Environment and Social Psychology (2024) Volume 9 Issue 8
doi: 10.59429/esp.v9i8.2924

RESEARCH ARTICLE

Exploring the impact of a dualistic model of harmony on sustainable consumption behavior: the mediating role of ethical evaluation

Yuanlai Xin [1, 2], Chun-Shuo Chen [1*], Shujuan Tu [2]

[1] *Chinese International College, Dhurakij Pundit University, Bangkok, Thailand 10210*

[2] *Jiangxi University of Chinese Medicine, Nanchang, China 330004*

*** Corresponding author:** Chun-Shuo Chen, chun-shuo.che@dpu.ac.th

ABSTRACT

Due to consumers' sustainable consumption behaviors are influenced by different cultural and individual values. However, few research examines the influence of interpersonal harmony values in collective culture on sustainable consumption behaviors, especially combined with moral and ethical research. Referring to Values-Beliefs-Behavior Theory, this paper aims to construct a theoretical model to explore the impact of a dualistic model of harmony on sustainable consumption behavior. Meanwhile, the aims of this study is to explore the mediating effect of ethical evaluation on the relationship of different interpersonal harmony orientations on sustainable consumption behavior. The sample were selected the consumers who had lived in Chinese urban areas for at least the past six months and had experience using sustainable brands. A total of 800 online questionnaires were distributed and496 valid responses were recovered. The results reveal that two difference types of interpersonal harmony values positively influence sustainable consumption behavior, but the mediating role of ethical evaluation differs significantly between them. Specifically, harmony enhancement can activate consumers' intrinsic moral beliefs, leading to sustainable consumption behavior. However, the intrinsic moral beliefs of consumers with disintegration avoidance are not directly activated, but they may still engage in sustainable consumption through other means. The findings of this study provide insights into how perceptions of interpersonal harmony values can transform into sustainable consumption behavior. Our research provides managers with advice, considering how to guide consumers to increase their harmony culture value and civic moral awareness in sustainable consumption.

Keywords: interpersonal harmony; harmony enhancement; disintegration avoidance; ethical evaluation; sustainable consumption behavior

1. Introduction

Sustainable consumption behavior is necessary to develop sustainable [1]. Currently, there is a significant gap in adopting sustainable production and consumption practices. Consequently, the importance of sustainable consumption in analyzing economic, social, and environmental impacts has received widespread attention in academia [2]. Thus, understanding the different antecedents that drive consumers to adopt sustainable consumption behavior is crucial [3]. There are many factors influencing consumers' behavior

ARTICLE INFO
Received: 18 June 2024 | Accepted: 22 July 2024 | Available online: 27 August 2024

CITATION
Xin YL, Chen CS, Tu SJ. Exploring the impact of a dualistic model of harmony on sustainable consumption behavior: the mediating role of ethical evaluation. *Environment and Social Psychology* 2024; 9(8): 2924. doi: 10.59429/esp.v9i8.2924

decisions [4]. Existing studies often discuss sustainable consumption from a macroeconomic perspective [5] or focus on demographic characteristics [6], lifestyle [7], external motivation [8], and other factors.

Since Geert Hofstede introduced the concept of cultural dimensions into mainstream management theory in 1980, there has been a great deal of interest in the differences in national cultural values and their impact on management theory [9]. In a sense, actions aimed at sustainable development are socially responsible collective actions [10]. Agostini and Zomeren [11] found that collective action identity is most likely influenced by culture. Consumers from different countries exhibit differences in sustainable consumption choices, and consumers' sustainable consumption behaviors are influenced by cultural and individual values [12]. Notably, the field of consumer ethics is another important topic in the context of sustainable consumption [10]. This is because sustainable consumption is not only a form of ethical consumption [10], but also a consumption habit driven by moral choices [13]. These moral beliefs, rooted in cultural values, serve as strong motivators for collective action[11]. Despite the need to encourage the potential of cultural values in sustainable behavior [14], there is a lack of research to simultaneously examine consumer culture and moral ethics in sustainable consumption [15]. Therefore, this study proposes a conceptual model grounded in the Values-Beliefs-Behavior theory to explore the relationships between the aforementioned variables. Value cognition is the foundation of behavioral decision-making [16]. The theory of Values-Beliefs-Behavior points out that values, as distal variables of behavior, act on behavior through specific beliefs [12]. From an individual value perspective, consumers' values reflect their guiding principles in doing things, thus influencing their behavior choices [17].

China is a typical society under collectivist culture [18]. The Chinese tend to avoid extreme behaviors in daily life [19] and place a high value on interpersonal harmony in social relationships [20]. According to Chen et al. [21], "harmony" plays a dominant role in Chinese life. Chinese people value relationships with others and rely more on the collective[22], encouraging them to make more socially responsible collective actions [11]. The literature has proven that collectivism positively correlates with sustainable and eco-friendly consumption [23], but the underlying common psychology has not been further analyzed, nor has it been combined with moral and ethical research. This study classifies interpersonal harmony into two types, namely, harmony enhancement and disintegration avoidance, based on individual differences in interpersonal harmony. Therefore, the present study expands the dualistic model of interpersonal harmony proposed by Leung et al.[24] to explore the causal relationship between interpersonal harmony value orientation and sustainable consumption behavior, supplementing the theoretical part of consumer cultural and moral ethics in sustainable research. Specifically, this study attempts to explore the following research questions:

- Does interpersonal harmony value orientation have an impact on sustainable consumption behavior? If so, are the mechanisms of influence the same for the two types of interpersonal harmony orientations (harmony enhancement and disintegration avoidance)?
- Given that moral variables are included in this study, does ethical evaluation mediate the impact of different interpersonal harmony orientations on sustainable consumption behavior?

Finally, this study aims to develop solutions to reduce the environmental impact of economic activities, thereby contributing theoretical and practical implications related to this topic.

2. Literature review and research hypotheses

2.1. Interpersonal harmony and sustainable consumption behavior

The Brundtland Report of 1987, was first defined "sustainable development" as a type of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [25]. "Sustainable consumption behavior," a concept aligned with sustainable development, is defined

by Quoquab and Mohammad [26] as consumer behavior that satisfies basic needs without harming the ecological and socioeconomic needs of the present and future generations. This concept emphasizes moderate consumption, efficient use, and environmentally friendly choices. Thus, from a consumer psychology perspective, the present study draws upon the study result by Quoquab et al. [5] and defines sustainable consumption behavior as adopting a wise consumption lifestyle. Specifically, it involves acquiring goods and services to satisfy one's basic needs, while considering the impact of protecting and preserving the environment, maintaining quality of life, and helping ensure the sustainability of natural resources for the future generational impacts of consumption.

