Ethical banking behavior among millennials and Gen-Z in Malaysia

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Abstract

Purpose – This study aims to determine the factors that influence ethical banking behavior among millennials and Gen-Z in Malaysia.

Design/methodology/approach – A stratified sample of 525 millennials and Gen-Z of Malaysian banking customers was used. Extended ethical decision-making (EDM) model was tested using partial least square-structural equation model for the analysis.

Findings – The findings indicated that the engagement of millennials and Gen-Z in ethical banking is influenced by factors such as intention, judgment and awareness, which shaped both generations' ethical banking behavior.

Statements and declarations:

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Authors' contributions: All authors contributed to the study conception and design. Instrument developments were administered by Shahida Shahimi and Suhaili Alma'amun. Material preparation, data collection and analysis were performed by Siti Aisyah Zahari. The first draft of the manuscript was written by Siti Aisyah Zahari and Mohd Mursyid Arshad. All authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Competing interests: All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

Ethics statement: This study does not involve direct face-to-face human participants as the survey was electronically administered. Informed consent was obtained from all individual participants involved in the study. Authors are committed to protecting the privacy and confidentiality of all participants.

Corrigendum: It has come to the attention of the publisher that the article Binti Zahari, S.A., Shahimi, S., Alma'amun, S. and Arshad, M.M. (2024), "Ethical banking behavior among millennials and Gen-Z in Malaysia", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 17 No. 2, pp. 252-273. https://doi.org/10.1108/IMEFM-04-2023-0152, displays Siti Aisyah Zahari's affiliation incorrectly. This error was introduced during the submission process. Binti Zahari, S.A., Shahimi, S., Alma'amun, S. and Arshad, M.M. (2024) has been corrected to Zahari, S.A., Shahimi, S., Alma'amun, S. and Arshad, M.M. (2024). The authors sincerely apologise for this error and for any misunderstanding.

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Practical implications – This study could be a central reference point and assist banking institutions in understanding the preferences of millennials and Gen-Z.

Originality/value – This study extends the previous EDM model that focused solely on consumer's belief systems. Three aspects differentiate this paper and contribute to its originality, namely, the uniqueness of millennials and Gen-Z behavior, incorporating new variables along with the EDM models and study in Malaysian context.

Keywords Ethical banking, Social banking, Decision-making, Net generation, Financial behavior

Paper type Research paper

1. Introduction

Ethical banking is a new form of financial business that extends beyond the economic return of traditional banking behavior. Ethical banking refers to the financial institutions that provide products and services that can contribute to economic development, environmental quality and the well-being of society (Martínez-Campillo *et al.*, 2021). In this perspective, ethical banking is a type of financial intermediation that develops new economic ties beyond profit making.

The emergence of ethical bank had started with the establishment of Triodos Bank in Netherlands in 1980. Nowadays, various banks have adopted ethical banks in their practices, such as Triodos Bank, GLS Bank, Cooperative Bank and Charity Bank (Barigozzi and Tedeschi, 2015) to deliver the sustainability agenda as highlighted in Sustainable Development Goals (SDGs). In Malaysia, several banks have started offering ethical banking products and services. Maybank, for instance, has integrated sustainable criteria into its credit risk management process and provide socially responsible investment to their customers (Tan *et al.*, 2017), while CIMB Bank offers products like EcoSave Savings Account-i (CIMB Group Holding Berhad, 2023).

The proliferation of sustainable banking products and services also reflects the growing awareness and demand for ethical banking behavior. Bank customers, particularly millennials and Gen-Z, have increasingly prioritized ethical considerations by putting more concern on social and environmental issues in their decision-making (Puiu, 2016), interested in making sustainable investing decisions (Formánková *et al.*, 2019) and adopted green products based on intrinsic pro-environmental values (Lee, 2020).

The consideration of these generations towards ethical financing is understandable as they are tackling their concerns by taking socially conscious actions (Forbes, 2020) to build a better world for future generations. Unfortunately, many banks have made a mistake by presuming that what worked for past generations will work for the millennials and Gen-Z. Adopting green approach alone can pose challenges for the banks to implement effective ethical banking practices (Ibe-enwo *et al.*, 2019) that can suit the preferences of both generations. Gaining consumers' perspective of ethical banks is crucial (Taneja and Ali, 2021) because anomalous and inefficient products and services can lead to bank failures. In worse situations, the entire economy may suffer huge losses if the banking industry does not cope with financing effectively [Bank Negara Malaysia (BNM), 2019].

Therefore, banking institutions need to respond to the incremental demand of ethical banking products and services by incorporating sustainability criteria into their offerings. The emergence of ethical banking practices not only influences customer preferences but also catalyzes the expansion and diversification of sustainable banking options, creating a dynamic interplay between responsible banking and financial behavior, and the products designed to meet these evolving ethical standards. However, the millennial and Gen-Z

ethical banking behavior have been insufficiently addressed in past study. Thus, this study aimed to determine the factors influencing ethical banking behavior among millennials and Gen-Z in Malaysia.

Our findings underscore the pivotal role of concern, skepticism, information, ethical banking awareness, ethical banking judgment, service quality, convenience, religious values, social context, ethical obligation and ethical banking intention in different stages of the ethical decision-making (EDM) process toward ethical banking engagement. This finding provides a comprehensive framework for financial institutions to adapt their marketing strategies, and formulate holistic directions for the development of ethical banking in Malaysia.

2. Literature review

2.1 Ethical bank

Ethical bank is a concept within sustainable finance that emphasizes beyond economic profitability of traditional banking in their banking practices. Social, ethical, green, alternative, sustainable development and solidarity banking are among the terms used to refer to ethical financing and banking (DeClerck, 2009; Chew *et al.*, 2016; Park and Kim, 2020) which refers to bank that take ethical, social and environmental concern into account. The key principles of EB include fair and equal banking operation, good cooperation with the community, committed toward customers, employee well-being, environmentally responsible practices, corporate governance, maintaining a good reputation and transparency (Ferreira *et al.*, 2016).

The primary distinction between ethical banks and conventional banks is that the latter focus solely on increasing their profits, whereas ethical banks operate under the three guiding principles of profit, people, and planet (Martínez *et al.*, 2021). There is no accreditation that identifies a bank as ethical, and membership in the ethical banking movement is entirely voluntary (Martínez *et al.*, 2020). However, most of them are members of the Global Alliance for Banking on Values (GABV), an independent network created in 2009 (Martínez *et al.*, 2020). This ideological link distinguishes ethical banks from conventional banks, where the ideology is more economic than social (San-Jose *et al.*, 2011).

2.2 Ethical banking behavior among millennials and Gen-Z

Globally, millennials and Gen-Z have a strong and potential impact on current and future business practices (Arli *et al.*, 2014). Millennials prefer ethical banks as their preferred banking model, as the products and services are according to their preferences and value (Jayasekera and Pushpakumari, 2021). Millennials tend to invest their money and wealth to bring people out of poverty and protect the environment (Ed Grattan, 2019). Money management is crucial to ensure they live within their means (Alma'amun *et al.*, 2018). Additionally, Gen-Z is also interested in practicing socially responsible investment (SRI) because they want to promote sustainable practices and values through a choice of financial instruments (Chen *et al.*, 2019). Bayer *et al.* (2019) further stated that the younger generation, consider the choice of ethical banking in their new phase of life after university.

Millennials and Gen-Z approximately account for 18.1 million people, representing almost 55% of the total population in Malaysia [Department of Statistics Malaysia (DOSM), 2020]. As most of the Malaysian workforce is from these generations, financial management is undeniably crucial in managing their wealth and money. Both generations have shifted their concern toward sustainable and ethical practices, which promotes good causes in the future (ICMR, 2021). Customers from these generations constantly consider the EDM process in their final decision to reflect their desire to boost the 3Ps (planet, people, profit).

Connecting with these customers, who possess different banking behavior and preference, is critical for the banks to understand factors influencing ethical banking behavior among millennials and Gen-Z.

Past studies regularly debate on factors determining customer intention and behavior toward banking services. One prominent theory used to measure customer intention is Theory of Planned Behavior (TPB) developed by Ajzen in the late 1980s. For instance, Asyari *et al.* (2022) mentioned that the TPB is very much relevant to Islamic banking as customers' attitudes regarding Islamic bank have a big impact on their purchasing decisions. In the context of ethical banking, Taneja and Ali (2021) emphasized the effectiveness of the TPB in predicting customer behavioral intention toward sustainable banking in India. Attitude is the most significant factor influencing customers to adopt sustainable banking (Taneja and Ali, 2021).

