The role of 'localness' in sustainable food consumption: insights from sustainable coffee in Thailand

Abstract

Purpose: We investigated consumers' environmental, social, and local beliefs and their impact on attitudes, subjective norms, and willingness to pay for sustainable coffee in the understudied context of Thailand.

Design: The study is based on a survey of 253 Thai consumers, analysed through an extended model of the Theory of Planned Behaviour (TPB).

Findings: The study validates the TPB model in the Thai demographic, finding a significant positive impact of environmental and local beliefs and subjective norms on willingness to pay for sustainable coffee. More importantly, it proposes an extended model of TPB, stressing the central role of '*local beliefs*' in sustainable consumption in a Global South context.

Originality: This study demonstrates the importance of 'localness' in the practice of sustainable consumption in Thailand, namely the beliefs in the support for the local economy and prosperity for the local community. This expands our understanding of the heterogeneous meanings associated with the practice of sustainable consumption in a South-East Asian context.

Keywords: sustainable consumption; Theory of Planned Behaviour; Global South; local community; coffee; Thailand.

1. Introduction

This study aims to understand the role that beliefs towards benefitting the environment, farmers, and the local economy play on consumers' attitudes and willingness to pay for sustainable coffee in a South-Asian context. This is timely and significant because most research on sustainable consumption is focused on the Global North, leaving the majority of world consumers underrepresented. A systematic review including 30 years of research (Cotte and Trudel, 2009) concluded that knowledge on sustainable consumption is based almost exclusively (90% of the sample) on North America and Europe. A more recent review confirmed this practice is still largely associated with privileged Northern consumers (Carrington *et al.*, 2021). In this paper, we argue that new theoretical devices are needed to understand sustainable consumption in different socio-economic contexts. To do so, we draw from a theoretical approach emphasising consumption and markets as sites of diversity, embedded in places, and influenced by local discourses and socio-political structures (Granovetter, 2018). To re-theorise sustainable consumption beyond Northern-centred lenses, we need to develop new contextual accounts of how sustainable consumption is understood and practiced from multiple Southern perspectives (Gregson and Ferdous, 2015; Hawkings, 2015).

This research addresses two gaps in the literature. First, from a theoretical perspective, it aims to unpack the role of 'local beliefs' in shaping sustainable food consumption. Here we refer to 'local beliefs' as the set of cultural norms and understandings that people attribute to the consumption of 'local food' for environmental sustainability, community revitalization, and support to local producers (Zhang *et al.,* 2020). Empirical studies showed that sustainable consumption in the Global South privileges support to the local economy (Doherty *et al.,* 2015), pride for national identity (Hawkings, 2015), and trust in the quality of domestic products over imported ones (Aoki *et al.,* 2017). However, a robust investigation of the role of 'local beliefs' in shaping consumers' attitudes and willingness to pay for sustainable food, and their interplay with environmental and social beliefs, is currently lacking.

Second, this paper addresses a gap of knowledge in the South-East Asian context. While scholarship researching the links among consumers' beliefs, attitudes, and intentions towards sustainable food in Asian contexts is mostly focused on India (Arya *et al.*, 2024; Chaturvedi *et al.*, 2024; Kumar, 2021; Taufique and Vaithianathan, 2018; Yadav and Pathak, 2016) and China (Bai *et al.*, 2019; Tan *et al.*, 2023; Zhang *et al.*, 2018; Zhang *et al.*, 2020), we have a scarcity of studies on sustainable food consumption in Thailand. A few exceptions include a

study of consumers' willingness to pay for food safety labels (Wongprawmas and Canavari, 2017), pesticide-free food (Lippe *et al.,* 2010), organic farming (Sangkapitux *et al.,* 2017), and Fair Trade products (Aoki *et al.,* 2017; Vantamay, 2018; Ut-tha *et al.,* 2021). While these studies highlight that Thai consumers value domestic products over imported and Fair Trade products (Aoki *et al.*, 2017; Sangkapitux *et al.,* 2017) the influence of 'local beliefs' on consumer attitudes and willingness to pay for sustainable food is not fully unpacked.

To address these gaps, we surveyed 253 Thai consumers and investigated consumers' beliefs, attitudes, subjective norms, and willingness to pay (WTP) for sustainable coffee using a theoretical model informed by the Theory of Planned Behaviour (TPB). The study contributes to existing literature in two ways: first, it validates and expands the TPB model in a South-East Asian context, thus addressing a lack of contextual understanding of this empirical setting. Second, the importance of 'localness' in sustainable food consumption is a prominent contribution of this paper: the study highlights the role of 'local beliefs', namely the belief in the contribution to the local economy, as a key factor shaping attitudes, subjective norms, and willingness to pay for locally-produced coffee among Thai consumers. The study concludes with managerial recommendations for marketers, businesses, and policymakers invested in promoting environmentally sustainable and local food consumption in Asian contexts.

2. Theoretical Review and Hypotheses Development

2.1 Theory of planned behaviour

Our hypotheses are informed by the Theory of Planned Behaviour (TPB), which was developed to identify factors influencing individual behaviour (Ajzen & Fishbein, 1980; Ajzen, 1991). Scholars have often criticised TPB for its lack of culturally sensitive variables (Randall *et al.*, 2024) and have highlighted that dynamically adapting the TPB model to variations within populations is important (Wu *et al.*, 2024). Several studies in the Global South have demonstrated that the TPB can be expanded to improve its explanatory power (Taufique and Vaithianathan, 2018; Kaffashi and Shamsudin, 2019; Ting *et al.,* 2019; Tan *et al.,* 2023). In this study, we adopted a variation on the TPB model developed in a study on Taiwanese consumers by Hultman *et al.*, (2015), namely a model testing the relationships between *beliefs, attitudes, subjective norms*, and *willingness to pay* (WLP). *Beliefs* refer to the perceived positive or negative outcomes of certain behaviours; they are the foundation

shaping individual attitudes and subjective norms, which, in turn, influence behaviours (Ajzen & Fishbein, 1980). *Attitudes* refer to an individual's overall evaluation of behaviour and correlate with the strongest salient beliefs (Ajzen, 1991). *Subjective norms* indicate the perceived social pressure to perform or not to perform a behaviour – namely the influence of peers, family, and societal expectations (Ajzen, 1991). *Willingness to pay* is often used as a measurement of buying intention that can be considered a proxy for actual behaviour (De Pelsmacker *et al.*, 2005). We outline each of our hypotheses below.

2.2 Beliefs

Here we focus on three types of consumers' beliefs: environmental, social, and local. Previous studies considered separately the role of environmental beliefs (Bai *et al.,* 2019; Arya *et al.*, 2024; Dangelico *et al.*, 2024; Naini and Reddy, 2024), social beliefs (Ut-tha *et al.* 2021; Ogiemwonyi and Jan, 2023; Duong *et al.*, 2024), and local beliefs (Zhang *et al.* 2020; Chaturvedi *et al.*, 2024) on consumer behaviour. The comprehensive consideration of these three different types of beliefs in the same study is a novel aspect of our study, that expands previous applications of TPB to sustainable food consumption.

2.2.1 Environmental beliefs

Environmental beliefs refer to the willingness to protect the environment (Arya *et al.*, 2024). Several studies indicate that beliefs about ecological protection positively influence consumers' intentions and WTP for sustainable food. This was confirmed in a study on organic food among Chinese consumers (Bai *et al.,* 2019) and research on sustainable biscuits among Italian consumers (Dangelico *et al.*, 2024). Environmental beliefs are the strongest predictor of purchase intention for eco-friendly products also among Indian students (Naini and Reddy, 2024). Beyond food, environmental beliefs have a significant positive influence on consumers' purchase intention of green products among young urban Indian consumers (Yadav and Pathak, 2016; Taufique and Vaithianathan, 2018; Kumar, 2021), Thai citizens (Maichum *et al.,* 2016), and Ghanaian students (Salifu *et al.*, 2024). Based on this, we hypothesise that, within the context of sustainable consumption in Thailand:

H1a: Environmental belief is positively related to WTP for sustainable coffee.