Building on Leung et al. [24] dualistic model of interpersonal harmony, Chen et al. [27] argue that individuals' value orientations in interpersonal interactions fall into two categories: "harmony enhancement," which refers to an individual's tendency to establish genuinely harmonious and respectful relationships with others, and "disintegration avoidance," which refers to an individual's tendency to maintain superficial harmonious relationships and cover up conflicts in certain situations. Individuals with the harmony enhancement attribute are more likely to exhibit empathy and a tendency to feel and understand others' emotions [28]. Those with high empathy are more connected to nature and inclined to see themselves as part of a broader natural community, believing that their well-being is related to the well-being of the natural world [29]. Therefore, individuals with the harmony enhancement attribute are more willing to prioritize group goals over their own [30, 31]. Furthermore, they often care about the public interest and the environment, including protecting the environment for their group's prosperity [32].

Zhang [33] suggests that some individuals choose to sacrifice personal interests to maintain superficial harmony, fearing that actions protecting personal interests may offend others. Individuals with high disintegration avoidance fear social relationship breakdown and avoid engaging in behaviors that may lead to conflicts [34]. Thus, individuals with disintegration avoidance are more afraid of behaviors that deviate from social norms. Therefore, harmony enhancement and disintegration avoidance are conducive to the formation of collectivism [24]. In a collectivist-dominated atmosphere, consensus on group goals is easily reached [35], and this promotes the formation of eco-friendly or sustainable consumption behaviors [36]. Consumers who highly value good relationships with others often consider ecological issues when making purchases [37], paving the way for sustainable consumption behavior, which encompasses a range of eco-conscious behaviors in the consumption context [38].

Based on the above literature, this study proposes Hypotheses 1a and 1b as follows:

H1a: Harmony enhancement positively influences sustainable consumption behavior.

H1b: Disintegration avoidance positively influences sustainable consumption behavior.

2.2. Interpersonal harmony and ethical evaluation

Consumers' ethical evaluations affect their cognition and subsequent behavior [39]. Moral laws in social regulations are central to value judgments [40]. Hunt and Vitell [41] proposed the Hunt–Vitell model, which divides ethical evaluation into deontological and teleological evaluation. The current study adopts Wang et al.[39] definition of "ethical evaluation," in which individuals pre-evaluate sustainable consumption behavior in terms of their moral standard in two aspects: whether sustainable consumption behavior is morally correct and whether sustainable consumption behavior has a subsequent positive impact. The more positive the ethical evaluation of individuals on sustainable consumption behavior (i.e., the more positive their evaluation on the obligation and objective of the scheme) the more moral the individual considers it.

Consumers with high harmony enhancement tend to value people-oriented ideals and pay more attention to themselves and others. This culture views unethical issues as more unacceptable and severe than individualistic consumption [42]. Sustainable consumption, which supports environmental protection, sustainable development, and social responsibility, benefits all humanity, serving the interests of oneself, others, and society as a whole [43].

At the same time, individuals with disintegration avoidance focus more on interpersonal reciprocity [44]. Thus, in the context of disintegration avoidance, they avoid behaviors that might limit or end relationships, as they are more concerned about the negative consequences of strained relationships. Zhang and Wei [45] confirmed that disintegration avoidance correlates positively with negative expectations, where individuals avoid differing voices or actions to prevent relationship deterioration or fear of social moral criticism [46].

Based on the above literature, this study proposes Hypotheses 2a and 2b as follows:

H2a: Harmony enhancement positively influences ethical evaluation.

H2b: Disintegration avoidance positively influences ethical evaluation.

2.3. Ethical evaluation and sustainable consumption behavior

Viewing consumption as an ethical phenomenon entails the notion that choices of consumption views and behaviors are inevitably influenced by societal ethical evaluation standards [10]. Before executing a specific plan, individuals perform a pre-evaluation based on their own values. Generally, this is not based solely on pre- deontological evaluation, but rather integrates the evaluation of deontological and teleological evaluations to form an ethical judgment [41]. The more positive the ethical evaluation, the more moral the individual considers the plan. At the same time, deontological evaluation influences individuals' behavioral preferences. When certain behaviors are considered morally right and ethical, individuals with high levels of deontological evaluation tend to perceive that these behaviors align with their own principles; thus, they perceive a moral obligation to engage in such behaviors, leading to the occurrence of those behaviors [47]. Actions that are considered socially beneficial and having positive outcomes increase the likelihood of execution among individuals with high levels of teleological evaluation [48].

Consumers increasingly recognize sustainable consumption as an aspect of environmental issues [49]. Therefore, driven by an ethical obligation to the environment, consumers are likely to make environmentally friendly purchases [50]. Consequently, businesses will strive to integrate morality into their overall strategy [51]. Evidence shows that more consumers are attracted to ethical evaluation beliefs related to environmental protection [52]. Furthermore, as consumers exercise their ethical principles, this motivates them to activate their sustainable actions [53]. Therefore, when individuals hold a positive ethical evaluation on sustainable consumption, they believe that sustainable consumption is right in its own ethical judgment, and its outcomes and purposes are positive. Consequently, they are more likely to endorse and engage in sustainable consumption behavior.

Based on the above literature, this study proposes Hypothesis 3 as follows:

H3: Ethical evaluation positively influences sustainable consumption behavior.

2.4. Mediating role of ethical evaluation

The Values-Beliefs-Behavior theory posits that beliefs serve as mediators and play an important role in converting personal values into personal norms and behaviors [12]. Groening et al. [54] pointed out that values are the foundation of beliefs, which in turn, are key motivators driving certain behaviors.

Sustainable consumption is also a form of ethical consumption, typically driven by various moral choices[13]. Only when consumers perform a positive ethical evaluation on sustainable actions can they intend to act sustainably [48]. Ethics are deeply influenced by cultural contexts, with moral choices varying slightly across cultures [55]. Dai et al. [56] defined "moral obligation evaluation" as an individual's standard of good and bad judgment based on their values. Each person's values differ, and so do their moral standards. Those who believe their sustainable consumption behavior can influence or change others' behaviors are more likely to act in accordance with their values [57].

Therefore, the present study attempts to integrate ethical beliefs with the Values-Beliefs-Behavior theory. As a result, it suggests that ethical evaluation serves as a bridge between cultural values and subsequent behaviors. Existing studies support this assumption. For instance, Qiu [58] showed that ethical norms partially mediate the influence of factors on tourists' civilized behavior intentions. "Interpersonal harmony" refers to mutual benefit and symbiosis, in which individuals' needs and interests are coordinated and realized on the basis of mutual respect, understanding, and acceptance [59]. Therefore, any type of interpersonal harmony can consider different or opposite things, achieve overall harmony between people and things, and enhance ethical evaluation on sustainable consumption. In turn, this positively influences sustainable consumption behavior.

Based on the above literature, this study proposes Hypotheses 4a and 4b as follows:

H4a: Ethical evaluation mediates the relationship between harmony enhancement and sustainable consumption behavior.

H4b: Ethical evaluation mediates the relationship between disintegration avoidance and sustainable consumption behavior.

The conceptual framework of this study is shown in **Figure 1**.