Nonetheless, measuring the customer's ethical banking beyond their intention by examining their actual behavior is crucial. Although the intention is a good predictor of moral behavior (Rifat *et al.*, 2016), it could create an intention-behavior gap. To address the matter, the Rest's model of EDM has been applied in various studies contexts. Rest's model of EDM consists of four (4) main parts, namely, awareness, judgment, intention and behavior, had stand as guiding principle in EDM process (Lehnert *et al.*, 2014). For instance, Bayer *et al.* (2019) extend the EDM model by include additional variable to examine the younger generation's ethical banking intention. In addition, Valentine and Hollingworth (2012) highlighted the positive association between moral intensity and Rest's EDM model for a Midwestern financial services organization. However, considering only Bayer's EDM model in measuring millennials and Gen-Z ethical banking behavior in Malaysia would not provide these cohorts' actual behavior in engaging in the practices. Thus, this study extends the model by incorporating technology-related factors, ethical obligation, religious values and ethical banking behavior in the model.

2.3 Hypothesis development

Moral awareness is the first stage in making an ethical decision, which requires the consumer to interpret a situation, including the ethical aspect (Rest, 1986). The researcher of the present study interpreted moral awareness as *ethical banking awareness* to suit the context of the study. *Ethical banking awareness* is achieved when millennials and Gen-Z realize the ethical banking component that banking institutions practice. The second stage of Rest's model is a moral judgment, which can be referred to as an individual assessment of ethical or unethical actions or behaviors (Culiberg and Bajde, 2013). A few studies have reported a positive link between *awareness* and *judgment* (Rest, 1986; Barnett and Valentine, 2004; Valentine and Bateman, 2011; Valentine and Hollingworth, 2012). Hence, the hypothesis on *ethical banking awareness* and *judgment* is proposed as follows:

H1. Ethical banking awareness positively impacts ethical banking judgment.

After establishing an *ethical banking judgment*, this reasoning generated *ethical banking intentions* (Rest, 1986). *Ethical banking intention* can be referred to as the intention of millennials and Gen-Z to engage with ethical banking in banking institutions. Several authors (Rest, 1986; Valentine and Hollingworth, 2012; Culiberg and Bajde, 2013; Bayer *et al.*, 2019) identified a positive relationship between *judgment* and *intention*. Hence, the second hypothesis is posited as follows:

H2. Ethical banking judgment positively impacts ethical banking intent.

Finally, the last step of Rest's model is the *ethical banking behavior*. Nonetheless, Bayer's EDM model did not measure the respondents' *ethical banking behavior*. Thus, this study

measures the *ethical banking behavior* of the millennials and Gen-Z generated by the *ethical banking intention* to fill in the practical knowledge gap. The individual's *ethical banking behavior* is demonstrated if they become a customer of an ethical bank (Bayer *et al.*, 2019). Various studies have emphasized the impact of intention on actual behavior. A prior study on banking evaluated the favorable link between *intention* and *behavior* (Rifat *et al.*, 2016; Iqbal *et al.*, 2017; Iqbal *et al.*, 2018) and ethics (Rest, 1986; Culiberg and Bajde, 2013; Yadav and Pathak, 2017; Agag, 2019). The following hypothesis has been proposed:

H3. Ethical banking intent positively impacts ethical banking behavior.

The general attitude in Bayer's EDM model is divided into *perceived consumer effectiveness (PCE), concern*, and s*kepticism*. *PCE* refers to the individual evaluation of how much their activities may help solve problems or issues (Bryson *et al.*, 2016). Bayer *et al.* (2019) further explained *PCE* as the perceived power of customers in deciding their actions. Bayer *et al.* (2019) discovered that *PCE* positively influences ethical banking awareness and judgment.

Concern in this study refers to the level of interest (De Pelsmacker and Janssens, 2007: Bayer *et al.*, 2019) and ethical, sustainable, social or green consciousness (Deng, 2015; Bayer *et al.*, 2019). Bayer *et al.* (2019) highlighted the positive effect between *concern* and *moral awareness* and *judgment*. Meanwhile, *skepticism* is often described as inviolate of moral principles (Forsyth and O'Boyle, 2011). In the present study, *skepticism* refers to the customer's distrust of the ethical value delivered by the ethical bank (Bayer *et al.*, 2019). There is a significant negative influence between *skepticism* and *moral awareness* and *judgment* (Bayer *et al.*, 2019). Hammad *et al.* (2014) stressed the negative impact of *skepticism* on *moral judgment*. Therefore, the hypotheses suggested for *PCE*, *concern* and *skepticism* are recommended as follows:

H4a. PCE positively impacts ethical banking awareness.

H4b. PCE positively impacts ethical banking judgment.

H4c. Concern positively impacts ethical banking awareness.

H4d. Concern positively impacts ethical banking judgment.

H4e. Skepticism negatively impacts ethical banking awareness.

H4f. Skepticism negatively impacts ethical banking judgment.

As Bayer *et al.* (2019) mentioned, bank selection criteria (such as *reputation, service quality, economic benefit and convenience*) must be included in the EDM model to suit the context of the study. *Technology-related factors* and *religious value* were included as additional variables for bank selection criteria to suit the characteristic of millennials and Gen-Z in Malaysian financial landscape. *Reputation* has been recognized as one of the most effective influences on customers' *intention* toward banking institutions (Zakiah and Al-Aidaros, 2017; Bayer *et al.*, 2019; Pujianti *et al.*, 2021). *Reputation* could refer to the bank's prestigious image (Bayer *et al.*, 2019). Second, *service quality* is the most prominent aspect of the bank selection criteria for any service industry's success (Abduh *et al.*, 2018; Khan *et al.*, 2020). The degree of responsiveness of their services, the competence of employees, and the reliability of the services are among the aspects included in the service quality (Bayer *et al.*, 2019). Most of the studies had stated a positive link between *service quality* and *intention* (Bayer *et al.*, 2019; Raza *et al.*, 2020; Suhartanto *et al.*, 2021).

Economic benefit refers mainly to the product's fees and profit, consisting of the cost of products, rate-of-return, lower service charge, and lower monthly payment (Aida and Musa, 2016). In contrast, *convenience* comprises the aspect that makes customers comfortable and

easier to access banking institutions (Andaleeb *et al.*, 2016). As millennials and Gen-Z are born in the technological diversity era, they tend to adopt technology banking more than traditional banking services (Salleh *et al.*, 2017). Thus, the *technology-related factor* is an important criterion that must be elaborated further concerning millennials and Gen-Z ethical banking selection criteria. The last bank selection criteria in this model is *religious values*. Previous studies highlighted the importance of religious value for both generations' bank selection criteria (Amin, 2016; Pujianti *et al.*, 2021). The present study will focus on the relationship between millennials and Gen-Z bank selection criteria and *ethical banking intention*, as proposed by Papaoikonomou *et al.* (2011) and Bayer *et al.* (2019). Hence, the suggested hypotheses are as follows:

H5a. Reputation positively impacts ethical banking intent.

H5b. Service quality positively impacts ethical banking intent.

H5c. Economic benefit positively impacts ethical banking intent.

H5d. Convenience positively impacts ethical banking intent.

H5e. Technology-related factor impacts ethical banking intent.

H5f. Religious value impacts ethical banking intent.

The *moral intensity* construct summarizes a set of issue-contingencies that impact ethical reasoning at the situational level (Barnett and Valentine, 2004; Valentine and Bateman, 2011). According to Jones (1991), *moral intensity* refers to the extent of imperative moral issues related to a situation with six main factors: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity and concentration of effect. There is a positive correlation between *moral intensity* and *moral awareness*, *judgment* and *intent* (Valentine and Hollingworth, 2012; Talha *et al.*, 2013; Bayer *et al.*, 2019). Consequently, the following hypotheses are presented:

H6a. Moral intensity positively impacts ethical banking awareness.

H6b. Moral intensity positively impacts ethical banking judgment.

H6c. Moral intensity positively impacts ethical banking intent.

Information in the present study comprises the category of knowledge (Papaoikonomou *et al.*, 2011; Bayer *et al.*, 2019), quantity and quality of the information or knowledge (De Pelsmacker and Janssens, 2007; Bayer *et al.*, 2019), and ethical cognitive effort (Deng, 2015; Bayer *et al.*, 2019). Bayer *et al.* (2019) discovered a significant positive impact between *information*, *moral awareness* and *intent*. Thus, the hypotheses for the present study are suggested as follows:

H7a. Information positively impacts ethical banking awareness.

H7b. Information positively impacts ethical banking judgment.

H7c. Information positively impacts ethical banking intent.

Social context can be defined as perceived social pressure to perform a specific action (Ajzen, 1985). *Social context* could also be referred to as subjective norm, social pressure, and peer group influence (Bayer *et al.*, 2019). Most of the studies found *social context* to have a positive correlation with behavioral intention to engage in ethical practices (Oseni *et al.*, 2018; Bayer *et al.*, 2019; Taneja and Ali, 2021). Consequently, the following hypothesis is presented:

H8. Social context positively impacts ethical banking intent.

