in the ECB context, which is different from attitude-behaviour theory, such as TRA and TPB. Although the intensity of a person's EID is different and largely context-dependent, it persistently manifests a significant relationship with conservation-related behaviour in the domain of ethical consumption (Rahmani et al., 2022). Hence, EID advances the application of ABC theory in ethical consumption studies. On the other hand, the moderating role of marital status that serves as a boundary condition advances the understanding of the differential strength of the human life-stage between the relationship of EID and ECB. Therefore, using marital status as a boundary between psychology and behaviour through ABC theory highlights how social and life-stage factors condition identity-driven actions.

In conclusion, this study demonstrates a direct and indirect relationship between EC and ECB through EID and marital status. It is comprehensible that EC led to ECB, but integrating EID disentangles the concern-behaviour gap by translating EC from a cognitive evaluation into a self-defining value. When Environmental Concern (EC) becomes part of a person's identity, engaging in Environmental Commitment Behaviour (ECB) is no longer just a rational choice. Instead, it becomes an identity-based action that ensures long-term behavioural consistency. The internalisation process reinforces behavioural commitment and narrows concern-behaviour disparity. Additionally, marital status explains the importance of life stage to strengthen the translation of identity-driven variables into behaviour. Married individuals manifest greater responsibility, making collective decisions and becoming more future-oriented to strengthen the translation of EID into ECB. The integration of marital status as a contextual moderator that serves as a boundary condition enhances the ABC theory by demonstrating the importance of social and life-stage

factors to drive ethical behaviour. Integrating Environmental Identity (EID) and marital status into the ABC Theory provides a clearer view of how identity interacts with concern to drive behaviour. Specifically, it shows how marital status strengthens the link between a person's self-concept and their environmental commitment (ECB). This particularly bolsters the importance of self-concept and life-stage factors in ethical marketing by enhancing the growing literature of ECB.

5.1   Managerial Implications

This research provides insights into businesses and affects business practices among marketers, policymakers, and environmental advocates by focusing on attitudes and identity to facilitate ECB. First, the positive relationship between EC and ECB denotes that ethical action is driven by attitudinal awareness. Thus, efforts that prioritise initiatives such as environmental education programmes, targeted public communication campaigns, supply chain transparency, and proper ethical labelling to elevate cognitive and emotional EC are preferable. Public agencies and educational institutions should incorporate formal and informal learning platforms to enhance ethical consumption by demonstrating how consumption impacts affect human beings. Government agencies and NGOs should launch targeted campaigns to frame Environmental Commitment Behaviour (ECB) as a responsible, feasible choice. These messages must align with shared societal values rather than positioning sustainability as a sacrifice. Of course, marketers are responsible for providing a transparent supply chain, an environmental report, clear eco-labelling, ethical sourcing certifications, and disclosure of carbon footprints to reinforce customers' concerns when making purchase decisions.

Second, the mediating effect of EID denotes the imperative of psychological mechanisms in converting EC into consistent ECB. Marketers and policymakers could focus their efforts beyond informational marketing by using identity-based branding and positioning. Traditionally, marketers emphasised functional attributes or normative guilt when promoting ethical behaviour. However, branding and positioning campaigns that foster self-identification as an environmental steward of the future should be the focus to transform ECB from a transactional utility into a self-verification action. For instance, marketers or brand owners are encouraged to position ethical products as a symbol of responsibility. Nonetheless, NGOs could initiate community engagement programmes, such as the ethical consumption workshop, to bring together the participants by offering social validation among them in such a way that they position themselves as socially and environmentally responsible individuals. The workshop could tackle and align personal consumption habits in accordance with sustainability, social justice, and fairtrade to express the engagement in ethical consumption as collective actions. Thus, it strengthens individual commitment to group norms. Therefore, instead of educating consumers about environmental problems, it is more significant to empower them to internalise solutions as part of their essential selves.

Third, focusing on marital status as a life-stage cycle, marketers should emphasise on family-oriented ethical consumption marketing messages that anchor in the family well-being, security, and legacy. For instance, sustainable fashion brands focus on non-toxic dyes for kids with sensitive skin. Electric vehicles (EVs) advertisements could emphasise the safety, comfort, and low fuel cost for a growing family, instead of low carbon emissions. Additionally, marketing messages pertaining to the protective benefits of ethical choices for children should be emphasised. One of the strategies to achieve this is by demonstrating less toxic exposure for better health, as well as ethical consumption as a long-term investment for future generations. Henceforth, highlighting the need for parental duty for engaging in environmental and societal action is encouraging. On the other hand, policymakers and NGOs should promote environmental messages by integrating family-related narratives. When the government makes public service announcements, they could directly and clearly link clean water to child health or reduce waste for a sustainable planet for future generations. By framing sustainability for the benefit of the public and as a means for family protection, policymakers can encourage more ethical action from the public. Subsidies and allowances from the government for EVs, solar panel and energy-saving appliances should be communicated and regulated as part of family financial investment and for physical well-being. For instance, the subsidies and allowances

potentially reduce household costs and create a cleaner, safer, and healthier home environment to encourage more families to adopt ECB. Nonetheless, initiatives that promote community spirit among families practicing sustainable and ethical living, like community-supported agriculture programmes that direct to family can foster shared and shaped identity-affirming community norms. This strengthens the understanding of ECB as a collective and family-friendly practice, but not a solitary sacrifice of personal or family.

6.   LIMITATIONS AND FUTURE RESEARCH

The empirical findings from this study enrich existing literature, but there are three primary limitations to be addressed in this study. First, this study represents an initial attempt to understand the mediating role of EID between EC and ECB without addressing the uniqueness of environmental identity. Since this study lays a foundation for the conceptual distinction between EC, EID, and ECB, future researchers can further expound on the empirical differences between EID and related constructs such as perceived competence. Second, although EID shows a mediating effect on EC and ECB, it is only a complementary mediator in this relationship. Hence, it is suggested that other mediators should be explored to advance the understanding of the complexity of this relationship. Third, the multi-dimensional nature of the NEP scale should be continuously tested to understand the ECB among developing countries. Different characteristics of local environments and communities are worth exploring to understand how they influence and drive ECB (Brieger, 2019; Yadav & Kumari, 2024). Fourth, the constructs studied are empirically tested among working adults in Malaysia, but different consumer groups are potentially to be studied to better understand the behaviour of different consumer groups in the ethical market. So, future studies should adopt the proposed research model to test other consumer groups, such as generational groups, to generalise the findings. Lastly, additional studies could adopt the proposed model to advance the understanding of EID (as a contextual factor) and marital status (as a contextual moderator) on the ABC theory in a specific ECB to draw a conclusive conclusion about other consumption behaviour among Malaysians.

7.   CONTRIBUTION OF AUTHORS

Mom-Zee, Tan carried out the research, wrote, and revised the article. Mom-Zee, Tan conceptualised the central research idea and provided the theoretical framework. Luen-Peng, Tan and Kum-Lung, Choe designed the research and supervised the research progress;

8.   FUNDING

9.   CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts, and declare the absence of conflicting interests with the funders.

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