Data Article

A dataset of factors affecting sustainable consumption intention in Vietnam

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A R T I C L E   I N F O

Article history:
Received 9 January 2022
Revised 17 March 2022
Accepted 28 March 2022
Available online 1 April 2022

Dataset link: Sustainable Consumption Intention in Vietnam (Original data)

Keywords:
Sustainable consumption intention
Theory of planned behavior
The norm activation model
Vietnam

A B S T R A C T

The dataset explores the factors affecting the sustainable consumption intention of Vietnamese consumers. The research model was built based on a combination of the theory of planned behavior (TPB) and norm activation model (NAM) with 7 factors and 26 items. The data set was the result of a large-scale survey of 551 Vietnamese people with different demographic characteristics conducted in November 2021. The data set was the basis for identifying factors that influence the sustainable consumption intention of Vietnamese consumers, thereby making recommendations to state management agencies and enterprises to promote sustainable consumption intentions in Vietnam.

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https://doi.org/10.1016/j.dib.2022.108127
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**Specification Table**

| Subject                        | Social Science                          |
|--------------------------------|-----------------------------------------|
| Specific subject area          | Sustainable consumption behavior, theory of planned behavior, norm activation model |
| Type of data                   | Table                                   |
| How data were acquired         | Design a questionnaire on Microsoft Word |
|                                | Survey using Google Form                |
|                                | Storing survey data using Microsoft Excel |
| Data format                    | Raw                                     |
|                                | Analyzed                                |
| Description of Data collection | The dataset has been collected from the online survey on sustainable consumption intentions of Vietnamese consumers in November 2021. The results of the collection of 551 valid questionnaires were included in the analysis. |
| Data source location           | Region: Asia.                           |
|                                | Country: Vietnam.                       |
| Data accessibility             | Mendeley Data                           |
|                                | Repository name: Sustainable Consumption Intention in Vietnam |
|                                | Data identification number: 10.17632/2n3sc78mph.2 |
|                                | Direct URL to data:                     |
|                                | https://data.mendeley.com/datasets/2n3sc78mph/2 |

**Value of the Data**

- The dataset explores the relationship between factors affecting the sustainable consumption intention of Vietnamese consumers based on the TPB-NAM integrated model. At the same time, the data set also included demographic characteristics of respondents.
- The dataset applies and confirms the suitability of the scales in the TPB-NAM integrated model to study the sustainable consumption intention in Vietnam.
- Other researchers can use the dataset to compare sustainable consumption intention with similar studies in geographically different regions.

**1. Data Description**

Sustainable consumption is the use of goods and services that meet basic needs and provide a better quality of life, while reducing the use of natural resources, hazardous materials and waste emissions, so as not to endanger the needs of future generations [1]. A special focus of sustainable consumption is on the economic activity of selecting, using and disposing of goods and services for social and environmental benefits. Sustainable consumption intentions have been studied a lot in such areas as: online shopping [2], energy-saving appliances [3], green purchases [4,5], recycling [6]. Previous studies have only focused on sustainable consumption intentions and behavior for specific industries or products. In Vietnam, the concept of sustainable consumption is still quite new, there have not been many studies on this topic [7], especially using the TPB-NAM combined model to research sustainable consumption intentions. Therefore, the authors decided to do this paper, in order to test the relevance of this theory to the Vietnamese context. This study was built based on seven factors from the TPB-NAM integration model (intention, attitude, subject norms, perceived behavioral control, awareness of consequences, ascription of responsibility, personal norm). TPB explains one's intentional behavior stemming from personal expectations and interests, while NAM focuses on one's behavior stemming from altruistic and moral beliefs, specifically beliefs about right and wrong [8].

The dataset was collected through 2 survey parts: the first part explores the respondents' demographic characteristics including gender, age, education level, marital status, and income (Table 1), the second part explores respondents' consent to statements related to factors affecting sustainable consumption intention. Vietnamese consumers spent about 5 min filling out the survey and the authors received 551 valid responses.
Table 1
Respondents’ characteristics.