Denial of responsibility, denial of injury, denial of victim, condemning the condemner and appeal to higher loyalty are among the five cognitive techniques of *neutralization* stated by Chatzidakis *et al.* (2007). D'Astous and Legendre (2009) included the government-dependency argument as a criterion of *neutralization* in their study. Bayer *et al.* (2019) discovered that *neutralizatio n* is negatively linked with *moral intention*. Thus, the following hypothesis is presented:

H9. Neutralization negatively impacts ethical banking intent.

Finally, *ethical obligation* is included as additional variable for the EDM model. Shaw and Shiu (2002) revealed that *ethical obligation* is better represented by predicting individual *intention*. In many instances, *ethical obligation* has improved *intention* prediction (Shaw *et al.*, 2000; Shaw and Shiu, 2002; Shaw *et al.*, 2015). In ethical bank consumerism, in which behavior is centered around a concern for others, the exploration of a measure that reflects ethical concerns is imperative in the applications of the model. Therefore, the suggested hypothesis is as follows:

H10. Ethical obligation positively impacts ethical banking intent.

All hypotheses will be tested according to the research framework in Figure 1 with a total of 18 constructs included in the model.

3. Methodology

3.1 Measurement construct

This study is empirical and tends to identify the ethical banking behavior among millennial and Gen-Z in Malaysia. Following a quantitative research approach, this study had analyzed primary data collected via an online survey. The instrument designed had four primary sections: *ethical banking awareness* and *judgment*; *ethical banking intention*; *ethical banking*

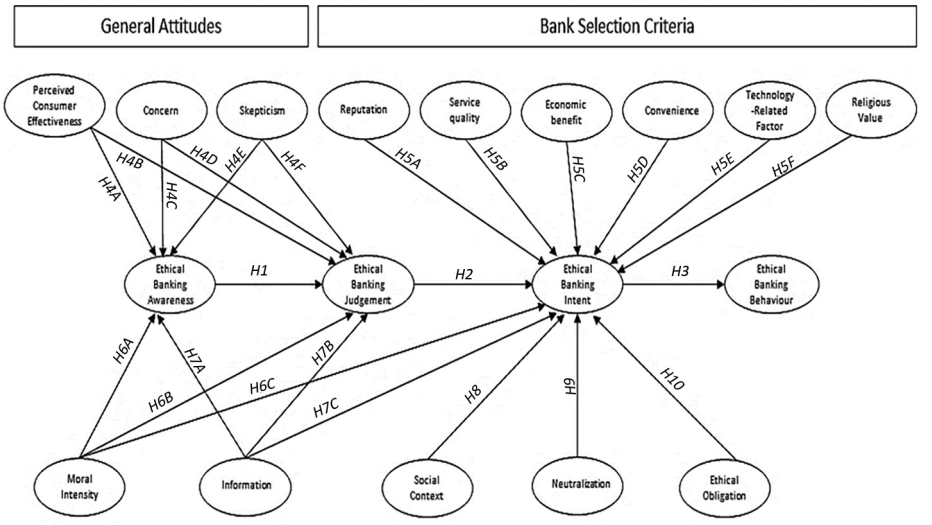


Figure 1.
Research framework

Source: Data analysis

behavior; and demography. The section regarding *ethical banking awareness*, *intention*, and *behavior* was measured using a five-point Likert scale (1-Strongly Disagree to 5-Strongly Agree). In contrast, *ethical banking judgments* were measured using a five-point scale for the respective options. The measurement items were based on previous studies related to ethical, sustainable, green behavior and adapted according to the banking context (Bayer *et al.*, 2019; Taneja and Ali, 2021; Farooq and Yahya, 2021).

The questionnaire was sent to two experts for validation. Then, the validated questionnaire was pretested on 30 millennials and Gen-Z for the reliability and validity of the instrument. The respondents provided several recommendations throughout this pilot test which led to changes in the readability, and clarity of the instrument.

3.2 Sampling and data collection

This study adopted a stratified random sampling technique to recruit the target respondents to ensure the survey sample was representative of Malaysia's millennials and Gen-Z population. Selangor, Putrajaya and Kuala Lumpur were chosen as the sampling location as a large population of millennials and Gen-Z are in these states.

By using the equation, $N = \frac{Z^2 \times \rho (1 - \rho)}{E^2}$ assuming a 95% confidence level, the standard deviation of 0.5, and a margin of error of 5%, the required sample size was discovered to be at least 385 respondents (Ringim, 2014). The questionnaires were finally distributed to a total of 536 respondents through social media and the WhatsApp application and 525 valid questionnaires were received.

3.3 Data analysis

The data were analyzed using descriptive statistics using Statistical Package for the Social Sciences (SPSS), while the hypotheses were test using partial least square-structural equation model (PLS-SEM) using SmartPLS. The PLS-SEM is an effective tool to explain causal links among variables in hypotheses (Ting *et al.*, 2019) and a good method in analyzing complex models (Hair *et al.*, 2018).

4. Finding

4.1 Respondents' profile

The sample of 525 respondents comprising 182 males and 343 females were used for the final analysis. Most respondents were identified as Malay (59.4%), followed by Chinese (24.8%) and Indian (13.5%). Regarding age or the generation category, 284 respondents were categorized as Gen-Z and 241 respondents were millennials. In the case of respondent academic qualification, most respondents were found to have a bachelor's degree and above (76.4%). The respondents comprised those located in Selangor (53.7%), Kuala Lumpur (31.0%) and Putrajaya (15.2%). The results of the demographic are presented in Figure 2.

In terms of their engagement with banking services, most of the respondents engage in more than two banks. For conventional banks, most respondents engage with CIMB Bank (22%) and Malayan Banking Berhad (20.5%) (Figure 3). In terms of Islamic banks, most of the respondents engage with BIMB (25.8%) and Maybank Islamic Berhad (16.7%) (Figure 4).

4.2 Measurement model

Indicator reliability, internal consistency, convergent validity, and discriminant validity have been conducted to measure the reliability and validity of the reflective measurement model. The first step is to examine the factor loadings of each item. As suggested by Hair *et al.* (2011), the factor loading in this study was above 0.5, which indicates a good indicator.

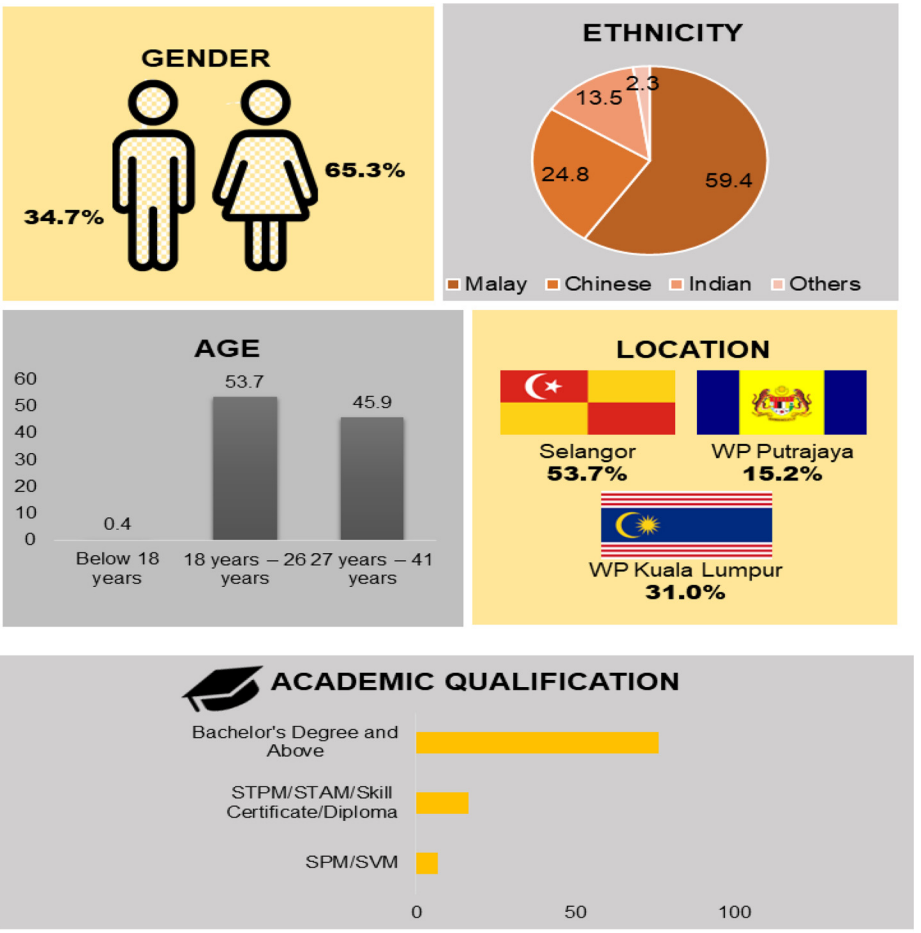
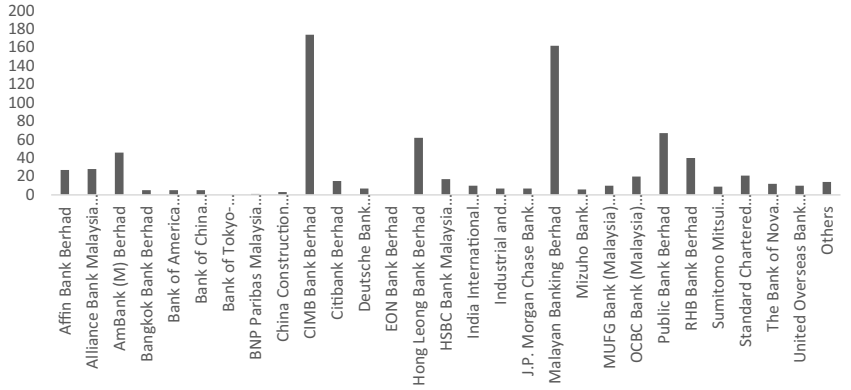