Research highlighted that environmental beliefs positively influence attitudes towards sustainable food. This was confirmed in research on sustainable food among Indian consumers (Arya *et al.*, 2024; Lavuri *et al.*, 2024) and sustainable coffee in Thailand (Ut-tha *et al.* 2021). The positive relationship between environmental beliefs and attitudes was further demonstrated through studies on organic products: as organic products are free from chemicals and pesticides, beliefs about environmental protection positively influence attitudes towards organic products (Lee and Yun, 2015; Bai *et al.*, 2019). Beyond food, environmental beliefs have been found to positively influence attitudes towards green products among Gen Z in the Philippines (Bajar *et al.*, 2024). Therefore, we postulate that:

H1b: Environmental belief is positively related to attitude towards consuming sustainable coffee.

Additionally, research found that environmental beliefs have a positive effect on subjective norms in the context of green products in the Philippines (Bajar *et al.*, 2024) and among Indian consumers (Lavuri *et al.*, 2024). Beyond food, environmental beliefs have been found to have a positive influence on subjective norms regarding organic beauty products (Lavuri *et al.*, 2022); namely, environmental beliefs affect the behaviour of peer groups, friends, and family members regarding sustainable consumption We thus hypothesise that:

H1c. Environmental belief is positively related to the subjective norm.

2.2.2 Social beliefs

Social beliefs refer to social responsibility and the contribution to the meaningful development of society (Polisetty *et al.*, 2024), such as beliefs in the fairness of production (protection of workers' rights, salary, working conditions, and livelihoods) and beliefs related to justice and personal responsibility (Duong *et al.*, 2024). Social beliefs align with collectivist values, where individuals value societal welfare over individual and hedonistic goals (Ogiemwonyi and Jan, 2023). 'Social beliefs' differ from 'social value', defined instead as the influence of perceived social status on consumer decisions (Wu *et al.*, 2024). Several studies found that social beliefs positively affect consumers' WTP for sustainable products, such as organic wine (Schaufele and Hamm, 2017), organic fresh food (Bai *et al.*, 2019), and

sustainable coffee (Ut-tha *et al.* 2021). Following these premises, we postulate that, within the Thai context:

H2a: Social belief is positively related to WTP for sustainable coffee.

Social beliefs, including religious beliefs about personal responsibility and karma, have a positive influence on individual pro-social behaviours (Chen *et al.*, 2022). Following TPB, beliefs positively influence attitudes (Ajzen & Fishbein, 1980), and several empirical studies in Asian contexts confirmed this positive relationship between social beliefs and attitudes (Arya *et al.*, 2024; Bai *et al.*, 2019; Ut-tha *et al.* 2021). Particularly, social beliefs in a just world positively influence attitudes towards sustainable consumption among consumers in Vietnam (Duong *et al.*, 2024). Following this, we hypothesise that:

H2b: Social belief is positively related to attitude towards consuming sustainable coffee.

Social conformity is important to consumers in collectivist cultures, as social beliefs might help consumers behave in a manner that society supports and is accepted by the public, especially in the context of green consumption (Ogiemwonyi and Jan, 2023). Consumers who hold social beliefs around moral responsibility towards others develop a strong sense of influence among their friends and peers (Kirmani *et al.*, 2023). Particularly, the beliefs in the importance of the well-being of others were found to have a strong positive impact on subjective norms in the context of green consumption of electrical appliances among Vietnamese consumers (Lobo and Greenland, 2017) and sustainable food consumption among Malaysian consumers (Ogiemwonyi and Jan, 2023). Therefore we postulate that:

H2c. Social belief is positively related to the subjective norm.

2.2.3 Local beliefs

There is no consensus on the definition of 'local food', as it can refer to food miles, geographic boundaries, regional specialties, alternative food markets (i.e. farmers' markets), or emotion-related food (i.e. from neighbours or relatives) (Zhang *et al.* 2020). For the purpose of this study, we refer to 'local beliefs' as the belief in the importance of consuming

locally-produced food over imported one to benefit the local economy and protect the environment. Several studies in Asian contexts have stressed the importance of national pride, national identity, and support for local products in the practice of sustainable consumption (Hawkins, 2015; Doherty *et al.,* 2015). For example, Zhang *et al.* (2020) confirmed that beliefs concerning the local origins of a product have a positive effect on Chinese consumers' WTP and purchase intentions. We argue that 'local beliefs' regarding support for the local economy positively influence Thai consumers' WTP, albeit no research has explicitly considered this before. Following this, we hypothesize that:

H3a: Local belief is positively related to WTP for sustainable coffee.

The positive relationship between beliefs and attitudes towards sustainable food has been confirmed by several studies in Asian contexts, such as India (Arya *et al.*, 2024), China (Bai *et al.*, 2019), and Thailand (Ut-tha *et al.* 2021). Previous studies explored the role of product familiarity, both direct and indirect, on purchase intention, finding that direct product familiarity positively influences consumer intention (Dangelico *et al.*, 2023). In an empirical study on Chinese and Danish consumers who value local food for its contribution to the environment and the local community, 'local beliefs' were found to be positively related to attitudes towards buying local food (Zhang *et al.*, 2020). Additionally, a study on organic food in India found that consumer preference for domestic products over foreign has a positive influence on attitudes (Chaturvedi *et al.*, 2024). Given this, we postulate that:

H3b: Local belief is positively related to attitude towards consuming sustainable coffee.

Given that social norms play a significant role in pro-social behaviour (Chen *et al.*, 2022), their role needs to be considered in relation to 'local beliefs'. Consumers who hold ethnocentric beliefs are more subject to influence from peers and societal expectations regarding buying domestic products over foreign ones (Josiassen *et al.*, 2011). Similarly, beliefs in the validity and morality of domestic products were found to be a key antecedent of subjective norms among Indian consumers (Chaturvedi *et al.*, 2024). This leads us to postulate that:

H3c. Local belief is positively related to the subjective norm.

2.3 *Attitudes*

Studies support that consumers' attitudes towards sustainable food positively impact WTP for sustainable wine (Schäufele and Hamm 2017), Fair Trade products (Zerbini *et al.,* 2019), and green food (Armutcu *et al.*, 2024). In Asian countries, studies found a positive influence of attitudes on WTP for: eco-labelled food in Malaysia (Rezai *et al.,* 2013); organic vegetables in China (Zhang *et al.,* 2018; Bai *et al.,* 2019); sustainable rice in South Korea (Yi, 2019). This positive relationship is confirmed also in studies beyond food, including energy-saving appliances in Pakistan (Jia *et al.,* 2024), and studies among Chinese consumers researching WTP for: low-carbon energy (Tan *et al.,* 2023), green hotel visits (Wu *et al.*, 2024), and carbon footprint apps (Cudjoe *et al.*, 2024). Based on this, we hypothesised that, within the context of sustainable coffee in Thailand:

H4: Attitude towards sustainable coffee positively impacts WTP for sustainable coffee.

In TPB, attitudes are often the strongest predictor of consumer intention (Ajzen & Fishbein, 1980). This has been demonstrated by several empirical studies on sustainable consumption, including a study on green product consumption among Thai consumers (Maichum *et al.*, 2016) and the adoption of energy-efficient appliances among Pakistani consumers (Jia *et al.*, 2024). Particularly, attitudes are often found to mediate the relationship between beliefs and purchase intention or WTP (Ajzen & Fishbein, 1980). This was empirically confirmed by two studies on organic food consumption, among Indian consumers (Chaturvedi *et al.*, 2024), and Chinese consumers (Bai *et al.*, 2019). Additionally, the mediating role of attitudes has been confirmed by a scoping review of TPB in sustainable food consumption (Randall *et al.*, 2024). Therefore we postulate that:

H5: Attitude mediates the relationship between beliefs and WTP for sustainable coffee.