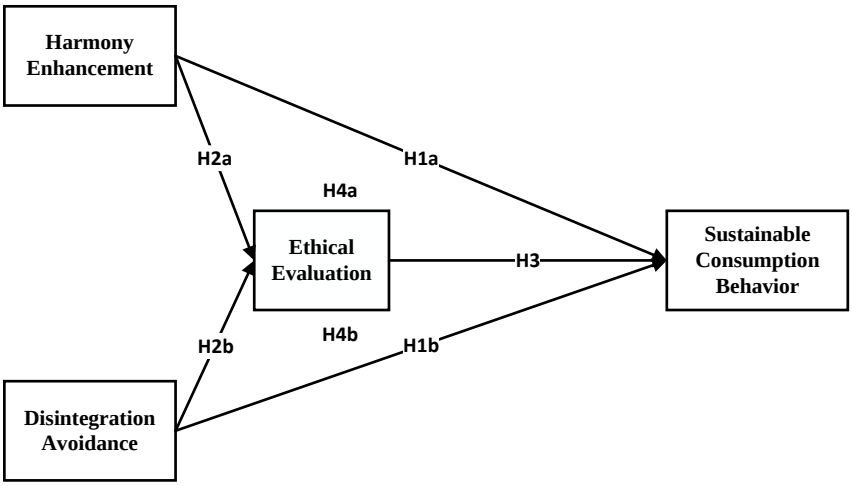

Figure 1. Research conceptual model.

3. Research methodology

3.1. Measures

The design of the questionnaire was primarily informed by existing research findings. Following the initial development of the questionnaire, two experts were consulted to assess the rationality of the variable measurements and the semantic expressions. Finally, the formal questionnaire of this study was formed. All measurement items assessed using a 5-point Likert scale. The study participants selected appropriate responses based on their perceptions, with 1 indicating "strongly disagree" and 5 indicating "strongly agree." The

socioeconomic characteristics of the sample included gender, age, educational level, and monthly income as control variables.

3.1.1. Interpersonal harmony

The interpersonal harmony scale used in this study adopts a mature questionnaire developed by Chen et al. [27], which has been validated to exhibit good reliability and validity. We defined "harmony enhancement" as the extent to which individuals value harmonious, respectful, and complementary relationships in daily interactions, considering interpersonal harmony as a personal virtue and life value pursuit. On this scale, 12 items assess the "harmony enhancement", it has questions such as "Maintaining interpersonal harmony is an important goal in my life" and "Having an ability to interact with others harmoniously is vital for achieving major successes". "Disintegration avoidance" was defined as the extent to which individuals avoid factors that may disrupt harmony in daily interactions, aiming to hide conflicts or temporarily shelve disputes. On this scale, 8 items evaluate "Disintegration avoidance". It has questions such as "If I losses are going to be small, there is no need to fight to the end" and "In order to maintain harmony, people might have to give up principles of justice in handling matters".

3.1.2. Sustainable consumption

The sustainable consumption behavior scale was measured using Quoquab et al. [5] 24-item scale, which has been validated to exhibit good reliability and validity. We defined "sustainable consumption behavior" as a type of behavior involving moderate consumption and careful use to meet basic needs by considering the impact on environment, quality of life, and future generational after individual consumption. It has questions such as "I choose to buy product(s) with biodegradable container or packaging" and "I reuse shopping bag(s) every time go for shopping".

3.1.3. Ethical evaluation

The ethical evaluation scale was measured using Wang et al. [39] 7-item scale. We defined "ethical evaluation" as individuals' pre-evaluation on the moral obligation and consequences of sustainable consumption behavior. It has questions such as "It is ethically right to conduct pro-environmental behaviors while consumption." and "Conducting pro-environmental behaviors while consumption can bring positive environmental, ecological and economic benefits".

3.2. Sample and data collection

This study focus on Chinese consumers who have a membership of ole' chain supermarkets and purposive sampling method was utilized to obtain the data. Utilising platforms like SoJump, 800 questionnaires were distributed from December 2023 to January 2024 via online surveys in Zhejiang and Jiangsu Provinces, China. After the exclusions, 496 valid questionnaires were retained, yielding a 62% validity rate. Based on 496 valid questionnaires, this study takes AMOS and SPSS statistical analysis software to verify the data and hypotheses through descriptive statistics, correlation analysis, reliability and validity analysis, and stepwise regression analysis.

4. Results

4.1. Basic information of samples

The study respondents included 302 females (60.90%) and 194 males (39.10%). Those aged below 18 years and had no disposable income were excluded. The largest proportion of respondents fell within the 18–29 age group with 195 (39.3%), followed by the 30–39 age group with 164 (33.1%). In terms of educational level, 160 participants (32.2%) held a bachelor's degree, ranking first, followed by 133 participants (26.82%)

with a graduate degree. Regarding monthly income, the highest income group earned RMB 5,001–7,500 yuan, with 161 participants (32.5%), followed by the RMB 2,501–5,000 yuan group with 106 participants (21.4%). Based on the statistics of the above basic information, the data collected from the questionnaire issued in this study are reasonable and can be used to proceed with further analysis or studies.

4.2. Factor analysis, reliability, and validity verification

4.2.1. Confirmatory factor analysis

The measurement model was evaluated using AMOS. The results of the model analysis, as presented in **Table 1**, demonstrate that the four-factor model exhibits CMIN/DF = 1.37 < 3, RMSE = 0.02 < 0.05, GFI = 0.89 > 0.8, AGFI = 0.88 > 0.8, NFI = 0.96 > 0.9, IFI = 0.97 > 0.9, and CFI = 0.97 > 0.9, indicating optimal fit and adherence to established standards [60].

Table 1. Model fit index.

Chi-square	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI
1662.06	1.37	0.02	0.89	0.88	0.96	0.97	0.97

4.2.2. Description statistics and correlation analysis of variables

Before conducting multiple regression analysis, multi-collinearity among variables was examined. Pearson correlation coefficients and descriptive statistics were used in this study. As shown in **Table 2**, the results reveal the absence of high multi-collinearity (all Pearson correlation coefficients < 0.6), and the means and standard deviations were within reasonable ranges. Thus, there is no obvious bias, and further regression analysis is allowed [61]. The results also show a significant positive correlation between harmony enhancement and sustainable consumption behavior (r = 0.50, $p < 0.001$), as well as between disintegration avoidance and sustainable consumption behavior (r = 0.51, $p < 0.001$). Therefore, it can be preliminarily concluded that the main effect is established.

Table 2. Description statistics and correlation analysis of variables.

	M	SD	1	2	3	4	5	6	7	8
1. Gender	1.61	0.49	1							
2. Age	3.00	1.04	-0.08*	1						
3. Education	2.63	1.07	0.00	0.14**	1					
4. Income	3.16	1.38	0.10**	-0.16***	0.21***	1				
5. SCB	3.45	0.65	-0.17***	0.19***	0.21***	-0.22***	1			
6. EH	3.62	0.94	-0.06	0.07	0.11*	-0.15***	0.50***	1		
7. AD	3.20	1.16	-0.04	0.05	0.04	-0.08*	0.51***	0.27***	1	
8. EE	3.72	0.98	-0.06	0.10*	0.18**	-0.07*	0.46**	0.43**	0.09*	1

Note 1: SCB = Sustainable Consumption Behavior, EH = Harmony enhancement, AD = Disintegration avoidance, EE = Ethical Evaluation.