Figure 2.
Respondents' profile

Source: Data analysis

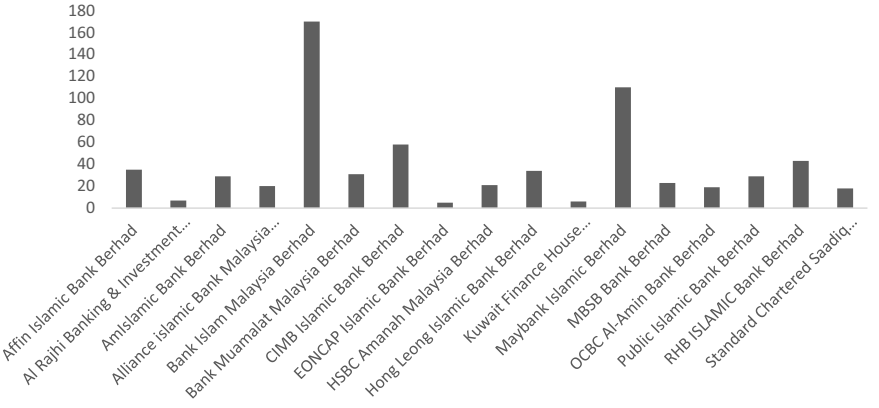
This study retained factor loading between 0.4 and 0.7, leading to increased composite reliability (CR), as Hair *et al.* (2014) stated. A total of 15 items were deleted. In the reflective model, dropping one indicator may not be highly impactful since other indicators are still representative of the construct (Garson, 2016).

The second step is assessing the internal consistency reliability through CR of the constructs. Compared to Cronbach's alpha (CA), CR is the preferred alternative as CA assumes all indicator loading is in the same population. Thus, it may overestimate or underestimate the reliability scale for a reflective model (Garson, 2016). After deleting a few items, all constructs exhibit a CR value between 0.7 and 0.9 (Hair *et al.*, 2018), suggesting internal consistency reliability. The third step is assessing the average variance extracted (AVE). All the AVEs are greater than 0.5, indicating that the construct explains at least 50% of the variance of the items (Hair *et al.*, 2018). The values also indicate the existence of



Source: Data analysis

Figure 3.
Number of respondents involved in conventional bank



Source: Data analysis

Figure 4.
Number of respondents involved in Islamic bank

convergent validity in the model. The results of the factor loading, CR and AVE are presented in Table 1.

The fourth step is to assess the Fornell–Lacker Criterion and heterotrait-monotrait (HTMT) ratio to measure the discriminant validity. The discriminant validity was measured to compare the inter-construct relation or the mean value of item correlation of each construct (Hair *et al.*, 2018). Henseler *et al.* (2015) proposed that the HTMT value above 0.9 indicates a high discriminant validity problem. The findings of the present study (Table 2) fulfilled discriminant validity. Hence, all variables are independent and explain different concepts.

4.3 Structural model

After the measurement model was satisfactory, the structural model was examined. Firstly, collinearity issues must be examined to ensure the issues do not bias the regression results before assessing the structural model. The assessment was undertaken through variance inflation factor (VIF), and the VIF values above five indicate collinearity issues (Hair *et al.*, 2018). Each VIF value

Constructs	Items [1]	Loadings	CR	AVE
AW	AW	1.000	1.000	1.000
CN	CN1	0.802	0.763	0.520
	CN2	0.703		
	CN3	0.650		
CV	CV3	1.000	1.000	1.000
EB	EB1	0.909	0.743	0.600
	EB2	0.611		
EBB	EBB2	0.675	0.801	0.503
	EBB3	0.644		
	EBB5	0.710		
	EBB6	0.798		
EO	EO2	0.739	0.757	0.510
	EO3	0.691		
	EO4	0.711		
INF	INF2	0.941	0.796	0.667
	INF3	0.670		
INT	INT1	0.762	0.761	0.614
	INT2	0.805		
JG	JG1	0.710	0.746	0.596
	JG2	0.829		
MI	MI2	0.628	0.779	0.546
	MI3	0.889		
	MI4	0.674		
NR	NR1	0.811	0.802	0.588
	NR2	0.920		
	NR3	0.510		
PCE	PCE1	0.579	0.766	0.635
	PCE3	0.966		
RP	RP1	0.762	0.808	0.679
	RP2	0.881		
RV	RV1	0.785	0.820	0.695
	RV2	0.879		
SC	SC1	0.630	0.785	0.552
	SC2	0.818		
	SC3	0.768		
SK	SK1	0.692	0.757	0.510
	SK2	0.722		
	SK3	0.727		
SQ	SQ2	1.000	1.000	1.000
TR	TR1	0.893	0.796	0.664
	TR2	0.728		

Notes: The items are part of the survey instrument which has been approved as an intellectual property (IP) right (protected under the Copyright Act 1987) and in the process of registration with MyIPO. PCE = perceive consumer effectiveness; AW = awareness; CN = concern; SK = skepticism; MI = oral intensity; INF = information; JG = judgment; RP = reputation; SQ = service quality; EB = economic benefit; CV = convenience; TR = technology-related factor; RV = religious value; SC = social context; NR = neutralization; EO = ethical obligation; INT = intent; EBB = ethical banking behavior
Source: Data analysis

Table 1.
Summary of the measurement model

in the model of the present study is lower than five (<5), indicating that this study does not include common method bias.

The results of the path coefficient and significant level of the structural model are presented in Figure 5. The outcome of the first chain in EDM model revealed that *concern*

Constructs	AW	CN	CV	EB	EBB	EO	INF	INT	JG	MI	NR	PCE	RP	RV	SC	SK	SQ	TR
AW																		
CN	0.329																	
CV	0.093	0.220																
EB	0.233	0.655	0.389															
EBB	0.249	0.287	0.165	0.343														
EO	0.206	0.476	0.279	0.722	0.213													
INF	0.024	0.339	0.263	0.186	0.108	0.286												
INT	0.272	0.759	0.528	0.666	0.476	0.815	0.318											
JG	0.492	0.592	0.032	0.858	0.437	0.729	0.192	0.846										
MI	0.207	0.225	0.084	0.341	0.312	0.121	0.194	0.107	0.166									
NR	0.062	0.081	0.062	0.307	0.270	0.083	0.073	0.173	0.156	0.537								
PCE	0.159	0.315	0.065	0.160	0.363	0.151	0.278	0.149	0.191	0.506	0.533							
RP	0.333	0.496	0.244	0.759	0.218	0.543	0.079	0.671	0.601	0.275	0.087	0.161						
RV	0.333	0.413	0.236	0.465	0.347	0.584	0.205	0.663	0.623	0.189	0.093	0.146	0.451					
SC	0.241	0.359	0.255	0.754	0.332	0.714	0.141	0.745	0.423	0.300	0.192	0.124	0.502	0.416				
SK	0.303	0.297	0.127	0.381	0.325	0.1214	0.344	0.225	0.314	0.800	0.536	0.675	0.221	0.265	0.344			
SQ	0.150	0.291	0.314	0.389	0.233	0.234	0.135	0.529	0.302	0.082	0.103	0.151	0.453	0.188	0.232	0.118		
TR	0.241	0.446	0.487	0.561	0.342	0.602	0.207	0.617	0.724	0.066	0.120	0.143	0.460	0.688	0.313	0.198	0.407	