2.4 Subjective norms

In the TPB model, subjective norms positively influence consumer attitudes (Ajzen & Fishbein, 1980; Ajzen *et al.,* 2004). This has been validated in studies on sustainable food among Malaysian (Rezai *et al.* 2013) and Indian consumers (Arya *et al.*, 2024; Lavuri *et al.*, 2024). A study on organic food consumption in Pakistan has found that subjective norms

significantly influence attitudes towards purchase intention (Al-Swidi *et al.*, 2014). Subjective norms played a key role also in Taiwanese consumers' willingness to try plant-based meat (Chen, 2024). Beyond food, subjective norms positively influence attitudes among Thai consumers' intention to reduce single-use plastic (Oludoye and Supakata, 2024), and Chinese Gen Z consumers' intention to visit green hotels (Wu *et al.*, 2024). Accordingly, we hypothesise that:

H6: Subjective Norm is positively related to attitude towards consuming sustainable coffee.

Subjective norms towards sustainable products positively influence WTP (Rezai *et al.,* 2013; Zerbini *et al.,* 2019; Tan *et al.,* 2023). Schaufele and Hamm's (2017) review of WTP for organic wines found that several studies support the positive relationship between subjective norms and WTP. Subjective norms were found to be a strong predictor of consumers' intention to purchase low-carbon products among Malaysian citizens (Kaffashi and Shamsudin, 2019), green products in the Philippines (Bajar *et al.*, 2024), carbon footprint apps among Chinese consumers (Cudjoe *et al.*, 2024), and energy-saving appliances among Pakistani consumers (Jia *et al.*, 2024). Therefore we postulate that:

H7: Subjective Norm has a positive impact on WTP for sustainable coffee.

Research has identified subjective norms as the strongest predictor of consumption behaviour in countries with a collectivist culture, placing group needs above individual goals, such as Malaysia (Kaffashi and Shamsudin, 2019; Ogiemwonyi and Tahir Jar, 2023) and China (Cudjoe *et al.*, 2024; Wu *et al.*, 2024). Individuals with collectivist beliefs are strongly influenced by subjective norms, placing collective group goals and social expectations above individual preferences (Ogiemwonyi and Tahir Jar, 2023). Particularly, empirical studies stressed that subjective norms mediate the relationship between beliefs and purchase intention or WTP, especially in countries with a collectivist culture. This has been confirmed in a study on organic food consumption in Pakistan (Al-Swidi *et al.* 2014) and fair trade products in Italy (Zerbini *et al.* 2019). Given Thailand's collectivist culture (Rurkkhum and Bartlett, 2018), we hypothesise that:

H8: Subjective Norm mediates the relationship between beliefs and WTP for sustainable coffee.

Fig. 1 depicts the relationship between the variables. H1a-H2a-H3a highlight the relationship between the various beliefs and WTP. H1 (b-c); H2 (b-c); H3 (b-c) represent the relationships between the beliefs and both subjective norms and attitudes. H4 and H7 depict the relationship between attitude and subjective norm and WTP. H6 depicts the relationship between subjective norms and attitude. H5 and H8 represent the mediation roles of attitude and subjective norm on the relationship between the beliefs and WTP.
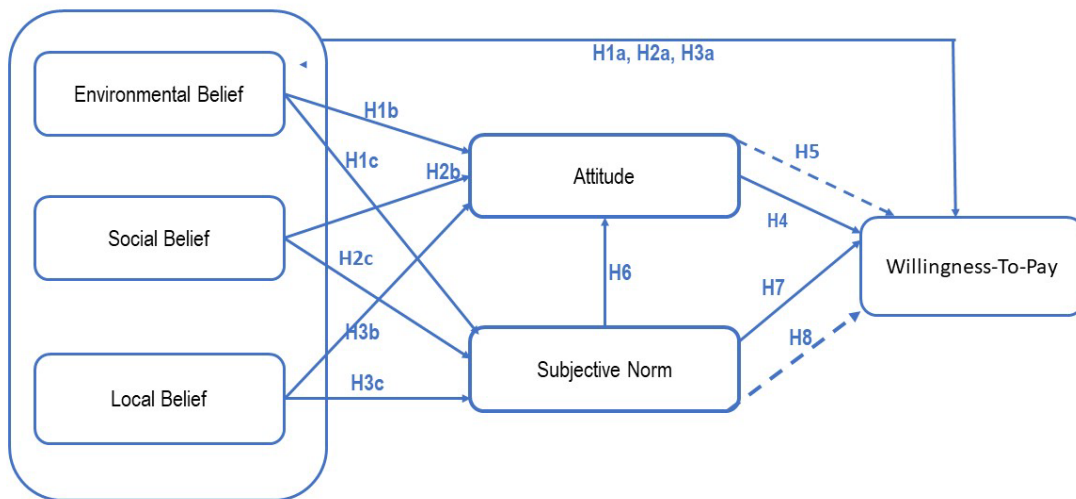
[Figure 1. Conceptual framework]

3. Methodology

3.1 Research context

Thailand constitutes a promising, yet understudied, context to expand our understanding of sustainable consumption in Asian contexts for three reasons. First, Thailand is a highly educated country (99% youth high literacy rate), with a GDP of US$ 514 billion in 2023, and GDP per capita of US$ 7,171, thus being an upper-middle income level (Worldbank, 2024). Given that sustainable consumption is a phenomenon prominent among, albeit not limited to,

educated and high-income consumers (Carrington *et al.,* 2021), Thailand is an important setting to study this topic. Second, food labelling has become increasingly important for Thai consumers (Wongprawmas and Canavari, 2017), and research on Thai population has found a high WTP for pesticide-free food (Lippe *et al.,* 2010), food safety labels (Wongprawmas and Canavari, 2017), organic farming (Sangkapitux *et al.,* 2017), and Fair Trade products (Aoki *et al.,* 2017; Vantamay, 2018; Ut-tha *et al.,* 2021). This demonstrates an increasing level of interest in sustainable food among the Thai population, making this an appropriate research context. Third, we decided to focus on coffee because coffee consumption in Thailand has been increasing steadily in the last 30 years, amounting to 1,4 million shipping bags in 2019 (ICO, 2021) and Thai coffee specialty business is increasing, especially in the capital Bangkok (Azavedo and Gogatz, 2021). Moreover, Thailand has a good tradition of coffee production: despite volumes of production are not comparable to Latin American countries such as Brazil or Colombia, Thailand's coffee production is still considered medium-size, producing over 500 60kg coffee bags in 2019/2020 (ICO, 2021). Additionally, two types of Thai coffee (Doi Chaang and Doi Tung coffee) have been registered under the EU framework of Geographical Indication, recognising the quality of Thai coffee on global markets (ARISE, 2019). These reasons made Thailand an important setting to study consumer behaviour regarding sustainable coffee.

3.2. Questionnaire

We employed the quantitative approach to ascertain and statistically test the relationship between the variables of the study. To evaluate the impact of each independent variable on consumers' WTP, primary data was gathered through a questionnaire. To ground the questionnaire in existing literature, we crafted the survey in English, translated it into Thai, and then back-translated it into English to ensure the accuracy of constructs was maintained through translation (Tyupa, 2011). The survey consisted of two sections. The first section probed the beliefs, attitudes, subjective norms, and WTP towards purchasing sustainable coffee. Participants were asked to respond to the items that measured variables using Likert-type statements with a five-point scale (from 1, strongly disagree, to 5, strongly agree). These items have been validated in the literature (Appendix 1). The second section probed participants' socio-demographics, an important factor influencing WTP among Thai consumers (Aoki *et al.*, 2017; Sangkapitux *et al.*, 2017; Vantamay, 2018). The questionnaire was developed electronically on an online survey engine (Qualtrics) for data collection.