Note 2: * $p < .05$, ** $p < .01$, *** $p < .001$.

4.2.3. Reliability and validity verification

Table 3 shows the reliability and validity verification results, with all variables' Cronbach alpha coefficients exceeding the 0.7 acceptance standard, thereby indicating high internal consistency. Confirmatory factor analysis was used to verify the validity of the measurement model, with all standardized factor loadings (FL) of all variables greater than 0.50, AVE values greater than 0.5, and CR values greater than 0.70, thus indicating acceptable convergent validity [62]. Additionally, all variables' correlations were less than the square root of AVE, indicating good discriminant validity among the four variables. These results collectively indicate that the measurement model is reliable and valid for further analysis.

Table 3. Reliability and validity verification test.

Variable	Cronbach's alpha	Standardized Factor Loading	AVE	CR
SCB	0.96	0.69-0.72	0.52	0.96
EH	0.93	0.70-0.79	0.54	0.93
AD	0.92	0.74-0.82	0.61	0.92
EE	0.91	0.76-0.79	0.62	0.92

Note: SCB = Sustainable Consumption Behavior, EH = Harmony enhancement, AD = Disintegration avoidance, EE = Ethical Evaluation.

4.3. Stepwise regression model

Stepwise regression analysis was used to test the study hypotheses. Variance inflation factor (VIF) values in the hypothesis model were all < 10, indicating the absence of multi-collinearity among explanatory variables[63]. In Model 1, the controlled variables included gender, age, educational level, and monthly income. The results reveal that gender and income are negatively correlated with sustainable consumption behavior, while age and education level are positively correlated with sustainable consumption behavior. Previous studies have suggested that females possess stronger environmental beliefs and a higher tendency for sustainable consumption than males; however, the impact of gender can be moderated by personal or social identity [64]. Regarding age, existing studies have yielded inconsistent results. For example, Wang et al. [65] found that older adults tend to be more willing to purchase energy-efficient products, while in contrast, Lindén et al. [66] suggested that younger individuals prefer energy-efficient products. Regarding education level, higher education levels enhance individuals' awareness of both societal progress and severe ecological challenges, providing them with a certain economic foundation that, in turn, prompts them to choose sustainable consumption behaviors [67]. Regarding income, higher-income consumers have stronger economic power and a greater preference for sustainable consumption behavior. In summary, demographic factors have limited and unstable effects, and their influence may vary across different contexts [68]. However, they must still be considered in relevant discussions.

Model 2 shows the regression analysis of harmony enhancement on sustainable consumption behavior, yielding an F value of 58.03 and a significant *p*-value of 0.000, thus indicating statistical significance. The model's R^2 value is 0.37, demonstrating that the independent variable can explain 37% of the changes in SCB. Thus, Model 2 is valid. The regression coefficient for harmony enhancement is 0.48 ($p = 0.000 < 0.01$), indicating a significant positive impact of harmony enhancement on sustainable consumption behavior, thereby supporting H1a.

Model 3 analyzes the impact of disintegration avoidance on sustainable consumption behavior under controlled variables. The F value is 59.36, with a significant p-value of 0.000, showing significant horizontally, and an R^2 value of 0.38. Thus, the model is valid. Furthermore, the regression coefficient for disintegration avoidance is 0.50 ($p = 0.000 < 0.01$), indicating a significant positive impact of disintegration avoidance on sustainable consumption behavior, thus supporting H1b.

To test the mediating role of ethical evaluation between harmony enhancement, disintegration avoidance and sustainable consumption behavior, Baron and Kenny [69] stepwise approach and Cheung and Lau [70] Bootstrap method were used to ensure the reliability of results. The specific test steps are as follows. First, in Model 4, gender, age group, educational level, and monthly income are used as control variables, and ethical evaluation is considered the regression result of the dependent variable. The results indicate a significant positive correlation between educational level and ethical evaluation, suggesting that people with higher education levels tend to have stronger moral beliefs.

In Model 5, harmony enhancement is added based on the controlled variables of Model 4 to test the relationship between the independent variable harmony enhancement and the mediating variable ethical evaluation. The results show that harmony enhancement has a significant positive impact on ethical evaluation ($\beta = 0.41$, $p = 0.000 < 0.01$), thus supporting H2a.

Based on the results of Model 7, it can be observed that the mediating variable, ethical evaluation, has a significant positive impact on sustainable consumption behavior ($\beta = 0.39$, $p = 0.000 < 0.01$), indicating that ethical evaluation positively affects sustainable consumption behavior. Thus, H3 is confirmed.

In Model 8, with the addition of ethical evaluation, the impact of harmony enhancement on sustainable consumption behavior significantly decreases (from 0.48 to 0.38), indicating a partial mediating effect of ethical evaluation between harmony enhancement and sustainable consumption behavior, thus supporting H4a.

According to the three-step mediation test[69], if the regression coefficient of the independent variable on the mediator is not significant, it indicates that the mediator does not have a mediation effect. Similarly, Model 6 tests the impact of disintegration avoidance on ethical evaluation, by adding disintegration avoidance to Model 4. The results reveal that disintegration avoidance has no significant impact on ethical evaluation ($\beta = 0.07$, $p = 0.15 > 0.05$). Thus, H2b is not supported. As such, it can be preliminarily inferred that ethical evaluation does not have a mediating effect between disintegration avoidance and sustainable consumption behavior. Thus, H4b is not supported.

Table 4. Stepwise regression analyses.

Model	**M1**	**M2**	**M3**	**M4**	**M5**	**M6**	**M7**	**M8**	**M9**
Variables	**SCB**	**SCB**	**SCB**	**EE**	**EE**	**EE**	**SCB**	**SCB**	**SCB**
Analytical	**β**	**β**	**β**	**β**	**β**	**β**	**β**	**β**	**β**
Indicators	**(t)**	**(t)**	**(t)**	**(t)**	**(t)**	**(t)**	**(t)**	**(t)**	**(t)**
1. Gender	-0.14	-0.12	-0.12	-0.05	-0.03	-0.05	-0.12	-0.11	-0.11
	(-3.25***)	(-3.22***)	(-3.46***)	(-1.08)	(-0.76)	(-1.04)	(-3.08**)	(-3.12**)	(-3.35***)
2. Age	0.10	0.09	0.09	0.05	0.04	0.05	0.08	0.09	0.07
	(2.38*)	(2.58*)	(2.48)	(1.08)	(1.04)	(1.04)	(2.12*)	(2.39*)	(2.24*)
3. Education	0.25	0.18	0.22	0.19	0.13	0.19	0.17	0.15	0.15
	(5.72***)	(4.76***)	(5.93***)	(4.15***)	(3.13**)	(4.06***)	(4.30***)	(4.02***)	(4.52***)
4. Income	-0.25	-0.16	-0.21	-0.10	-0.03	-0.09	-0.21	-0.15	-0.17
	(-5.63***)	(-4.22***)	(-5.51***)	(-2.19*)	(-0.69)	(-2.06*)	(-5.16***)	(-4.19***)	(-5.10***)