| Characteristics               | N   | %    |
|-------------------------------|-----|------|
| Gender (GE)                   | 551 | 100  |
| Male                          | 228 | 41.4 |
| Female                        | 323 | 58.6 |
| Age (AG)                      | 551 | 100  |
| Under 18                      | 65  | 11.8 |
| 18–24                         | 376 | 68.2 |
| 25–35                         | 51  | 9.3  |
| 36–45                         | 28  | 5.1  |
| 46–55                         | 22  | 4.0  |
| Over 56                       | 9   | 1.6  |
| Education level (EL)          | 551 | 100  |
| Haven’t finished high school  | 26  | 4.7  |
| High school                   | 60  | 10.9 |
| Intermediate college          | 27  | 4.9  |
| University                    | 407 | 73.9 |
| After university              | 31  | 5.6  |
| Marital status (MS)           | 551 | 100  |
| Single                        | 436 | 79.1 |
| Married                       | 82  | 14.9 |
| Divorce                       | 13  | 2.4  |
| Others                        | 20  | 3.6  |
| Monthly income (MI)           | 551 | 100  |
| Under 6                       | 383 | 69.5 |
| 6–10                          | 66  | 12.0 |
| 11–15                         | 38  | 6.9  |
| 16–20                         | 30  | 5.4  |
| 21–30                         | 18  | 3.3  |
| Over 30                       | 16  | 2.9  |

2. Experimental Design, Material and Methods

The survey was conducted in both direct and online form in November 2021. In the form of direct data collection at some supermarkets, the authors listed the top 6 supermarkets in three major cities (Hanoi, Ho Chi Minh and Da Nang), where have a number of customers in Vietnam. Then, with the support of collaborators, the author conducted a survey at 7:30 p.m. – 9 p.m. every week at the exit of supermarkets. In the form of online data collection via Google Forms, the author made a list of a number of businesses that publish their employees’ email addresses on the company’s official website and randomly selected 10 businesses with diverse business fields, and then sent the survey link to these people. In addition, the authors asked for the help of 10 universities across the country to collect student email information, thereby contacting them through the provided email and requesting a survey. Each survey participant will receive a prize code and 15 randomly selected lucky people will receive a $10 phone card.

- Students: 415 answers accounting for 75.32% of the total valid answers, and 5 answers were not valid (randomly selected based on a list of personal information, which was gathered from a number of universities).
- Working people: 30 answers accounting for 5.44% of the total valid answers, and 1 answer was not valid (randomly selected based on contact information, which is searched on some websites of enterprises, government agencies).
- Consumers: 106 answers accounting for 19.24% of the total valid answers, and 3 answers were not valid (randomly selected at the supermarket direct survey).

This survey was designed by the authors with 26 items with 5 demographic characteristics, designed based on a 5-likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly agree), focusing on 7 factors: intention, attitude, subject norms, perceived behavioral
control, awareness of consequences, ascription of responsibility, personal norm. All items are based on previous studies [9,10]. Before the analysis, the variables were encoded and the data were checked to ensure the validity of each questionnaire. The results of data collection shown that 600 answer sheets were collected, including 551 valid answer sheets (91.83%). All responses were imported into SPSS 22 and Smart PLS 3 were used to analyze the data. The data were analyzed by descriptive statistics (Table 2), Cronbach’s Alpha reliability test, EFA exploratory factor test (Table 3), Person correlation test (Table 4), Structural Equation Modeling (Fig. 1).
Table 2
Description results of participants’ responses.

| Variables | N | Min | Max | Mean | Std. Deviation |
|-----------|---|-----|-----|------|----------------|
| ATT1      | 551 | 1.0 | 5.0 | 4.160 | 0.8800         |
| ATT2      | 551 | 1.0 | 5.0 | 4.216 | 0.8835         |
| ATT3      | 551 | 1.0 | 5.0 | 4.054 | 0.8360         |
| ATT4      | 551 | 1.0 | 5.0 | 4.220 | 0.8162         |
| ATT5      | 551 | 1.0 | 5.0 | 3.946 | 0.8446         |
| IN1       | 551 | 1.0 | 5.0 | 3.949 | 0.8807         |
| IN2       | 551 | 1.0 | 5.0 | 3.971 | 0.8734         |
| IN3       | 551 | 1.0 | 5.0 | 4.011 | 0.8570         |
| IN4       | 551 | 1.0 | 5.0 | 3.788 | 0.9187         |
| PN1       | 551 | 1.0 | 5.0 | 3.902 | 0.8787         |
| PN2       | 551 | 1.0 | 5.0 | 3.882 | 0.8773         |
| PN3       | 551 | 1.0 | 5.0 | 3.773 | 0.8910         |
| PN4       | 551 | 1.0 | 5.0 | 3.820 | 0.8997         |
| AC1       | 551 | 1.0 | 5.0 | 3.918 | 0.9566         |
| AC2       | 551 | 1.0 | 5.0 | 3.813 | 0.9589         |
| AC3       | 551 | 1.0 | 5.0 | 3.902 | 0.9674         |
| SN1       | 551 | 1.0 | 5.0 | 3.672 | 0.8152         |
| SN2       | 551 | 1.0 | 5.0 | 3.641 | 0.8145         |
| SN3       | 551 | 1.0 | 5.0 | 3.695 | 0.8579         |
| SN4       | 551 | 1.0 | 5.0 | 3.838 | 0.8187         |
| PBC1      | 551 | 1.0 | 5.0 | 3.800 | 0.9342         |
| PBC2      | 551 | 1.0 | 5.0 | 3.695 | 0.9561         |
| PBC3      | 551 | 1.0 | 5.0 | 3.699 | 0.9890         |
| AR1       | 551 | 1.0 | 5.0 | 3.764 | 0.9178         |
| AR2       | 551 | 1.0 | 5.0 | 3.837 | 0.9374         |
| AR3       | 551 | 1.0 | 5.0 | 3.967 | 0.9199         |
Table 3
Cronbach's alpha & explore factor analysis.