3.3 *Sampling and data collection*

Considering the current Thai population, the sample size estimated for the study was 385 (using a sample size calculator). We first employed the snowball sampling method through social media recruitment. As a network-based convenience form of sampling, snowball sampling ensures the selection of respondents who fit the research criteria (Parker *et al.*, 2019), in this case, Thai citizens who consume coffee. However, due to the disadvantage of this sampling method related to the representativeness of samples, we also employed Prolific (which used a random sampling method) to collect more data for the study. Data collection took place between July 2023 and July 2024. We obtained 268 responses (183-snowball, 85-prolific); 15 were considered invalid due to incomplete responses and were discarded. A total of 253 valid responses were used for the study, representing a response rate of 65%. Though the actual sample size is slightly less than the expected sample size (385), the number is appropriate for generalising especially to the gen-z in Thailand, as they constituted most of the respondents for this study. We tested for non-response bias to identify any significant differences between early and late responses on the demographic variables (Armstrong and Overton, 1977). We split the responses into two based on the dates they were received. The test yielded no significant differences at $p < 0.05$.

4. Results

We performed one-way ANOVA to determine whether there was a significant difference between the responses (Armstrong and Overton, 1977). The results showed no significant (*p-values* = .14) difference between the means of variables, income, and age. The data were then analysed using SEM techniques. Table 1 shows the descriptive statistics of the demographics data. Most of the respondents were males, highly educated, had income levels above 90000 THB, and were between the ages of 18-30. The standard deviation compared to the mean was very small indicating a very good spread of the dataset around the mean.

Table 1. *Descriptive Statistics (n= 253)*

	Frequency	Mean	Deviation
Gender			
Female	100	1.65	.576
Male	144		
Preferred Not to Say	7		
Other	2		
Age			
18-30	152	1.52	.716
31-45	72		
46-60	27		
61 and older	2		
Education			
Middle School or lower	7	3.49	.694
High School	8		
Graduate Degree	91		
Postgraduate degree	147		
Income level (THB)			
<15000	7	3.54	1.193
15001-30000	48		
30001-60000	78		
60001-90000	41		
>90000	79		
Location			
Bangkok	138	1.59	.721
Urban Region	80		
Other	35		

4.1 Measurement model

We employed SEM, a statistical modelling technique utilised to analyse relationships in models with many independent variables (Dadeliene *et al.*, 2020; Chowdury *et al.* 2022). SEM was applied testing the various hypotheses of the study to identify the significant relationships. Smart PLS 4.0 was used to perform both confirmatory and exploratory factor analyses (Ringle *et al.*, 2015). The model was further assessed using several model fit indices and the reliability and validity statistics are presented below.

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was calculated for the model. With results of (0.876), we confirmed that the sample size was excellent to conduct SEM analysis. Further, Bartlett's test of sphericity was significant, indicating that the constructs in the study are suitable for the SEM analyses to measure the relationships between the variables. However, some constructs were poorly loaded onto the main variables and were deleted. For example, ATT3 and ATT4 (measuring attitude), and LOB3 (measuring local belief) had extremely low factor loadings and were deleted (Table 2). This significantly enhanced the reliability, validity, and even regression analyses. The reliability of the constructs was then tested using Cronbach's Alpha (α) and Composite Reliability (CR). All the α values except that for attitude, social belief, and subjective norm met or exceeded the threshold of 0.70 (Cronbach, 1951). However, α values of 0.50 or more are sometimes considered acceptable (Rana and Sharma, 2019). Cronbach Alpha (α) has been criticised for its use of restrictive assumptions in rating the importance of all indicators, hence, can be biased (Werts *et al.* 1974; Li *et al.* 2005). As such, Werts *et al.* (1974) suggested the use of a reliability indicator, CR to check for reliability. Therefore, the values of CR for all the variables ranged between .70~.90 which exceeded the threshold of 0.70 (Table 2). Though the α values for some of the variables were low, the CR for those variables met or exceeded the threshold highlighting the high level of reliability of the scales used in measuring each of the variables. WTP was treated as a binary or dummy variable.

Table 2. Confirmatory Factor Analyses

Variables	Items	Factor Loadings	VIF	Cronbach Alpha (α)	Composite Reliability (CR)	AVE
Attitude (ATT)	ATT1	0.848	1.290			
	ATT2	0.869	1.290	.644	.849	.737
Environmental Belief (ENB)	ENB1	0.905	1.784			
	ENB2	0.919	1.784	.797	.908	.831
Social Belief (SOB)	SOB1	0.884	1.174			
	SOB2	0.772	1.174	.556	.815	.689
Local Belief (LOB)	LOB1	0.875	1.454			
	LOB2	0.890	1.454	.717	.876	.779
	LOB3		1.425			
Subjective Norm (SUN)	SUN1	0.899	1.025	.272	.716	.569
	SUN2	0.574	1.025			
Willingness-to-Pay (WTP)			1.000	1.000	1.000	1.000

We tested for convergent validity using average variance extracted (AVE) and the individual factor loadings of the variables. The AVE and factor loadings exceeded 0.50 (Table 2), which meets the acceptable and reasonable threshold and further shows the high validity of the remaining constructs (Fornell and Larcker, 1981). The Fornell-Larcker criterion was further employed to test the discriminant validity of each factor. Fornell and Larcker (1981) argued that the square root of the AVE should be greater than the correlations among the latent variables to assess the discriminant validity. The square root of the AVE *(indicated in italics and bold)* was larger than the correlations among the variables indicating no issues with discriminant validity (Table 3).

**Table 3. Inter-correlations among the major constructs**

	Attitude	Environmental Belief	Local Belief	Social Belief	Subjective Norm	WTP
Attitude	*0.859*					
Environmental Belief	0.651	*0.912*				
Local Belief	0.562	0.540	**0.883**			
Social Belief	0.566	0.604	0.656	*0.830*		
Subjective Norm	0.513	0.582	0.450	0.452	*0.754*	
WTP	0.227	0.298	0.291	0.208	0.199	*1.000*

Note: n= 253, the square root of the average variance extracted is indicated on the diagonal in bold and italics, ATT- Attitude; ENB- Environmental Belief; LOB- Local Belief; SOB- Social Belief; Subjective Norm; WTP- Willingness-to-Pay.

We also tested for multi-collinearity issues using the Variation Inflation Factor (VIF) which according to Hair *et al.* (2020) should not be greater than 3.00. The VIFs of all the measuring items ranged between 1.000-1.784 (Table 2), hence multi-collinearity does not appear to be an issue in the data. Since we obtained the data from a common source with the same set of questions, Harman's one-factor test was conducted to rectify any issues with common method variance (CMV). The results indicated four (4) factors with eigenvalues above 1.0, representing 60.810 percent of the total variance. The first three factors explained 54 percent of the total variance. Additionally, the Full Collinearity VIF (FCVIF) showed values of less than 3.3 for most of the variables (Kock, 2015), hence, CMV does not appear to be a problem in the data.