5. EH		0.48 (13.18***)			0.41 (9.92***)			0.38 (9.95***)	
6. AD			0.50 (13.39***)			0.07 (1.63)			0.45 (14.12***)
7. EE							0.39 (10.27***)	0.24 (6.2***)	0.36 (11.10***)
R^2	0.15	0.37	0.38	0.05	0.21	0.05	0.30	0.42	0.50
Adj. R^2	0.14	0.36	0.37	0.04	0.20	0.04	0.29	0.41	0.49
F	21.52***	58.03***	59.36***	6.26***	25.66***	5.55***	41.98***	58.46***	82.35***

Note 1: n = 496, * $p < .05$, ** $p < .01$, *** $p < .001$.

Note 2: SCB = Sustainable Consumption Behavior, EH = Harmony enhancement, AD = Disintegration avoidance, EE = Ethical Evaluation.

Note 3. M2 (independent variable: EH; reactive variable: SCB); M3 (independent variable: AD; reactive variable: SCB); M5 (independent variable: EH; reactive variable: EE); M6 (independent variable: AD; reactive variable: EE); M7 (independent variable: EE; reactive variable: SCB); M8 (independent variable: EH; mediator: EE; reactive variable: SCB); M9 (independent variable: AD; mediator: EE; reactive variable: SCB).

Note 4. The first bracket contains the t values.

4.4. The mediating role of ethical evaluation

4.4.1. The Mediating Effect of ethical evaluation (Path: EH→ EE→SCB)

We examined the mediating role of ethical evaluation in the relationship between harmony enhancement and sustainable consumption behavior using the Model 4 validation procedure proposed by Preacher and Hayes [71]. The total effect coefficient of harmony enhancement on sustainable consumption behavior is 0.33, with a 95% confidence interval (CI) of [0.28, 0.38], excluding 0. The direct effect coefficient of harmony enhancement on sustainable consumption behavior is 0.27, with a 95% CI of [0.21, 0.32], also excluding 0. The indirect effect coefficient is 0.07, with a 95% CI of [0.04, 0.09], again excluding 0. These findings suggest that after incorporating ethical evaluation into the relationship between harmony enhancement and sustainable consumption behavior, the main effect coefficient decreased, indicating that ethical evaluation partially mediates the relationship between harmony enhancement and sustainable consumption behavior. This analysis further supports H4a.

Table 5. Analysis of the mediating effect of ethical evaluation between harmony enhancement and sustainable consumption behavior.

Predictor	***B***	***SE***	**95% CI**		**R^2**
			LL	**UL**	
Total effect	0.33***	0.03	0.28	0.38	0.21
Direct effect	0.27***	0.03	0.21	0.32	
	Boot IE	Boot SE	95% CI		
Indirect effect via mindful acceptance			LL	UL	
	0.07	0.01	0.04	0.09	0.41

Note: n = 496, * $p < .05$, ** $p < .01$, *** $p < .001$.

4.4.2. The mediating effect of ethical evaluation (Path: AD→ EE→SCB)

We tested the mediating role of ethical evaluation in the relationship between disintegration avoidance and sustainable consumption behavior using Hayes' Process in Model 4. The total effect coefficient of disintegration avoidance on sustainable consumption behavior is 0.27, with a 95% CI of [0.23, 0.31], which does not include 0. The direct effect coefficient of disintegration avoidance on sustainable consumption behavior is 0.25, with a 95% CI of [0.21, 0.29], which does not include 0. The indirect effect coefficient is 0.02, with a 95% CI of [-0.01, 0.03], which includes 0. These findings indicate that the mediating effect of ethical evaluation between disintegration avoidance and sustainable consumption behavior is not established. Given that disintegration avoidance does not influence sustainable consumption behavior through ethical evaluation, H4b is not supported.

Table 6. Analysis of the mediating effect of ethical evaluation between disintegration avoidance and sustainable consumption behavior.

Predictor	***B***	***SE***	**95% CI**		**R^2**
			LL	**UL**	
Total effect	0.27***	0.02	0.23	0.31	0.05
Direct effect	0.25***	0.02	0.21	0.29	
	Boot IE	Boot SE	95% CI		
Indirect effect via mindful acceptance			LL	UL	
	0.02	0.01	-0.01	0.03	0.50

Note: n = 496, * $p < .05$, ** $p < .01$, *** $p < .001$.

5. Conclusions and recommendations

5.1. Conclusions

In summary, the proposed theoretical hypotheses in this study received partial empirical support. In particular, five of the seven research hypotheses in this study were supported by the data. Specifically, the study consisted of two main parts. The first part examined direct effects, confirming that both types of interpersonal harmony orientation had a positive impact on sustainable consumption behavior, thus supporting H1a and H1b. Additionally, ethical evaluation positively influenced sustainable consumption behavior, thus supporting H3.

The second part examined the indirect effects, exploring the mediating role of ethical evaluation in the relationship between the dualistic model of interpersonal harmony and sustainable consumption behavior. The results showed that ethical evaluation partially mediated the relationship between harmony enhancement and sustainable consumption behavior, thus supporting H2a and H4a. However, disintegration avoidance did not have an influence on ethical evaluation; thus, H2b is not supported. Furthermore, ethical evaluation did not mediate between disintegration avoidance and sustainable consumption behavior. Thus, H4b not support. This finding indicates that disintegration avoidance views harmony primarily as a means, and individuals may not possess a strong sense of morality beneath the surface. Therefore, the implementation of sustainable consumption behavior by individuals with disintegration avoidance may not be transmitted through moral considerations.

In summary, sustainable consumption, a form of ethical consumption, is an environmentally responsible and eco-friendly consumption model. Value cognition is the foundation of behavioral decision-making. Through the cultivation of interpersonal harmony values, consumers can be guided to respect and understand

the long-term development and intrinsic value of sustainable consumption, thus enhancing civic moral awareness and strengthening the recognition of pre-action moral evaluation. Consumers can engage in sustainable intentions only when they conduct positive pre-moral evaluations of sustainable actions [48]. In turn, this can reduce the unscientific and unethical utilization of existing resources, adhere to ecological priorities, and foster a resource-saving and environmentally friendly spatial pattern and lifestyle, ultimately transforming the recognition of interpersonal harmony values into sustainable consumption habits.

5.2. Theoretical implications

The conclusions of this study further demonstrate the crucial role played by individual consumers in the success of sustainable development [10]. The theoretical contributions of this study are twofold:

It is the first study to validate the positive impact of interpersonal harmony value orientation on sustainable consumption behavior based on the collectivist culture of China. By conducting in-depth exploration and classification of interpersonal harmony orientation, the study further expands the research on the dualism of interpersonal harmony and provides new insights for studying sustainable consumption from a values perspective.