Source: Data analysis

Table 2.
Heterotrait-monotrait (HTMT) ratio of the correlation

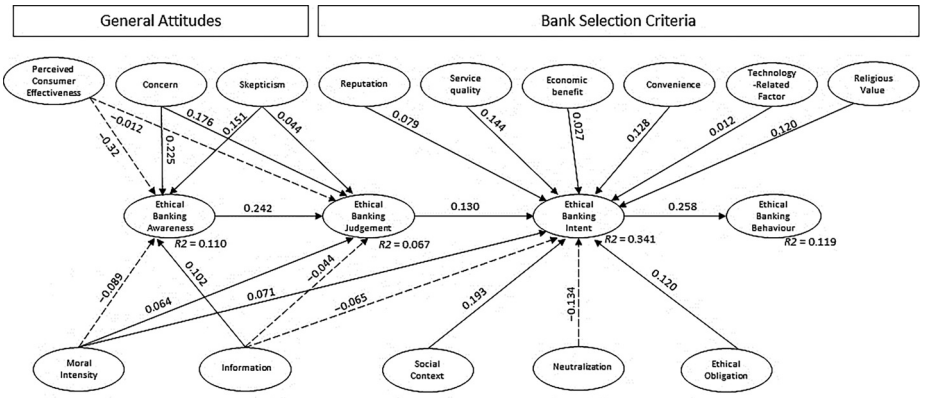


Figure 5.
Results of the structural model

Source: Data analysis

($\beta = 0.225$, $p < 0.001$), *skepticism* ($\beta = 0.151$, $p < 0.01$) and *information* ($\beta = 0.102$, $p < 0.05$) were significant and positively influence *awareness*. On the other hand, *PCE* ($\beta = -0.032$, $p > 0.05$) and *moral intensity* ($\beta = -0.089$, $p > 0.05$) negatively correlate with *awareness*. In the second chain of the EDM model, *awareness* ($\beta = 0.242$, $p < 0.001$) and *concern* ($\beta = 0.176$, $p < 0.001$) significantly and positively correlate with *ethical banking judgment*, whereas *PCE* ($\beta = -0.012$, $p > 0.05$) and *information* ($\beta = -0.044$, $p > 0.05$) negatively influence *ethical banking judgment*. At the same time, *skepticism* ($\beta = 0.044$, $p > 0.05$) and *moral intensity* ($\beta = 0.064$, $p > 0.05$) were found to have insignificant positive impact on *ethical banking judgment*.

Judgment ($\beta = 0.130$, $p < 0.05$), *service quality* ($\beta = 0.144$, $p < 0.01$), *convenience* ($\beta = 0.128$, $p < 0.01$), *religious value* ($\beta = 0.114$, $p < 0.05$), *social context* ($\beta = -0.193$, $p < 0.001$), and *ethical obligation* ($\beta = 0.120$, $p < 0.05$) significant and positively influence *ethical banking intent*. The result also revealed that the *reputation*, ($\beta = 0.079$, $p > 0.05$), *economic benefit* ($\beta = 0.027$, $p > 0.05$), *technology related factors* ($\beta = 0.012$, $p > 0.05$), and *moral intensity* ($\beta = 0.071$, $p > 0.05$) have positive impact on *ethical banking intent*, whereas *neutralization* ($\beta = -0.134$, $p > 0.05$) and *information* ($\beta = -0.065$, $p > 0.05$) was found to have negative impact. The *ethical banking intent* was also found to have a significant and positive impact on *ethical banking behavior* ($\beta = 0.258$, $p < 0.001$).

The R^2 values for the construct in the study were found to be in the range of 0.35 – 0.05. The R^2 of *ethical banking awareness* (0.110) indicates that the model explains 11% of the variance of *ethical banking awareness*. In contrast, R^2 of *ethical banking judgment* (0.093) indicates that the model explains 9.3% of the variance of *ethical banking judgment*. In contrast, R^2 of *ethical banking judgment* (0.093) indicates that the model explains 9.3% of the variance of *ethical banking judgment*. Besides, the R^2 of *ethical banking intent* (0.341) implies that the model explains 34.1% of the variance of *ethical banking intent*. Hair *et al.* (2018) confirm that the model has low explanatory power for *ethical banking awareness*, *judgment*, and *behavior* and moderate explanatory power for *ethical banking intent*.

Blindfolding was subsequently used to assess the path model's predictive accuracy. The *Q2* value for *ethical banking awareness* was 0.089, 0.027 for *ethical banking judgment*, 0.177 for *ethical banking intent* and 0.051 for *ethical banking behavior*, representing the structural

Hypothesis	β	t value	p-value	R^2	Q^2	Result
Ethical banking awareness						
H4A: PCE → AW	−0.032	0.611	0.541	0.110	0.089	Not supported
H4C: CN → AW	0.225	4.702	0.000***			Supported
H4E: SK → AW	0.151	2.825	0.005**			Not supported
H6A: MI → AW	−0.089	1.882	0.060			Not supported
H7A: INF → AW	0.102	2.142	0.032*			Supported
Ethical banking judgment						
H1: AW → JG	0.242	4.706	0.000***	0.067	0.027	Supported
H4B: PCE → JG	−0.012	0.160	0.873			Not supported
H4D: CN → JG	0.176	3.415	0.001***			Supported
H4F: SK→ JG	0.044	0.716	0.474			Not supported
H6B: MI → JG	0.064	1.007	0.314			Not supported
H7B: INF → JG	−0.044	0.851	0.395			Not supported
Ethical banking intent						
H2: JG → INT	0.130	2.496	0.013*	0.341	0.177	Supported
H5A: RP → INT	0.079	1.697	0.090			Not supported
H5B: SQ → INT	0.144	3.167	0.002**			Supported
H5C: EB → INT	0.027	0.587	0.557			Not supported
H5D: CV → INT	0.128	2.575	0.010**			Supported
H5E: TR → INT	0.012	0.258	0.796			Not supported
H5F: RV → INT	0.120	2.568	0.010*			Supported
H6C: MI → INT	0.071	1.632	0.103			Not supported
H7C: INF → INT	−0.065	1.553	0.120			Not supported
H8: SC → INT	0.193	4.193	0.000***			Supported
H9: NR → INT	−0.134	1.838	0.066			Not supported
H10: EO → INT	0.120	2.406	0.016*			Supported
Ethical banking behavior						
H3: INT → EBB	0.258	6.195	0.000***	0.119	0.051	Supported

Notes: ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$
Source: Data analysis

Table 3.
Summary of the structural model

model's predictive accuracy as the $Q2 > 0$. Table 3 summarizes the analysis of the structural model assessment.

5. Discussion

The result of the structural model assessment discovered that half of the hypotheses were supported [*H1*, *H2*, *H3*, *H4C*, *H4D*, *H5B*, *H5D*, *H5F*, *H7A*, *H8* and *H10*] and positively influence different stages of the EDM process when deciding to engage in ethical banking. Nevertheless, the *technology-related factor*, considered an important characteristic of millennials and Gen-Z, revealed an insignificant positive relationship with *ethical banking intent*. According to Bayer *et al.* (2019), the possible explanation for the insignificant relationship is that the EDM model was drawn from publications in different contexts. Thus, the model may not represent the engagement of millennials and Gen-Z EDM in ethical banking.

A significant positive relationship between *concern* and *awareness* has been reported in De Pelsmacker and Janssens (2007), Yadav and Pathak (2017) and Ye *et al.* (2020). According to Taneja and Ali (2021), the *concern* will enhance customers' *awareness* and *judgment* regarding the consequences of their attitude toward *ethical banking behavior*. Moreover, the

present study found that *information* significantly influences *ethical banking awareness*. This result further supports the idea of Papaoikonomou *et al.* (2011) and Bayer *et al.* (2019). Knowledge regarding the topic helps customers to understand the products better, leading to a high level of *awareness* (Sulaiman *et al.*, 2022). Customers among millennials and Gen-Z who receive sufficient and reliable *information* will be highly concerned regarding the impact of their decision to participate in ethical banking. Thus, *ethical banking awareness* among both generations will be enhanced.

Surprisingly, *skepticism* was found to have a significant and positive impact on *ethical banking awareness* among millennials and Gen-Z. This finding was unexpected as prior studies had highlighted the negative relationship between *skepticism* and *awareness* (De Pelsmacker and Janssens, 2007; Bayer *et al.*, 2019). This might occur due to a high level of curiosity (Goldgehn, 2004) and their love to discover new things (Vieira *et al.*, 2020). A high level of *skepticism* toward ethical banking among these generations tends to increase their *awareness* when they have started to understand the business model of ethical banking.

In the second step of the EDM process, only *awareness* and *concern* significantly affect the *ethical banking judgment*. This finding is consistent with prior studies on ethics and banking (Rest, 1986; Deng, 2015; Martínez and Jaeger, 2016). The positive correlation between *concern* and *ethical banking judgment* is consistent with De Pelsmacker and Janssens (2007) and Bayer *et al.* (2019). The findings could have emerged since recognizing ethical issues among both generations nowadays improves their ability to judge the consequences of their EDM.

The significant and positive relationship between *ethical banking judgment* and *ethical banking intent* is in line with Rest (1986), Agag (2019), and Bayer *et al.* (2019). The good correlation between *judgment* and *intention* were due to the level of relativism and idealism (Arli *et al.*, 2014) developed from the *awareness* of millennials and Gen-Z. In addition, the significant association with *service quality* was confirmed by prior studies on ethic and banking literature (Lymperopoulos *et al.*, 2012; Nisha, 2016). Customers will be influenced to adopt *ethical banking behavior* due to the provision of efficient (Ringim, 2014). As for *convenience*, a significant positive relationship was discovered between *ethical banking intent* among millennials and Gen-Z. This finding suggests that various ethical banking products and services, time of service and the incorporation of technology in the ethical banking business model can attract customers to adopt *ethical banking behavior* in the future. The finding has been confirmed by Patterson and McEachern (2018) and Iqbal *et al.* (2018).