4.2 Structural Model

To obtain the true direct effect, we tested the relationships between the variables separately. The path coefficients together with the significant values (p-values) of the relationships between the variables are therefore presented.
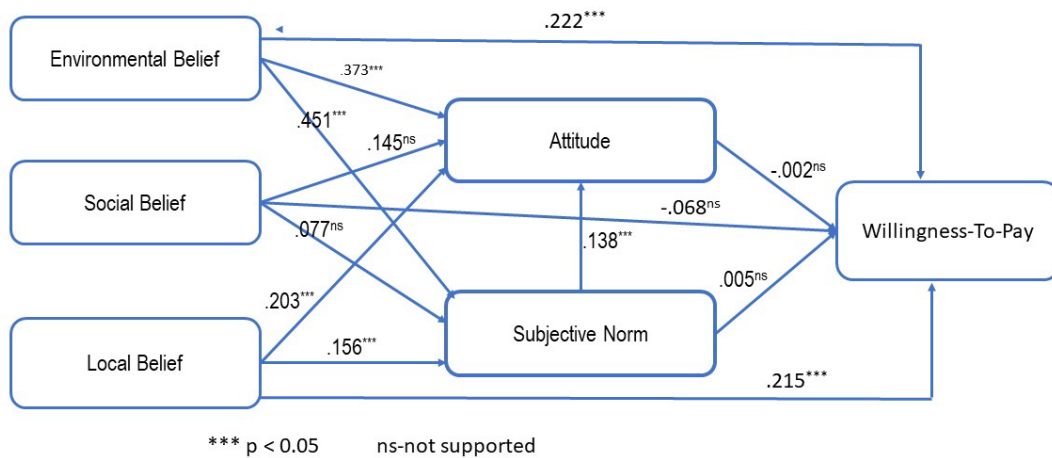
[Figure 2: Structural Model with Results]

The structural model presents the relationships between the various variables of the study (Fig. 2). Firstly, we tested the relationship between environmental beliefs, attitudes, subjective norms, and WTP for sustainable coffee. The results confirm a positive and significant relationship between environmental belief and WTP for sustainable coffee with (β= .222, p-value < 0.05), thereby, supporting *hypothesis H1a*. The results further confirmed a positive and significant relationship between environmental belief and attitude toward buying sustainable coffee with values (β= .373, p-value < 0.05), thereby, supporting *hypothesis H1b*. The results also confirmed a positive and significant impact of environmental belief on subjective norms (β=.451, p-value < 0.05), confirming *hypothesis H1c*. Social belief was found to have a negative and unsupported relationship with WTP for sustainable coffee (β= -.068, p-values > 0.05); as such *hypothesis H2a* was not supported. With values (β= .145, p-value > 0.05), the results confirmed a positive but unsupported relationship between social belief and attitude toward buying sustainable coffee, therefore, *hypothesis H2b* was not supported. Similarly, *hypothesis H2c* was not supported with results (β= .077, p-value > 0.05), indicating a non-significant but positive relationship between social belief and subjective norm.

The results, with values (β= .215, p-value < 0.05), confirmed a positive and significant relationship between the local belief of the participants and their WTP for sustainable coffee,

thereby supporting *hypothesis H3a*. *Hypothesis H3b* which highlights the positive impact of local belief on attitude toward buying coffee was confirmed and supported with (β= .203, p-value < 0.05). Similarly, *hypothesis H3c* which stipulates the positive impact of local belief on subjective norm was confirmed with (β= .156, p-value < 0.05).

Hypothesis H4, which highlights the relationship between attitude towards buying sustainable coffee and WTP, was not supported with results (β= -.002, p-value > 0.05) indicating a negative relationship between attitude and WTP. The results also confirmed a positive and significant impact of subjective norm on attitude toward buying sustainable coffee (β= .138, p-value < 0.05), therefore, *hypothesis H6* was fully supported. The results further confirmed a positive but unsupported relationship between subjective norm and WTP for sustainable coffee, with (β= .005, p-value > 0.05), thus, hypothesis *H7* was not fully supported.

Table 4. Indirect Effect of Attitude and Subjective Norm

Path Coefficient			Indirect effect	Bias-corrected interval		95% confidence	Hypothesis Testing (p-values)
				Bias	Lower Bound	Upper Bound	
ENB -> ATT -> WTP			0.040	0.002	0.104	0.010	Supported (p <0.01)
SOB -> ATT -> WTP			0.010	0.001	0.044	0.002	Supported (p<0.01)
LOB -> ATT -> WTP			0.007	0.003	0.036	0.002	Supported (p<0.01)
ENB -> SUN -> WTP			0.002	0.000	0.030	0.003	Supported (p<0.01)
SOB -> SUN -> WTP			0.006	0.001	0.013	0.020	Supported (p<0.01)
LOB -> SUN -> WTP			0.001	0.000	0.009	0.015	Supported (p<0.01)

Note: n= 253, the square root of the average variance extracted is indicated on the diagonal in bold and italics, ATT-Attitude; ENB- Environmental Belief; LOB- Local Belief; SOB- Social Belief; Subjective Norm; WTP- Willingness-to-Pay, p< 0.001

We also tested the mediating role of attitude on the relationship between the different beliefs and WTP for sustainable coffee. Attitude was found to mediate the relationship between

environmental, social, and local beliefs and WTP, fully supporting *hypothesis H5*. The results also confirmed the mediating role of subjective norms on the relationship between the environmental, local, and social beliefs and WTP fully supporting *hypothesis H8* (Table 4). We also sought to ascertain whether respondent's gender, income, and education have an impact on WTP and these factors were considered as control factors in the analysis. Education has a negative but significant impact on WTP. Gender does not affect the WTP of the consumers. Household income was found to have a positive but non-significant effect on the WTP of the consumers. A summary of the results is presented in Table 6.

4.3 Assessment of the structural model fit

We assessed the robustness of the structural model using the predictive capability (R^2), predictive relevance (Q^2), and unobserved heterogeneity to determine the potential replication of the observed values and further examined the extent of the heterogeneity in the data (di *et al.*, 2017). The findings revealed good Q^2 values > 0, and adequate standardised root mean square residual (SRMR) (0.09) (Hu and Bentler, 1999; Henseler *et al.*, 2016). Hu and Bentler (1999), Henseler *et al.* (2016) and Hair *et al.* (2020) indicated that Q^2 below 0, GoF closer to 1 and SRMR equal to 0.08 should be considered acceptable values for assessing model fit. Therefore, the values of the model fit indices indicate a good fit for the proposed model (Table 5). Additionally, the NFI is closer to 1, and exact fit criteria measures, d_ULS and d_G were found to be non-significant indicating no significant difference between the proposed and the implied model (Hu and Bentler, 1999; Henseler *et al.*, 2016).

Table 5. Model fit Indices

Model Fit Parameters	Values
SRMR	0.086
d_ULS	0.566
d_G	0.301
NFI	0.731

Table 6. Summary of the results

Hypothesis	Path Coefficients (***)	p-values	Conclusion
H1a: ENB -> WTP	.222***		Supported
H1b: ENB -> ATT	.373***		Supported
H1c: ENB -> SUN	.451***		Supported
H2a: SOB -> WTP	-.068ns		Not Supported
H2b: SOB -> ATT	.145ns		Not Supported
H2c: SOB -> SUN	.077ns		Not Supported
H3a: LOB -> WTP	.215***		Supported
H3b: LOB -> ATT	.203***		Supported
H3c: LOB -> SUN	.156***		Supported
H4: ATT -> WTP	-.002ns		Not Supported
H5:			
ENB -> ATT -> WTP	0.039****		Supported
SOB -> ATT -> WTP	0.009****		Supported
LOB -> ATT -> WTP	0.007****		Supported
H6: SUN -> ATT	0.138****		Supported
H7: SUN-> WTP	0.005ns		Not supported
H8:			
ENB -> SUN -> WTP	0.002****		Supported
SOB - > SUN -> WTP	0.006****		Supported
LOB -> SUN -> WTP	0.001****		Supported
Education -> WTP	-.092ns		Not Supported
Gender -> WTP	-.118ns		Not Supported
Household Income -> WTP	.101ns		Not Supported

Note: n= 253, the square root of the average variance extracted is indicated on the diagonal in bold and italics, ATT- Attitude; ENB- Environmental Belief; LOB- Local Belief; SOB- Social Belief; Subjective Norm; WTP- Willingness-to-Pay, $p < 0.01$, ns= not supported