By introducing ethical evaluation as a mediating variable, this study expands the Values-Beliefs-Behavior model and verifies for the first time the different mediating roles of ethical evaluation in the relationship between two different interpersonal harmony orientations and sustainable consumption behavior. In this way, the study's findings offer a new perspective for the research direction of ethical consumption.

5.3. Practical implications

Related concepts of environmental management, such as green management are being pursued by enterprises to reduce environmental pollution [72]. More importantly, consumers can become drivers of environmental change by adopting social practices that contribute to sustainable development [73]. The practical implications of this research can be summarized into two points:

Environmental policymakers in China can leverage institutionalized educational tools and noninstitutionalized media channels to popularize the concepts of "ecological civilization" and "sustainable development," thus awakening consumers' environmental moral beliefs. If consumers themselves realize the benefits of sustainable consumption, this could have significant practical implications for guiding the entire society toward a correct future and for the harmonious development of resources and the environment [5].

Companies should also prioritize the impact of cultural factors on sustainable consumption. By gaining a deeper understanding of marketing plans that align with sustainable development goals, firms can leverage these frameworks to better understand consumer behaviors [10]. Specifically, this can be done by considering the psychological and behavioral factors in interpersonal interactions during daily life, understanding the cultural and ethical psychological needs and environmental motivations, and increasing attention to consumers' moral and ethical aspects. For instance, enhancing interpersonal harmony cognition can increase trust [24] and foster a more united sentiment [74]. This is an important principle in jointly addressing global challenges and can help promote climate-friendly actions [75].

5.4. Limitations and future research directions

The participants of this study were supermarket members in China, so the results may not directly apply to consumers in other countries or retail categories. In future studies, researchers may wish to examine whether local consumers in other regions exhibit similar behaviors, thus providing useful information for future

managers in designing marketing strategies targeting cross-cultural consumers with different shopping preferences.

This study only explored how two different types of harmony factors differently influence moral evaluations. However, it has not yet explored what mediating variables may exist for individuals with disintegration avoidance, which could affect sustainable consumption behavior. In order to gain a more comprehensive understanding of this relationship, further research is required to ascertain the moderating variables that influence the relationship between a dualistic model of harmony and sustainable consumption behavior.

Finally, this study used a cross-sectional approach for questionnaire processing and analysis, rather than exploring a longitudinal analysis over a specific period. Thus, to better enhance the accuracy of the interpretation of the results, future research could utilize time-series analysis to explore whether the research results remain the same or differ over time (e.g., over six months and one year).

Author contributions

Conceptualization, YX and CC; methodology, YX; software, YX.; validation, YX and CC; formal analysis, YX; investigation, YX and ST; resources, YX and ST; data curation, YX; writing—original draft preparation, YX and CC; writing—review and editing, YX and CC; supervision, YX and CC; project administration, YX; All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding.

Conflict of interest

Authors declare no conflicts of interest.

References

1. Sharma R, Jha M. Values influencing sustainable consumption behaviour: Exploring the contextual relationship. Journal of Business Research 2017; 76: 77-88. doi:https://doi.org/10.1016/j.jbusres.2017.03.010
2. Aktan M, Kethüda Ö. The role of environmental literacy, psychological distance of climate change, and collectivism on generation Z's collaborative consumption tendency. Journal of Consumer Behaviour 2024; 23(1): 126-140. doi:https://doi.org/10.1002/cb.2159
3. Peggy MN, Cheung CT, Lit KK, et al. Green consumption and sustainable development: The effects of perceived values and motivation types on green purchase intention. Business Strategy and the Environment 2024; 33(2): 1024-1039. doi:https://doi.org/10.1002/bse.3535
4. Fang C. The influence of host characteristics on impulsive online purchases by consumers: Examining the effects of flow experience and independent self-construal. Environment and Social Psychology 2024; 9(5): 1-13. doi:https://esp.apacsci.com/index.php/esp/article/view/2293
5. Quoquab F, Mohammad J, Sukari NN. A multiple-item scale for measuring "sustainable consumption behaviour" construct: Development and psychometric evaluation. Asia Pacific Journal of Marketing and Logistics 2019; 31(2): 1-26. doi:https://doi.org/10.1108/APJML-02-2018-0047
6. Dangelico RM, Nonino F, Pompei A. Which are the determinants of green purchase behaviour? A study of Italian consumers. Business Strategy and the Environment 2021; 30(5): 2600-2620. doi:https://doi.org/10.1002/bse.2766
7. Matharu M, Jain R, Kamboj S. Understanding the impact of lifestyle on sustainable consumption behavior: a sharing economy perspective. Management of Environmental Quality: An International Journal 2020; 32(1): 20-40. doi:https ://doi.org/10.1108/MEQ-02-2020-0036
8. Sharma N, Lal M, Goel P, et al. Being socially responsible: How green self-identity and locus of control impact green purchasing intentions? Journal of Cleaner Production 2022; 357: 1-17. doi:https://doi.org/10.1016/j.system.2022.102820