The findings for the *religious value* are consistent with past studies, which found a significant relationship with engagement in ethical banking (Bukhari *et al.*, 2019; Alsaad *et al.*, 2020; Janah *et al.*, 2020). In Malaysia, Islamic banking conforms to the ethical banking criteria, which solely focus on profit-maximization (Musa *et al.*, 2020). Indeed, ethical banking was in line with value-based intermediation introduced by BNM (Ismail *et al.*, 2020). This relationship indicates that customers of both generations with strong religious values were highly consider practicing it in the future.

The significant influence of *social context* was supported by Bayer *et al.* (2019) and Taneja and Ali (2021). The suggestions and opinions of the reference group, especially family members, close friends, co-workers, neighbors, colleagues, promotion by banks and the government, influence their decision-making (Awang *et al.*, 2019; Bayer *et al.*, 2019). Moreover, the results indicate a significant positive influence of *ethical obligation* with *ethical banking intent*. A strong *ethical obligation* from customers' social and environmental values guides them in their decision to be involved in ethical banking, which enhances the *ethical banking intention* (Tullani *et al.*, 2018).

The *ethical banking intent* was found to influence *ethical banking behavior* among millennials and Gen-Z significantly. These results support the finding of Iqbal *et al.* (2018) and Djafarova and Foots (2022). Djafarova and Foots (2022) reported that Gen-Z turns from *ethical intention* to *ethical behavior* when they feel pride in using the products, and the products bring positive outcomes in the future. This study has confirmed that *ethical banking intention* has been marked as a highly significant antecedent of *ethical banking behavior* among millennials and Gen-Z in Malaysia.

This study contributes and enriches the literature on ethical banking. To the best of the researchers' knowledge, this study is the first research undertaken to determine the factors influencing ethical banking behavior among millennials and Gen-Z in Malaysia. Therefore, this study provides valuable insights for future research on sustainable finance and responsible banking practices that help researchers to identify patterns, motivations, and factors influencing ethical banking choices. Researchers can build upon these findings to further investigate the specific drivers and barriers to ethical banking adoption among the both generations.

Second, this study also extended the Bayer's EDM model by incorporating relevant variables to suit the study context. Hence, the present study confirmed that the extended EDM model are applicable in explaining factors influencing customers' ethical banking behavior. Moreover, this study highlighted the general attitude of *concern* and *skepticism* in enhancing the *awareness* and *judgment* of millennials and Gen-Z on ethical banking. Motivated by this consideration, a new relationship was identified between *skepticism* and *awareness*, thus providing a new basis for future study in the ethical behavior context. Based on the bank selection criteria, the rationality of *service quality, convenience* and *religious value* in influencing *ethical banking behavior* among both generations is emphasized in this study. Besides *information, social context* and *ethical obligation* influence the EDM process of engaging in ethical banking.

This study enhances bankers' understanding of the factors influencing *ethical banking behavior* among Malaysian millennials and Gen-Z. The findings indicate how much ethical banking contributes to social, environmental and economic sustainability and may influence customers' intention to engage in it. Therefore, banks must focus on increasing information and marketing campaigns to promote ethical banking. In the present era of technological diversity, banks and policymakers must use social media to broaden ethical banking awareness. Providing clear, adequate, and trustworthy information on ethical banking will address the high level of skepticism on ethical banking. In turn, social influence aided by word-of-mouth will also increase customers' intention to engage in ethical banking in the future.

Banks must manage their target customers through their *service quality* and *convenience* of services to build a strong intention of ethical banking behavior among customers. Besides, *religious value* makes millennials and Gen-Z confident in being involved in ethical banking. Ethical banking has constantly been linked to Islamic banking. The ethical identity within Islam can be explained by the application of a net fair value approach, which involves a comparative analysis of *haram* and *halal* matters (Hassan and Rashid, 2010). Thus, the ethical banking business model must comply with *Shariah* and provide tools and services that reinforce *religious values*.

In addition, this study will assist the banks in developing a good ethical banking practices that meet both generations' preferences, which in turn help them to increase their market share. From a global perspective, this study could create opportunities and thrive the regional financial institutions and international bank understanding on the importance of millennials and Gen-Z toward sustainable financing. In a nutshell, this study has significant

implications for research, practice and society which potentially driven the positive changes in the global banking sector. Therefore, in the Malaysian context, a national regulatory framework and policy by BNM are crucial to drive the implementation of ethical financing standards to promote the ethical banking benefits.

6. Conclusion

The present study applied extended EDM model in explaining the behavior of millennials and Gen-Z toward ethical banking in Malaysia. Among the determining factors influencing ethical banking behavior are *concern, skepticism, information, service quality, convenience, religious value, social context, ethical obligation, ethical banking awareness, ethical banking judgment* and *ethical banking intent*. By understanding a broader spectrum of the behavior of millennials and Gen-Z, banks can adjust their marketing approaches and practices to keep pace with the preference of these generations. In a wider context, this finding will enhance bankers understanding of customers behavior in providing a good ethical banking practices to develop a prosperous, inclusive and sustainable banking system.

Notwithstanding, the generalizability of these results is subjected to certain limitations. Firstly, the study focused on millennials and Gen-Z customer behavior, yet ethical banking attitudes among other generations behavior may differ from these generations. Additionally, using a self-administered survey may lead to challenges in monitoring, as respondents might not fully grasp the author's intent, potentially causing variations in survey interpretation among participants. Therefore, future study may address the limitation to provide a more comprehensive result.

Note

1. Available upon request.

References

Abduh, M., Ramjaun, S. and Mustaqim, M. (2018), "Bank selection criteria and SERVQUAL survey among Muslims in Mauritius", *Qudus International Journal of Islamic Studies*, Vol. 6 No. 2.

Agag, G. (2019), "Understanding the determinants of guests' behaviour to use green P2P accommodation", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 9, pp. 3417-3446.

Aida, M. and Musa, R. (2016), "Determinants of attitude and intention towards Islamic financing adoption among Non-Users", *Procedia Economics and Finance*, Vol. 37 No. 16, pp. 227-233.

Ajzen, I. (1985), "From intentions to actions, a theory of planned behaviour", in Ajzen, J. and Beckmann, J. (Eds), *Action Control*, SSSP Springer Series in Social Psychology, Springer, Berlin, Heidelberg.

Alma'amun, S., Kamaruzaman, M.N., Shafie, Z. and Md. Noh, S. (2018), "Money management for Muslim family", *International Journal of Islamic Economics and Finance Research*, Vol. 1 No. 1, pp. 31-40.

Alsaad, A., Saif-Alyousfi, A.Y.H. and Elrehail, H. (2020), "Religiosity, idealism, and ethical consumption, the mediating effect of perceived customer effectiveness and moral obligation", *Journal of Social Marketing*, Vol. 11 No. 1, pp. 25-43.

Amin, H. (2016), "Investigating drivers of internet giving behaviour in Malaysia", *Asia Pacific Journal of Marketing and Logistics*, Vol. 28 No. 2, pp. 95-115.

Andaleeb, S.S., Rashid, M. and Rahman, Q.A. (2016), "A model of customer-centric banking practices for corporate clients in Bangladesh", *International Journal of Bank Marketing*, Vol. 34 No. 4, pp. 458-475.

Arli, D., Tjiptono, F. and Winit, W. (2014), "Consumer ethics among young consumers in developing countries, a cross-national study", *Social Responsibility Journal*, Vol. 11 No. 3, pp. 449-466.

Asyari, M., Hoque, E., Hassan, M.K., Susanto, P., Jannat, T. and Mamun, A.A. (2022), "Millennial generation's Islamic banking behavioral intention: the moderating role of Profit-Loss sharing, perceived financial risk, knowledge of Riba, and marketing relationship", *Journal of Risk and Financial Management*, Vol. 15 No. 12, p. 590.

Awang, Y., Abdul Rahman, A.R. and Ismail, S. (2019), "The influences of attitude, subjective norm and adherence to Islamic professional ethics on fraud intention in financial reporting", *Journal of Islamic Accounting and Business Research*, Vol. 10 No. 5, pp. 710-725.

Bank Negara Malaysia (BNM) (2019), "Preparing our financial sectors for risks from climate change", available at: www.bnm.gov.my/climatechange (accessed 20 April 2021).

Barigozzi, F. and Tedeschi, P. (2015), "Credit markets with ethical banks and motivated borrowers", *Review of Finance*, Vol. 19 No. 3, pp. 1281-1313.