5. Discussion and conclusions

The study analysed the impact of beliefs, attitudes, and subjective norms on Thai consumers' WTP for sustainable coffee. Our results confirmed a positive and significant relationship between environmental belief and WTP for sustainable coffee, in line with other studies exploring the impact of ecological awareness on WTP for sustainable products (Bai *et al.*, 2019; Dangelico *et al.*, 2024; Naini and Reddy, 2024). This means that Thai consumers holding positive beliefs regarding sustainable coffee's ability to prevent contamination and pollution of soil, air, water, and food chain (Ut-tha *et al.*, 2021), will have a higher WTP for such products. We observed a positive significant relationship between environmental belief and attitude, supporting the progression from beliefs to attitudes in the TPB model (Ajzen & Fishbein, 1980), aligning with empirical studies confirming this relationship in several Asian contexts (Lavuri *et al.*, 2024; Bajar *et al.*, 2024; Arya *et al.*, 2024). We also found a positive significant impact of environmental beliefs on subjective norms, confirming previous studies exploring this relationship in the Philippines (Bajar *et al.*, 2024) and India (Lavuri *et al.*, 2024). These results expand existing research by validating findings in a South-East Asian context.

The results are more controversial for the dimension of social belief. We found that social belief has a negative impact on WTP for sustainable coffee, challenging previous studies that found a positive relationship (Schaufele and Hamm, 2017; Bai *et al.*, 2019; Duong *et al.*, 2024). This indicates that the belief that sustainable coffee supports coffee growers and creates better working conditions for producers will have a negative impact on WTP. Additionally, the impact of social beliefs on attitudes and subjective norms was positive but non-significant. These results might be due to several reasons. Consumers might hold skeptical views of certification schemes supporting farmers, due to the proliferation of such certifications and related consumer confusion (Cho and Taylor, 2020). Additionally, proximity with farmers, especially in rural communities, has been found to generate an overload of solidarity messages, leading consumers to be less inclined to practice sustainable consumption to support local farmers (Doherty *et al.*, 2015). Moreover, despite Thailand's collectivist culture, the advancements in globalization, modernisation, and individualism, might lead younger generations to practice sustainable consumption for individualistic and hedonistic reasons rather than collectivistic ones (Polisetty *et al.*, 2024). These findings are novel and require further exploration through qualitative studies to understand consumers' motivations related to social beliefs.

Local beliefs were found to have a positive and significant influence on WTP, attitudes, and subjective norms. Previous qualitative studies in Asian contexts explored the importance of national identity and support for the local economy in sustainable consumption (Hawkins, 2015; Doherty *et al.,* 2015); this study expands these insights by empirically testing the relationship between local beliefs and WTP, attitudes, and subjective norms. The positive and significant relationship among these constructs indicates that: i) Thai consumers have a stronger WTP for sustainable coffee if they believe that coffee consumption benefits the local economy; ii) local beliefs have a strong impact on positive attitude towards sustainable coffee, namely feeling that buying sustainable coffee is 'the right thing to do', which generates a positive 'feel good' effect; iii) local beliefs reinforce subjective norms, namely collective expectations regarding supporting the local economy through individual consumption behaviours.

The study also found that attitudes mediate the relationship between environmental, social, and local beliefs and WTP. These results align with the original TPB model, indicating attitudes as key antecedents of consumer behaviour (Ajzen, 1991), and studies empirically confirming the mediating role of attitudes (Bai *et al.*, 2019; Chaturvedi *et al.*, 2024). However, our study found that attitudes have a negative impact on WTP, challenging results of several studies in Asian contexts (Rezai *et al.,* 2013; Zhang *et al.,* 2018; Bai *et al.,* 2019; Yi, 2019; Tan *et al.,* 2023; Wu *et al.*, 2024; Cudjoe *et al.*, 2024; Jia *et al.*, 2024).

Lastly, our study found a positive and significant relationship between subjective norms and attitudes, and that subjective norms mediate the relationship between beliefs and WTP. The role of subjective norms is contested in the literature, and several studies found that subjective norms have a negative or insignificant impact on WTP (Taufique and Vaithianathan, 2018; Tan *et al.,* 2023; Dangelico *et al.* 2024). However, our study evidences a strong positive impact of subjective norms on attitudes and confirms the mediating role of subjective norms in the relationship between beliefs and WTP. The strong importance of subjective norms in our study can be explained by Thailand's collectivist culture and collective-oriented citizenship behaviours, which are expected to shape individual behaviours (Rurkkhum and Bartlett, 2018). This has been observed in other countries with a collectivist culture, such as Malaysia (Kaffashi and Shamsudin, 2019).

As regards socio-demographic characteristics, we found that education has a negative significant impact on WTP. The link between education and WTP should be further explored by future studies, exploring what meanings highly educated consumers attribute to sustainable food. Moreover, in our study, income and gender do not influence WTP. This

contradicts studies finding that sustainable consumption in Thailand is influenced by education, gender, and income (Aoki *et al.,* 2017; Sangkapitux *et al.,* 2017; Vantamay, 2018). The non-significance of these factors could be an indication that food labelling has become increasingly important for Thai consumers regardless of age and gender (Wongprawmas and Canavari, 2017) and that coffee culture is increasing in Thailand, due to local entrepreneurship in the coffee sector (Azavedo and Gogatz, 2021).

5.1 Theoretical implications

The study has two main theoretical contributions. First, it validates and expands the TPB model in a South-East Asian context. Other studies on Thai consumers explored consumer preferences for domestic food (Aoki *et al.*, 2017), consumer preferences for multifunctional agriculture (Sangkapitux *et al.*, 2017), determinants for sustainable consumption among Thai youth (Vantamay *et al.*, 2018), and consumers' WTP for sustainable coffee (Ut-tha *et al.*, 2021). This study expands previous research through a comprehensive examination of the role played by environmental, social, and local beliefs on consumer behaviour, which had not been considered before in Thailand. Second, this study highlights the role of 'localness' as a key factor shaping sustainable food consumption in a South-East Asian context. While previous studies in Asian contexts showed consumers value local food due to higher trust in its quality (Aoki *et al.*, 2017; Zhang *et al.*, 2020), this study expands this by showing Thai consumers value local food for its contribution to the local economy. This concept expands existing constructs in the literature, such as *consumer-producer proximity* and *consumer ethnocentrism*. Studies explored the impact of *proximity* between consumers and producers, finding that proximity leads to higher solidarity and the purchase of local products in India (Gilliani *et al.,* 2021). While 'localness' is complementary to proximity, as it underscores the importance of creating wealth for the local economy, it does not necessarily involve proximity with producers. We thus invite further studies to explore the interplay between rural and urban places in the consumption of local sustainable food. Lastly, 'localness' expands existing insights on *consumer ethnocentrism* (CE), namely consumer preference for domestic products over foreign (Chaturvedi *et al.*, 2024). While CE is motivated by moral beliefs in the superiority of domestic products and national identity, in our study, 'localness' emphasises notions of prosperity and wellbeing of the local community, and belonging to the local food landscape (Graciotti and McEachern, 2024).

5.2 Practical implications

This study provides marketers, businesses, and policymakers with important recommendations to promote sustainable food consumption in Asian contexts. First, our results show that consumers who value the ecological dimension of food have a high WTP for sustainable products. Marketers should develop marketing strategies that raise awareness of the environmental benefits of local food products; in this way, marketers can improve demand for more sustainable products. Our results also demonstrate that consumers who value the local origin of products have a high WTP for sustainable products. Marketers should emphasise the local origin of sustainable food through easily recognisable advertisement and labels. Additionally, our study found that subjective norms, namely peer and group expectations, play an important role in shaping sustainable consumption. Marketers could develop strategies appealing to collectivism and altruism through raising awareness campaigns. Second, our study has important implications for business decisions. Given that our study demonstrates consumers value locally-produced products, businesses should not only increase the availability of such products but also better showcase the product origin and emphasise their environmental benefits. Third, from a policy perspective, this should translate into a promotion of local products, for example through bolstering labelling and geographical indication systems to make local products available and known to consumers. To achieve this, local institutions should involve industry stakeholders, and collaborate with local marketers, businesses, and consumer groups.