9. Javidan M, House RJ, Dorfman PW, et al. Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches. Journal of international business studies 2006; 37: 897-914. doi:https://doi.org/10.1057/palgrave.jibs.8400234
10. Nangia P, Bansal S, Thaichon P. Doing more with less: An integrative literature review on responsible consumption behaviour. Journal of Consumer Behaviour 2024; 23(1): 141-155. doi:https://doi.org/10.1002/cb.2163
11. Agostini M, Zomeren MV. Toward a comprehensive and potentially cross-cultural model of why people engage in collective action: A quantitative research synthesis of four motivations and structural constraints. Psychological Bulletin 2021; 147(7): 667-700. doi:https://psycnet.apa.org/record/2022-08521-001
12. He A, Liu M. The chain-mediated effect of ecological values on sustainable consumption behavior. Journal of Xi'an Jiaotong University(Social Sciences) 2021; 41(1): 61-68. doi:https://link.cnki.net/doi/10.15896/j.xjtuskxb.202101007
13. Halder P, Hansen EN, Kangas J, et al. How national culture and ethics matter in consumers' green consumption values. Journal of Cleaner Production 2020; 265: 1-33. doi:https://doi.org/10.1016/j.jclepro.2020.121754
14. Chakraborty S, Sadachar A. Can a connection with the indigenous cultural values encourage sustainable apparel consumption? Journal of Fashion Marketing and Management: An International Journal 2023; 27(1): 80-99. doi:https ://doi.org/10.1108/JFMM-07-2021-0191
15. Moraes C, Kerrigan F, McCann R. Positive shock: A consumer ethical judgement perspective. Journal of Business Ethics 2020; 165: 735-751. doi:https://doi.org/10.1007/s10551-018-4092-y
16. Verplanken B, Holland RW. Motivated decision making: effects of activation and self-centrality of values on choices and behavior. Journal of personality and social psychology 2002; 82(3): 434–447. doi:https://doi.org/10.1037/0022-3514.82.3.434
17. Stern PC, Dietz T. The value basis of environmental concern. Journal of Social Issues 1994; 50(3): 65-84. doi:https://doi.org/10.1111/j.1540-4560.1994.tb02420.x
18. Omrane A, Khan MA. A comparative analysis of six national cultures under the umbrella of the Hofstede's model. Environment and Social Psychology 2024; 9(3): 1-22. doi:https://esp.apacsci.com/index.php/esp/article/view/1618
19. Lu J, Yu C-s, Liu C, et al. Comparison of mobile shopping continuance intention between China and USA from an espoused cultural perspective. Computers in Human Behavior 2017; 75: 130-146. doi:https://doi.org/10.1016/j.chb.2017.05.002
20. Farh J, Zhong C, Organ DW. Organizational citizenship behavior in the People's Republic of China. Organization Science 2004; 15(2): 241-253. doi:https://doi.org/10.1287/orsc.1030.0051
21. Chen L, Ye Z, Shafait Z, et al. The effect of abusive supervision on employee creativity: The mediating role of negative affect and moderating role of interpersonal harmony. Frontiers in Psychology 2022; 13: 1-12. doi:https://doi.org/10.3389/fpsyg.2022.796355
22. Wei S. Economic-environmental effects of differentiated carbon tax policies in north and south countries: Sequential game analysis based on carbon emission responsibility perspective. Journal of Xi'an Jiaotong University(Social Sciences) 2020; 40(5): 111-118. doi:https://link.cnki.net/doi/10.15896/j.xjtuskxb.202005011
23. Zhao AL, Dermody J, Koenig‐Lewis N, et al. Cultivating sustainable consumption: The role of harmonious cultural values and pro‐environmental self‐identity. Journal of Consumer Behaviour 2024; 23(2): 1014-1031. doi:https://doi.org/10.1037/bul0000256
24. Leung K, Koch PT, Lu L. A dualistic model of harmony and its implications for conflict management in Asia. Asia Pacific Journal of Management 2002; 19: 201-220. doi:https://doi.org/10.1023/A:1016287501806
25. WCED. World Commission on Environment and Development: Our common future. Oxford University Press. 1987.https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf (accessed on OCT 1987)
26. Quoquab F, Mohammad J. Managing sustainable consumption: is it a problem or panacea?: Springer; 2017.
27. Chen T, Leung K, Li F, et al. Interpersonal harmony and creativity in China. Journal of Organizational Behavior 2015; 36(5): 648–672. doi: https://doi.org/10.1002/job.2001
28. Fabio AD, Tsuda A. The psychology of harmony and harmonization: Advancing the perspectives for the psychology of sustainability and sustainable development. Sustainability 2018; 10(12): 1-15. doi:https://doi.org/10.3390/su10124726
29. Zhao X, Lynch J, John G, et al. Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. Journal of Consumer Research 2010; 37(2): 197-206. doi:https: //doi.org/10.1086/651257
30. Kim Y, Choi SM. Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. Advances in Consumer Research 2005; 32: 592-599. doi:https://www.researchgate.net/profile/Yeonshin-Kim-2/publication/233894746
31. Leonidou LC, Leonidou CN, Kvasova O. Antecedents and outcomes of consumer environmentally friendly attitudes and behaviour. Journal of Marketing Management 2010; 26: 1319-1344. doi:https://doi.org/10.1080/0267257X.2010.523710

32. Chou CJ. Hotels' environmental policies and employee personal environmental beliefs: Interactions and outcomes. Tourism Management 2014; 40: 436-446. doi:https://doi.org/10.1016/j.tourman.2013.08.001
33. Zhang ZX. Negative expectations, conflict avoidance, and inhibitive advice: Conceptualization process in theoretical construction. Tourism and Hospitality Prospects 2022; 6(1): 1-23. doi:https://link.cnki.net/doi/10.12054/lydk.bisu.192
34. Hwang KK. Chinese relationalism: Theoretical construction and methodological considerations. Journal for the Theory of Social Behaviour 2000; 30(2): 155-178. doi:https://doi.org/10.1111/1468-5914.00124
35. Kotlar J, De Massis A. Goal setting in family firms: Goal diversity, social interactions, and collective commitment to family-centered goals. Entrepreneurship Theory and Practice 2013; 37(6): 1263-1288. doi:https://doi.org/10.1111/etap.12065
36. Ianole-Călin R, Francioni B, Masili G, et al. A cross-cultural analysis of how individualism and collectivism impact collaborative consumption. Resources, Conservation and Recycling 2020; 157: 1-12. doi:https://doi.org/10.1016/j.resconrec.2020.104762
37. Pan Y, Gao L, Zhang X, et al. Consumer values in the context of Chinese culture: Scale development and comparison. Management World 2014; 04: 90-106. doi:https://link.cnki.net/doi/10.19744/j.cnki.11-1235/f.2014.04.010
38. Wu L, Zhu Y, Zhai J. Understanding waste management behavior among university students in China: environmental knowledge, personal norms, and the theory of planned behavior. Frontiers in Psychology 2022; 12: 1-13. doi:https://doi.org/10.3389/fpsyg.2021.771723
39. Wang S, Wang J, Wan L, et al. Social norms and tourists' pro-environmental behaviors: Do ethical evaluation and Chinese cultural values matter? Journal of Sustainable Tourism 2023; 31(6): 1413-1429. doi:https://doi.org/10.1080/09669582.2022.2049805
40. Sorokin P. Social and cultural dynamics: A study of change in major systems of art, truth, ethics, law and social relationships: Routledge; 2017 . pp. 16–25
41. Hunt SD, Vitell S. A general theory of marketing ethics. Journal of Macromarketing 1986; 6(1): 5-16. doi:https://doi.org/10.1177/027614678600600103
42. Bernardi RA, Long SP. Family Values, Competition And The Environment: An International Study Of Business Ethics. International Business & Economics Research Journal 2004; 3(1): 1-12. doi:https://doi.org/10.19030/iber.v3i1.3650
43. Jaeger L. In the Interests of All Mankind: The Long Road from National Energy Concepts to Global Policy. Ways Out of the Climate Catastrophe: Springer, Cham.; 2021. p. pp 219–234.
44. Li Q, Zhong X. Characteristics of Confucian culture and its impact on enterprise human resource management. Productivity Research 2006; 3: 231-233. doi:https://link.cnki.net/doi/10.19374/j.cnki.14-1145/f.2006.03.095
45. Zhang ZX, Wei X. Superficial harmony and conflict avoidance resulting from negative anticipation in the workplace. Management and Organization Review 2017; 13(4): 795-820. doi:https://doi.org/10.1017/mor.2017.48
46. Liu C, Li L, Li H, et al. Supervisor–employee task conflict and supervisor ostracism: The moderating effect of interpersonal harmony values. Applied Psychology 2023; 72(3): 971-997. doi:https://doi.org/10.1111/apps.12416
47. Sweeney B, Arnold D, Pierce B. The impact of perceived ethical culture of the firm and demographic variables on auditors' ethical evaluation and intention to act decisions. Journal of Business Ethics 2010; 93: 531-551. doi:https://doi.org/10.1007/s10551-009-0237-3
48. Yin J, Qian L, Singhapakdi A. Sharing Sustainability: How Values and Ethics Matter in Consumers' Adoption of Public Bicycle-Sharing Scheme. Journal of Business Ethics 2016; 149: 313-332. doi:https://doi.org/10.1007/s10551-016-3043-8
49. Rahman O, Fung BC, Chen Z. Young Chinese consumers' choice between product-related and sustainable cues—The Effects of Gender Differences and Consumer Innovativeness. Sustainability 2020; 12(9): 1-23. doi:https://doi.org/10.3390/su12093818
50. Balderjahn I, Buerke A, Kirchgeorg M, et al. Consciousness for sustainable consumption: scale development and new insights in the economic dimension of consumers' sustainability. AMS review 2013; 3: 181-192. doi:https://doi.org/10.1007/s13162-013-0057-6
51. Moulins JL, Toti JF. How to measure ethical consumption behavior? RIMHE : Revue Interdisciplinaire Management, Homme & Entreprise 2016; 24: 45-66. doi:https://hal.science/hal-01468872
52. Wiederhold M, Martinez LF. Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. International Journal of Consumer Studies 2018; 42(4): 419-429. doi:https://doi.org/10.1111/ijcs.12435
53. Tomșa M-M, Romonți-Maniu A-I, Scridon M-A. Is sustainable consumption translated into ethical consumer behavior? Sustainability 2021; 13(6): 1-14. doi:https://doi.org/10.3390/su13063466
54. Groening C, Sarkis J, Zhu Q. Green marketing consumer-level theory review: A compendium of applied theories and further research directions. Journal of cleaner production 2018; 172: 1848-1866. doi:https://doi.org/10.1016/j.jclepro.2017.12.002