Barnett, T. and Valentine, S. (2004), "Issue contingencies and marketers' recognition of ethical issues, ethical judgments, and behavioural intentions", *Journal of Business Research*, Vol. 57 No. 4, pp. 338-346.

Bayer, S., Gimpel, H. and Sarikaya, S. (2019), "Bank customers' decision-making process in choosing between ethical and conventional banking, a survey-based examination", *Journal of Business Economics*, Vol. 89 No. 6, pp. 655-697.

Bryson, D., Atwal, G. and Dave, K. (2016), "Antecedents of intention to use green banking strategic change", *Briefings in Entrepreneurial Finance*, Vol. 25 No. 5, pp. 551-567.

Bukhari, S.A.A., Hashim, F. and Amran, A. (2019), "Determinants of green banking adoption, a theoretical framework", *KnE Social Sciences*, pp. 1-14.

Chatzidakis, A., Hibbert, S. and Smith, A.P. (2007), "Why people don't take their concerns about fair trade to the supermarket: the role of neutralisation", *Journal of Business Ethics*, Vol. 74 No. 1.

Chen, M.H., Chen, B.H. and Chi, C.G. (2019), "Socially responsible investment by Gen-Z, a cross-cultural study of Taiwanese and American investors", *Journal of Hospitality Marketing and Management*, Vol. 28 No. 3, pp. 334-350.

Chew, B.C., Tan, L.H. and Hamid, S.R. (2016), "Ethical banking in practice, a closer look at the cooperative bank UK PLC", *Qualitative Research in Financial Markets*, Vol. 8 No. 1, pp. 70-91.

CIMB Group Holding Berhad (2023), "Sustainable business and banking products", available at: www.cimb.com/en/sustainability/sustainable-business-and-banking-products-for-individuals.html (accessed 6 December 2023).

Culiberg, B. and Bajde, D. (2013), "Do you need a receipt? Exploring consumer participation in consumption tax evasion as an ethical dilemma", *Journal of Business Ethics*, Vol. 124 No. 2, pp. 271-282.

D'Astous, A. and Legendre, A. (2009), "Understanding consumers' ethical justifications: a scale for appraising consumers' reasons for not behaving ethically", *Journal of Business Ethics*, Vol. 87 No. 2, pp. 255-268.

De Pelsmacker, P. and Janssens, W.A. (2007), "Model for fair trade buying behaviour, the role of perceived quantity and quality of information and of product-specific attitudes", *Journal of Business Ethics*, Vol. 75 No. 4, pp. 361-380.

DeClerck (2009), "Ethical Banking", in Zsolnai, L., Boda, Z. and Fekete, L. (Eds) *Ethical Prospects*, Springer, Dordrecht.

Deng, X. (2015), "Understanding Chinese consumers' ethical purchasing decision-making process, a combination of qualitative and quantitative study", *Geoforum*, Vol. 67, pp. 204-213.

Department of Statistics Malaysia (DOSM) (2020), "Current population estimates Malaysia", available at: https://newss.statistics.gov.my/newss-portalx/ep/epDataRequestForm.seam

Djafarova, E. and Foots, S. (2022), "Exploring ethical consumption of generation Z, theory of planned behaviour", *Young Consumers*, Vol. 23 No. 3, pp. 413-431.

Ed Grattan (2019), "Who are the 'ethical natives', and how will they change the world?", Triodos Bank, available at: www.triodos.co.uk/articles/2018/who-are-the-ethical-natives-and-how-will-they-change-the-world (accessed 19 September 2021).

Farooq, M. and Yahya, S. (2021), "The impact of green religiosity on the green product switching behaviour in Pakistan, the role of green personal values and green altruism", *Journal of Religion and Health*, Vol. 61 No. 6, pp. 4825-4848.

Ferreira, F.A.F., Jalali, M.S. and Ferreira, J.J.M. (2016), "Experience-focused thinking and cognitive mapping in ethical banking practices: from practical intuition to theory", *Journal of Business Research*, Vol. 69 No. 11, pp. 4953-4958.

Forbes (2020), "Millennials and gen Z's are shaping a better world for us all", available at: www.forbes.com/sites/deloitte/2020/09/16/millennials-and-gen-zs-are-shaping-a-better-world-for-us-all/?sh=58de13b37c65 (accessed 7 December 2023).

Formánková, S., Trenz, O., Faldík, O., Kolomazník, J. and Sládková, J. (2019), "Millennials' awareness and approach to social responsibility and Investment-Case study of the Czech Republic", *Sustainability*, Vol. 11 No. 2, p. 504.

Forsyth, D.R. and O'Boyle, E.H. (2011), "Rules, standards, and ethics: relativism predicts cross-national differences in the codification of moral standards", *International Business Review*, Vol. 20 No. 3, pp. 353-361.

Garson, G.D. (2016), *Partial Least Square: Regression and Structural Equation Models*, Statistical Associates Publishing, NC.

Goldgehn, L.A. (2004), "Generation who, what, Y? What you need to know about generation Y", *International Journal of Educational Advancement*, Vol. 5 No. 1, pp. 24-34.

Hair, J.F., Jr, Sarstedt, M., Hopkins, L. and G. Kuppelwieser, V. (2014), "Partial least squares structural equation modeling (PLS-SEM), an emerging tool in business research", *European Business Review*, Vol. 26 No. 2, pp. 106-121.

Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: indeed, a silver bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139-152.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2018), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.

Hammad, H., El-Bassiouny, N., Paul, P. and Mukhopadhyay, K. (2014), "Antecedents and consequences of consumers' attitudinal dispositions toward cause-related marketing in Egypt", *Journal of Islamic Marketing*, Vol. 5 No. 3, pp. 414-445.

Hassan, M.K. and Rashid, M. (2010), "Ethical gaps and market value in the Islamic banks of Bangladesh", *Social Science Research Network*, Vol. 14 No. 1, pp. 49-75.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.

Ibe-Enwo, G., Igbudu, N., Garanti, Z. and Popoola, T. (2019), "Assessing the relevance of green banking practice on bank loyalty, the mediating effect of green image and bank trust", *Sustainability*, Vol. 11 No. 17, p. 4651.

Institute for Capital Market Research Malaysia (ICMR) (2021), "The rise of millennial and gen Z investors, trends, opportunities, and challenges for Malaysia", available at: www.icmr.my/wp-content/uploads/2021/10/FINAL-VERSION-The-Rise-of-Millennial-and-Gen-Z-Investors.pdf (accessed 15 May 2021).

Iqbal, M., Nisha, N. and Raza, S.A. (2017), "Customers' perceptions of green banking: Examining service quality dimensions in Bangladesh", in de Pablos, P.O. (Eds), *Managerial Strategies and Solutions for Business Success in Asia*, 1st ed., Business Science Reference, pp. 1-19.

Iqbal, M., Nisha, N., Rifat, A. and Panda, P. (2018), "Exploring client perceptions and intentions in emerging economies, the case of green banking technology", *International Journal of Asian Business and Information Management*, Vol. 9 No. 3, pp. 14-34.

Ismail, A.Y., Hameed, L.B.M., Suhaimi, A.F.M., Jamaludin, N.I. and Shahimi, S. (2020), "Value based intermediation and interconnection of sustainable development goals in Islamic banking framework", *International Journal of Islamic Economics and Finance Research*, Vol. 3 No. 1, pp. 45-56.

Janah, N., Medias, F. and Pratiwi, E.K. (2020), "The intention of religious leaders to use Islamic banking services, the case of Indonesia", *Journal of Islamic Marketing*, Vol. 12 No. 9, pp. 1786-1800.

Jayasekera, M.A.K.D.S. and Pushpakumari, M.D. (2021), "Ethical banking, will it be millennials choice?", *International Conference on Business Research*, pp. 214-223.

Jones, T.M. (1991), "Ethical decision making by individuals in organisations: an Issue-Contingent model", *The Academy of Management Review*, Vol. 16 No. 2, pp. 366-395.

Khan, Y.M., Din, S.U., Khan, M.J. and Javeed, A. (2020), "Dynamics of selecting Islamic home financing", *International Journal of Finance and Economics*, pp. 1-12.

Lee, Y. (2020), "The relationship between green country image, green trust, and purchase intention of korean products, focusing on Vietnamese gen Z consumers", *Sustainability*, Vol. 12 No. 12, p. 5098.

Lehnert, K., Park, Y. and Singh, N. (2014), "Research note and review of the empirical ethical decision-making literature: boundary conditions and extensions", *Journal of Business Ethics*, Vol. 129 No. 1, pp. 195-219.

Lymperopoulos, C., Chaniotakis, I.E. and Soureli, M. (2012), "A model of green bank marketing", *Journal of Financial Services Marketing*, Vol. 17 No. 2, pp. 177-186.

Martínez, L.F. and Jaeger, D.S. (2016), "Ethical decision making in counterfeit purchase situations, the influence of moral awareness and moral emotions on moral judgment and purchase intentions", *Journal of Consumer Marketing*, Vol. 33 No. 3, pp. 213-223.