5.3 Limitations of the study and future research

The current study has some limitations constituting opportunities for future research. First, our data included mainly younger and educated consumers, as they generally display higher interest in sustainable consumption (Aoki *et al.,* 2017; Sangkapitux *et al.,* 2017; Vantamay, 2018); further studies could target specifically low-income respondents, to compare results across consumer groups. Particularly, we recommend characteristic-based clustering to segment consumers and understand preferences (Jaiswal *et al.*, 2021). Additionally, albeit a growing phenomenon, sustainable consumption is still a marginal sector of the economy in Thailand. Further research is needed to assess Thai consumers' understanding of different food labels and sustainable consumption practices, especially through qualitative methods and real-behaviour studies assessing consumers' behaviour in supermarkets and shops.

Lastly, our study found that social belief has a negative impact on WTP for sustainable coffee; there is an opportunity for future studies to further unpack the relationships between social beliefs and purchase intention, especially using qualitative methods to assess consumers' views.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

Ajzen I., Brown T. C., Carvajal F. (2004). Explaining the discrepancy between intentions and actions: The case of hypothetical bias in contingent valuation. *Personality and Social Psychology Bulletin*, 30, 1108–1121.

Ajzen, I., Fishbein, M., (1980). Understanding attitudes and predictiing social behavior. *Englewood cliffs*.

Akter, S., Fosso Wamba, S., & Dewan, S. (2017). Why PLS-SEM is suitable for complex modelling? An empirical illustration in big data analytics quality. *Production Planning & Control*, *28*(11-12), 1011-1021.

Al-Swidi, A., Mohammed Rafiul Huque, S., Haroon Hafeez, M. and Noor Mohd Shariff, M., 2014. The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, 116 (10), 1561-1580.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, *14*(3), 396-402.

Armutcu, B., Ramadani, V., Zeqiri, J., & Dana, L. P. (2024). The role of social media in consumers' intentions to buy green food: evidence from Türkiye. British Food Journal, 126(5), 1923-1940.

Aoki, K., Akai, K., & Ujiie, K. (2017). A choice experiment to compare preferences for rice in Thailand and Japan: The impact of origin, sustainability, and taste. *Food Quality and Preference, 56*, 274-284.

Arya, B., Chaturvedi, S., & Bhati, N. S. (2024). Extending the theory of planned behaviour to predict sustainable food consumption. Environment, Development and Sustainability, 1-24.

ARISE (2019), Promoting Intellectual Property Rights in the ASEAN Region.

Azavedo, M., & Gogatz, A. (2021). The developing speciality coffee businesses of Bangkok, Thailand and Penang, Malaysia. A story of entrepreneurial passion and creativity?. *Journal of Entrepreneurship, Management and Innovation*, 17/2021.

Bai, L., Wang, M., & Gong, S. (2019). Understanding the antecedents of organic food purchases: The important roles of beliefs, subjective norms, and identity expressiveness. *Sustainability*, *11*(11), 3045.

Bajar, R., Ong, A. K. S., & German, J. D. (2024). Determining Sustainable Purchase Behavior for Green Products from Name-Brand Shops: A Gen Z Perspective in a Developing Country. Sustainability, 16(9), 3747.

Carrington, M., Chatzidakis, A., Goworek, H., & Shaw, D. (2021). Consumption ethics: A review and analysis of future directions for interdisciplinary research. *Journal of Business Ethics*, 168, 215-238.

Chaturvedi, P., Agnihotri, D., & Tripathi, V. (2024). Exploring the role of consumer ethnocentrism in predicting the purchase intention for locally produced organic food in an emerging market. British Food Journal, 126(2), 738-757.

Chen, M. F. (2024). Consumer food choice motives and willingness to try plant-based meat: moderating effect of meat attachment. British Food Journal, 126(3), 1301-1324.

Chen, M., Chu, X. Y., Lin, C. H., & Yu, S. H. (2022). What goes around comes around: The effect of belief in karma on charitable donation behavior. Psychology & Marketing, 39(5), 1065-1077.

Cho, Y. N., & Taylor, C. R. (2020). The role of ambiguity and skepticism in the effectiveness of sustainability labeling. Journal of Business Research, 120, 379-388.

Chowdhury, S., Dey, P. K., Rodríguez-Espíndola, O., Parkes, G., Tuyet, N. T. A., Long, D. D., & Ha, T. P. (2022). Impact of organisational factors on the circular economy practices and sustainable performance of small and medium-sized enterprises in Vietnam. *Journal of Business Research*, *147*, 362-378.

Cotte, J., & Trudel, R. (2009). Socially conscious consumerism: A systematic review of the body of knowledge. *Network for Business Sustainability*.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297– 334. doi:10.1007/BF02310555

Cudjoe, D., Zhu, B., & Wang, H. (2024). The role of incentive policies and personal innovativeness in consumers' carbon footprint tracking apps adoption in China. Journal of Retailing and Consumer Services, 79, 103861.

Dadeliene, R., Dadelo, S., Pozniak, N., & Sakalauskas, L. (2020). Analysis of top kayakers' training-intensity distribution and physiological adaptation based on structural modelling. *Annals of Operations Research*, *289*, 195-210.

Dangelico, R. M., Ceccarelli, G., & Fraccascia, L. (2024). Consumer behavioral intention toward sustainable biscuits: An extension of the theory of planned behavior with product familiarity and perceived value. Business Strategy and the Environment.

De Pelsmacker, P., Driesen, L., & Rayp, G. (2005). Do consumers care about ethics? Willingness to pay for fair-trade coffee. *Journal of consumer affairs*, *39*(2), 363-385.

Doherty, B., Smith, A., & Parker, S. (2015). Fair Trade market creation and marketing in the Global South. *Geoforum*, *67*, 158-171.

Duong, C. D., Nguyen, B. N., Doan, X. H., & Vu, A. T. (2024). "I do believe in karma": understanding consumers' pro-environmental consumption with an integrated framework of theory of planned behavior, norm activation model and self-determination theory. Management of Environmental Quality: An International Journal. Vol 35, No 2, pp. 270-298.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Gillani, A., Kutaula, S., Leonidou, L. C., & Christodoulides, P. (2021). The impact of proximity on consumer fair trade engagement and purchasing behavior: The moderating role of empathic concern and hypocrisy. Journal of Business Ethics, 169(3), 557-577.

Graciotti, A., & McEachern, M. G. (2024). Rural space and the local food landscape: Consumers' construction of food localness through the politics of belonging. Journal of Place Management and Development, 17(1), 1-20.

Granovetter, M. (2018). *Economic action and social structure: The problem of embeddedness. In The sociology of economic life* (pp. 22-45). Routledge.

Gregson, N., & Ferdous, R. (2015). Making space for ethical consumption in the South. *Geoforum*, *67*, 244-255.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101-110.

Hawkins, R. (2015). Shifting conceptualizations of ethical consumption: Cause-related marketing in India and the USA. *Geoforum*, 67, 172-182.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial management & data systems*, *116*(1), 2-20.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, *6*(1), 1-55.

Hultman M., Kazeminia A., Ghasemi V. (2015). Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation. *Journal of Business Research*, 68, 1854–1861.

ICO (2021), International Coffee Organization, Total coffee production by all exporting countries. Available at: http://www.ico.org/historical/1990%20onwards/PDF/1a-total-production.pdf

Jaiswal, D., Kaushal, V., Singh, P. K., & Biswas, A. (2021). Green market segmentation and consumer profiling: a cluster approach to an emerging consumer market. Benchmarking: An International Journal, 28(3), 792-812.