55. Hasan S, Wooliscroft B, Ganglmair-Wooliscroft A. Drivers of Ethical Consumption: Insights from a Developing Country. Journal of Macromarketing 2023; 43(2): 175-189. doi:https://doi.org/10.1177/02761467231168045
56. Dai Q, Cao Z, Shen G. Consumer moral decision-making under B2C e-commerce model: The moderating effect of self-monitoring. Journal of Technology Economics 2015; 34(01): 117-124. doi:https://link.cnki.net/doi/10.3969/j.issn.1002-980X.2015.01.017
57. Leary RB, Vann RJ, Mittelstaedt JD, et al. Changing the marketplace one behavior at a time: Perceived marketplace influence and sustainable consumption. Journal of Business Research 2014; 67(9): 1953-1958. doi:https://doi.org/10.1016/j.jbusres.2013.11.004
58. Qiu H. Moral norms and tourists' willingness for civilized tourism behavior: An extended TPB model. Zhejiang Social Sciences 2016; 3: 1-8. doi:https://link.cnki.net/doi/10.14167/j.zjss.2016.03.017
59. Wu J, Zheng R. Compilation of the Psychological Harmony Scale for College Students. Chinese Journal of Health Psychology 2011; 19(5): 622-624. doi:https://link.cnki.net/doi/10.13342/j.cnki.cjhp.2011.05.022
60. Bagozzi RP, Yi Y. On the evaluation of structural equation models. Journal of the Academy of Marketing Science 1988; 16: 74-94. doi:https://doi.org/10.1007/BF02723327
61. Cohen I, Huang Y, Chen J, et al. Pearson Correlation Coefficient. Noise Reduction in Speech Processing 2009; 2: 1-4. doi:https://doi.org/10.1007/978-3-642-00296-0_5
62. Fornell C, Larcker DF. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research 1981; 18(1): 39-50. doi:https://doi.org/10.1177/002224378101800104
63. Robinson C, Schumacker RE. Interaction effects: centering, variance inflation factor, and interpretation issues. Multiple Linear Regression Viewpoints 2009; 35(1): 6-11. doi:http://glmj.org/archives/MLRV_2009_35_1.pdf#page=8
64. Costa Pinto D, Herter MM, Rossi P, et al. Going green for self or for others? Gender and identity salience effects on sustainable consumption. International Journal of Consumer Studies 2014; 38(5): 540-549. doi: https://doi.org/10.1111/ijcs.12114
65. Wang Z, Zhang B, Yin J, et al. Determinants and policy implications for household electricity-saving behaviour: Evidence from Beijing, China. Energy Policy 2011; 39(6): 3550-3557. doi:https://doi.org/10.1016/j.enpol.2011.03.055
66. Lindén A-L, Carlsson-Kanyama A, Eriksson B. Efficient and inefficient aspects of residential energy behaviour: What are the policy instruments for change? Energy policy 2006; 34(14): 1918-1927. doi:https://doi.org/10.1016/j.enpol.2005.01.015
67. Xu S, Chu C, Zhang Y, et al. Entangled stakeholder roles and perceptions of sustainable consumption: An evaluation of sustainable consumption practices in Tianjin, China. Journal of Environmental Management 2018; 223: 841-848. doi:https://doi.org/10.1016/j.jenvman.2018.07.007
68. Dong X, Yang Z, Li Y. Influencing factors of urban residents' sustainable consumption behavior. Urban Problems 2012; (10): 55-61. doi:https://link.cnki.net/doi/10.13239/j.bjsshkxy.cswt.2012.10.014
69. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology 1986; 51(6): 1173–1182. doi:https://doi.org/10.1037/0022-3514.51.6.1173
70. Cheung GW, Lau RS. Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. Organizational Research Methods 2008; 11(2): 296-325. doi:https://doi.org/10.1177/1094428107300343
71. Preacher KJ, Hayes AF. SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments, & Computers 2004; 36: 717-731. doi:https://link.springer.com/article/10.3758/bf03206553
72. Chen C-S. What is the impact of green strategy on enterprises? Exploring the mediating effect of green assets and green technology. International Journal of Business 2022; 27(1): 1-17. doi:https://ijb.cyut.edu.tw/var/file/10/1010/img/927/V27N1-5.pdf
73. Pollex J. Regulating Consumption for Sustainability? Why the European Union Chooses Information Instruments to Foster Sustainable Consumption. European Policy Analysis 2017; 3(1): 185-204. doi:https://doi.org/10.1002/epa2.1005
74. Lau WK, Nguyen LD, Pham LN, et al. The mediating role of harmony in effective leadership in China: From a Confucianism perspective. Asia Pacific Business Review 2023; 29(3): 546-569. doi:https://doi.org/10.1080/13602381.2021.1948216
75. Kastner K, Matthies E. On the importance of solidarity for transforming social systems towards sustainability. Journal of Environmental Psychology 2023; 90: 102067. doi:https://doi.org/10.1016/j.jenvp.2023.102067