Martínez, M.D.C., Martín-Cervantes, P.A. and Peña Rodríguez, S. (2021), "Ethical banking and poverty alleviation banking, the two sides of the same solidary coin", *Sustainability*, Vol. 13 No. 21, p. 11977.

Martínez, M.D.C., Rambaud, S.C. and Oller, I.M.P. (2020), "Sustainable and conventional banking in Europe", *PloS One*, Vol. 15 No. 2.

Martínez-Campillo, A., Wijesiri, M. and Wanke, P. (2021), "Evaluating the double Bottom-Line of social banking in an emerging country, how efficient are public banks in supporting priority and Non-Priority sectors in India?", *Journal of Business Ethics*, Vol. 162 No. 2, pp. 399-420.

Musa, M.A., Sukor, M.E.A., Ismail, M.N. and Elias, M.R.F. (2020), "Islamic business ethics and practices of Islamic banks, perceptions of Islamic bank employees in Gulf cooperation countries and Malaysia", *Journal of Islamic Accounting and Business Research*, Vol. 11 No. 5, pp. 1009-1031.

Nisha, N. (2016), "Exploring the dimensions of mobile banking service quality, implications for the banking sector", *International Journal of Business Analytics (IJBAN)*, Vol. 3 No. 3, pp. 60-76.

Oseni, U.A., Adewale, A.A. and Omoola, S.O. (2018), "The feasibility of online dispute resolution in the Islamic banking industry in Malaysia, an empirical legal analysis", *International Journal of Law and Management*, Vol. 60 No. 1, pp. 34-54.

Papaoikonomou, E., Ryan, G. and Ginieis, M. (2011), "Towards a holistic approach of the attitude-behaviour gap in ethical consumer behaviours, empirical evidence from Spain", *International Advances in Economic Research*, Vol. 17 No. 1, pp. 77-88.

Park, H. and Kim, J.D. (2020), "Transition towards green banking: role of financial regulators and financial institutions", *Asian Journal of Sustainability and Social Responsibility*, Vol. 5 No. 1.

Patterson, Z. and McEachern, M.G. (2018), "Financial service providers, does it matter if banks don't behave ethically?", *International Journal of Consumer Studies*, Vol. 42 No. 5, pp. 1-12.

Puiu, S. (2016), "Gen-Z- a new type of consumers", *Young Economists Journal*, Vol. 13 No. 27, pp. 67-78.

Pujianti, F.N., Tran, P.T.H. and Novianty, I. (2021), "Millennial experience in islamic banking, a comparative study between clients and Non-Clients", *International Journal of Applied Business Research*, Vol. 3 No. 2, pp. 47-62.

Raza, A., Rather, R.A., Iqbal, M.K. and Bhutta, U.S. (2020), "An assessment of corporate social responsibility on customer company identification and loyalty in banking industry, a PLS-SEM analysis", *Management Research Review*, Vol. 43 No. 11, pp. 1337-1370.

Rest, J.R. (1986), *Moral Development, Advances in Research and Theory*, Praeger, New York, NY.

Rifat, A., Nisha, N., Iqbal, M. and Suviitawat, A. (2016), "The role of commercial banks in green banking adoption, a Bangladesh perspective", *International Journal of Green Economics*, Vol. 10 Nos 3/4, pp. 226-251.

Ringim, J.K. (2014), "Perception of Nigerian Muslim account holders in conventional banks toward Islamic banking products", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 7 No. 3, pp. 288-305.

Salleh, M.S.M., Mahbob, N.N. and Baharudin, N.S. (2017), "Overview of 'Gen-Z' behavioral characteristic and its effect towards hostel facility", *International Journal of Real Estate Studies*, Vol. 11 No. 2, pp. 59-67.

San-Jose, L., Retolaza, J.L. and Gutierrez-Goiria, J. (2011), "Are ethical banks different? A comparative analysis using the radical affinity index", *Journal of Business Ethics*, Vol. 100 No. 1, pp. 151-173.

Shaw, D. and Shiu, E. (2002), "An assessment of ethical obligation and self-identity in ethical consumer decision-making, a structural equation modelling approach", *International Journal of Consumer Studies*, Vol. 26 No. 4, pp. 286-293.

Shaw, D., Shiu, E. and Clarke, I. (2000), "The contribution of ethical obligation and self-identity to the theory of planned behaviour, an exploration of ethical consumers", *Journal of Marketing Management*, Vol. 16 No. 8, pp. 879-894.

Shaw, D., Shiu, E. and Clarke, I. (2015), "Ethical consumption, the contribution of ethical obligation and Self-Identity to the theory of planned behaviour. Developments in marketing science", *Proceedings of the Academy of Marketing Science*, Vol. 16 No. 8, pp. 359-359.

Suhartanto, D., Syarief, M.E., Chandra Nugraha, A., Suhaeni, T., Masthura, A. and Amin, H. (2021), "Millennial loyalty towards artificial intelligence-enabled mobile banking, evidence from Indonesian Islamic banks", *Journal of Islamic Marketing*, Vol. 13 No. 9, pp. 1299-1336.

Sulaiman, Z., Ahmad Sugiran, H.S., Hasbullah, N.N., Mas'od, A., Hashim, S. and Bradley, D.A. (2022), "Public awareness of consumer products containing radioactive materials, empirical evidence from Malaysia", *International Journal of Environmental Research and Public Health*, Vol. 19 No. 4, p. 2326.

Talha, M., Sallehhuddin, A., Masoud, M.S. and Said, A.M.A. (2013), "An analysis of moral intensity, intention, and socially responsible investment behaviour among fund managers of Malaysian unit trust companies", *International Journal of Managerial and Financial Accounting*, Vol. 5 No. 2, pp. 162-177.

Tan, L.H., Chew, B.C. and Hamid, S.R. (2017), "Service quality implementation in shaping sustainable banking operating system: a case study of Maybank group", *Qualitative Research in Financial Markets*, Vol. 9 No. 4, pp. 359-381.

Taneja, S. and Ali, L. (2021), "Determinants of customers' intentions towards environmentally sustainable banking, testing the structural model", *Journal of Retailing and Consumer Services*, Vol. 59 No. March, p. 102418.

Ting, C., Hsieh, C., Chang, H. and Chen, H. (2019), "Environmental consciousness and green customer behaviour, the moderating roles of incentive mechanisms", *Sustainability*, Vol. 11 No. 3, p. 819.

Tullani, H., Saha, R. and Dahiya, R. (2018), "Green innovation and ethical responsibility, do they improve customer's green purchase intentions?", *International Journal of Sustainable Entrepreneurship and Corporate Social Responsibility*, Vol. 3 No. 1, pp. 35-52.

Valentine, S. and Hollingworth, D. (2012), "Moral intensity, issue importance, and ethical reasoning in operations situations", *Journal of Business Ethics*, Vol. 108 No. 4, pp. 509-523.

Valentine, S.R. and Bateman, C.R. (2011), "The impact of ethical ideologies, moral intensity, and social context on Sales-Based ethical reasoning", *Journal of Business Ethics*, Vol. 102 No. 1, pp. 155-168.

Vieira, J., Frade, R., Ascenso, R., Prates, I. and Martinho, F. (2020), "Generation Z and Key-Factors on E-commerce, a study on the Portuguese tourism sector", *Administrative Sciences*, Vol. 10 No. 4, pp. 103-117.

Yadav, R. and Pathak, G.S. (2017), "Determinants of consumers' green purchase behaviour in a developing nation: Applying and extending the theory of planned behaviour", *Ecological Economics*, Vol. 134 No. 1, pp. 114-122.

Ye, Y., Lu, X. and Lu, T. (2020), "Examining the spillover effect of sustainable consumption on microloan repayment, a big data-based research", *Information and Management*, Vol. 59 No. 5, p. 103288.

Zakiah, F. and Al-Aidaros, A.-H. (2017), "Customers' Islamic ethical behaviour, the case of Malaysian Islamic banks", *Humanomics*, Vol. 33 No. 3, pp. 371-383.

Further reading

Hofmann, E., Meier-Pesti, K. and Kirchler, E. (2007), "The decision process for ethical investment", *Journal of Financial Services Marketing*, Vol. 12 No. 1, pp. 4-16.

Iqbal, M., Rifat, A. and Nisha, N. (2021), "Evaluating attractiveness and perceived risks", *International Journal of Asian Business and Information Management*, Vol. 12 No. 1, pp. 1-23.

Mansour, I.H.F. and Diab, D.M.E. (2016), "The relationship between celebrities' credibility and advertising effectiveness: the mediation role of religiosity", *Journal of Islamic Marketing*, Vol. 7 No. 2, pp. 148-166.

Nisha, N. (2020), "Can Central bank survive the green banking revolution? A case of Bangladesh bank", *International Journal of Asian Business and Information Management*, Vol. 11 No. 3, pp. 45-64.

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