Jia, Y., Nadeem, M., Hameed, I., Waris, I., & Akram, U. (2024). Towards sustainable consumption: Factors influencing energy-efficient appliance adoption in haze-affected environments. Energy Strategy Reviews, 53, 101416.

Josiassen, A., Assaf, A. G., & Karpen, I. O. (2011). Consumer ethnocentrism and willingness to buy: Analyzing the role of three demographic consumer characteristics. International Marketing Review, 28(6), 627-646.

Kaffashi, S., & Shamsudin, M. N. (2019). Transforming to a low carbon society; an extended theory of planned behaviour of Malaysian citizens. *Journal of Cleaner Production*, *235*, 1255-1264.

Kirmani, M. D., Uddin, S. F., Sadiq, M. A., Ahmad, A., & Haque, M. A. (2023). Food-leftover sharing intentions of consumers: An extension of the theory of planned behavior. Journal of Retailing and Consumer Services, 73, 103328.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, *11*(4), 1-10.

Kumar, G. A. (2021). Framing a model for green buying behavior of Indian consumers: From the lenses of the theory of planned behavior. *Journal of Cleaner Production*, *295*, 126487.

Lavuri, R., Jabbour, C. J. C., Grebinevych, O., & Roubaud, D. (2022). Green factors stimulating the purchase intention of innovative luxury organic beauty products: Implications for sustainable development. Journal of Environmental Management, 301, 113899.

Lavuri, R., Parida, R., & Singh, S. (2024). Unveiling ways to examine the purchase intension of green products in emerging markets. Benchmarking: An International Journal, 31(5), 1385-1401.

Lee, H.-J. and Yun, Z.-S., 2015. Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food Quality and Preference*, 39, 259-267.

Li, J., & Chen, J. B. (2005). Dynamic response and reliability analysis of structures with uncertain parameters. *International Journal for Numerical Methods in Engineering*, *62*(2), 289-315.

Lippe, R.S., Mergenthaler, M., Isvilanonda, S., 2010. Consumer Willingness to Pay for Pesticide Safe Produce: The Case of Cabbage and Yellow Mango in Thailand, International Conference on Business and Economic Research (ICBER 2010). ICBER, Kuching Sarawak, Malaysia.

Lobo, A., & Greenland, S. (2017). The influence of cultural values on green purchase behaviour. Marketing Intelligence & Planning, 35(3), 377-396.

Maichum K., Parichatnon S., Peng K. C. (2016). Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers. *Sustainability*, 8, 1077.

Naini, S. R., & Reddy, M. R. (2024). Role of green awareness and green behaviour in fostering sustainable consumption in India. Journal of Science and Technology Policy Management.

Ogiemwonyi, O., & Jan, M. T. (2023). The influence of collectivism on consumer responses to green behavior. Business Strategy & Development, 6(4), 542-556.

Oludoye, O. O., & Supakata, N. (2024). Breaking the plastic habit: Drivers of single-use plastic reduction among Thai university students. Plos one, 19(5), e0299877.

Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. SAGE research methods foundations.

Polisetty, A., Chakraborty, D., Singu, H. B., & Behl, A. (2024). Examining the relationship between pro-environmental consumption behaviour and hedonic and eudaimonic motivation. Journal of Environmental Management, 359, 121095.

Rana, K., & Sharma, S. K. (2019). Supply chain performance measurement: A scale development. *IUP Journal of Business Strategy*, *16*(1), 88-111.

Randall, T., Cousins, A. L., Neilson, L., Price, M., Hardman, C. A., & Wilkinson, L. L. (2024). Sustainable food consumption across Western and Non-Western cultures: A scoping review considering the theory of planned behaviour. Food Quality and Preference, 105086.

Rezai, G., Kit Teng, P., Mohamed, Z. and Shamsudin, M. N., 2013. Consumer Willingness to Pay for Green Food in Malaysia. *Journal of International Food & Agribusiness Marketing*, 25, 1-18.

Ringle, C. M., Wende, S., and Becker, J.-M. 2015. SmartPLS 3. Boenningstedt: SmartPLS GmbH

Rurkkhum, S., & Bartlett, K. R. (2018). Organizational citizenship behaviour for collectivist cultures: instrument development and human resource development implications. Human Resource Development International, 21(2), 107-124.

Salifu, I., Arthur, F., & Nortey, S. A. (2024). Green consumption behaviour among higher education students as an approach to achieving sustainable source reduction of marine plastic pollution. Young Consumers.

Sangkapitux, C., Suebpongsang, P., Punyawadee, V., Pimpaoud, N., Konsurin, J., & Neef, A. (2017). Eliciting citizen preferences for multifunctional agriculture in the watershed areas of northern Thailand through choice experiment and latent class models. *Land Use Policy*, 67, 38-47.

Schäufele, I., & Hamm, U. (2017). Consumers' perceptions, preferences and willingness-to-pay for wine with sustainability characteristics: A review. *Journal of Cleaner production*, *147*, 379-394.

Tan, Y., Ying, X., Gao, W., Wang, S., & Liu, Z. (2023). Applying an extended theory of planned behavior to predict willingness to pay for green and low-carbon energy transition. *Journal of Cleaner Production*, *387*, 135893.

Taufique, K. M. R., & Vaithianathan, S. (2018). A fresh look at understanding Green consumer behavior among young urban Indian consumers through the lens of Theory of Planned Behavior. *Journal of Cleaner Production*, *183*, 46-55.

Ting, H., De Run, E. C., Cheah, J. H., & Chuah, F. (2016). Food neophobia and ethnic food consumption intention: An extension of the theory of planned behaviour. British Food Journal, 118(11), 2781-2797.

Tyupa, S. (2011). A theoretical framework for back-translation as a quality assessment tool. New Voices in Translation Studies, 7(1), 35-46.

Ut-tha, V., Lee, P. P., & Chung, R. (2021). Willingness to Pay for Sustainable Coffee: A Case of Thai Consumers. SAGE Open, 11(4).

Vantamay, N. (2018). Investigation and recommendations on the promotion of sustainable consumption behavior among young consumers in Thailand. *Kasetsart Journal of Social Sciences*, *39*(1), 51-58.

Yadav R., Pathak G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732–739.

Yi, S. (2019). Contingent valuation of sustainable integrated agriculture–aquaculture products: The case of rice–fish farming systems in South Korea. *Agronomy*, *9*(10), 601.

Werts, C. E., Linn, R. L., & Jöreskog, K. G. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological measurement*, *34*(1), 25-33.

Wongprawmas, R., & Canavari, M. (2017). Consumers' willingness-to-pay for food safety labels in an emerging market: The case of fresh produce in Thailand. *Food Policy*, 69, 25-34.

Worldbank (2024), Thailand Data: Washington DC, USA. 2021. Available online: https://data.worldbank.org/country/thailand

Wu, H., Wang, W., Tao, Y., Shao, M., & Yu, C. (2024). Understand the Chinese Z Generation consumers' Green hotel visit intention: An extended theory of planned behavior model. Heliyon, 10(3).

Zhang, B., Fu, Z., Huang, J., Wang, J., Xu, S., & Zhang, L. (2018). Consumers' perceptions, purchase intention, and willingness to pay a premium price for safe vegetables: a case study of Beijing, China. *Journal of Cleaner Production*, *197*, 1498-1507.

Zhang, T., Grunert, K. G. and Zhou, Y., 2020. A values–beliefs–attitude model of local food consumption: An empirical study in China and Denmark. *Food Quality and Preference*, 83.

Zerbini, C., Vergura, D. T. and Latusi, S., 2019. A new model to predict consumers' willingness to buy fair-trade products. *Food Research International*, 122, 167-173.