| Variables | Items | Cronbach's Alpha | 1 | 2      | 3      | 4      | 5      | 6      | 7      |
|-----------|-------|------------------|---|--------|--------|--------|--------|--------|--------|
| ATT       | ATT2  | 0.895            |   | 0.779  |        |        |        |        |        |
|           | ATT4  | 0.899            |   | 0.753  |        |        |        |        |        |
|           | ATT1  | 0.892            |   | 0.753  |        |        |        |        |        |
|           | ATT5  | 0.899            |   | 0.670  |        |        |        |        |        |
|           | ATT3  | 0.900            |   | 0.654  |        |        |        |        |        |
| IN        | IN1   | 0.925            |   | 0.844  |        |        |        |        |        |
|           | IN2   | 0.924            |   | 0.844  |        |        |        |        |        |
|           | IN3   | 0.935            |   | 0.818  |        |        |        |        |        |
|           | IN4   | 0.953            |   | 0.804  |        |        |        |        |        |
| PN        | PN3   | 0.900            |   | 0.780  |        |        |        |        |        |
|           | PN1   | 0.898            |   | 0.780  |        |        |        |        |        |
|           | PN2   | 0.904            |   | 0.757  |        |        |        |        |        |
|           | PN4   | 0.898            |   | 0.745  |        |        |        |        |        |
| SN        | SN2   | 0.811            |   |        |        | 0.804  |        |        |        |
|           | SN1   | 0.828            |   |        |        | 0.763  |        |        |        |
|           | SN3   | 0.833            |   |        |        | 0.694  |        |        |        |
|           | SN4   | 0.857            |   |        |        | 0.678  |        |        |        |
| AC        | AC2   | 0.876            |   |        |        |        | 0.877  |        |        |
|           | AC3   | 0.901            |   |        |        |        | 0.862  |        |        |
|           | AC1   | 0.886            |   |        |        |        | 0.861  |        |        |
| PBC       | PBC2  | 0.820            |   |        |        |        |        | 0.866  |        |
|           | PBC3  | 0.821            |   |        |        |        |        | 0.807  |        |
|           | PBC1  | 0.878            |   |        |        |        |        | 0.770  |        |
| AR        | AR1   | 0.860            |   |        |        |        |        |        | 0.819  |
|           | AR2   | 0.844            |   |        |        |        |        |        | 0.789  |
|           | AR3   | 0.854            |   |        |        |        |        |        | 0.773  |
Table 4
Person correlations test.

|       | GE       | AG       | EL       | MS       | MI       | IN       | ATT      | SN       | PBC      | PN       | AR       | AC       |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| GE    | Pearson Correlation | 1        |          |          |          |          |          |          |          |          |          |          |
|       | Sig      |          |          |          |          |          |          |          |          |          |          |          |
| AG    | Pearson Correlation | −0.185** | 1        |          |          |          |          |          |          |          |          |          |
|       | Sig      | .000     |          |          |          |          |          |          |          |          |          |          |
| EL    | Pearson Correlation | −0.053   | .112**   | 1        |          |          |          |          |          |          |          |          |
|       | Sig      | .211     | .008     |          |          |          |          |          |          |          |          |          |
| MS    | Pearson Correlation | −0.093*  | .393**   | −0.154** | 1        |          |          |          |          |          |          |          |
|       | Sig      | .029     | .000     | .000     |          |          |          |          |          |          |          |          |
| MI    | Pearson Correlation | −0.207** | .465**   | .162**   | .237**   | 1        |          |          |          |          |          |          |
|       | Sig      | .000     | .000     | .000     | .000     |          |          |          |          |          |          |          |
| IN    | Pearson Correlation | −0.069   | .192**   | .527**   | .013     | .256**   | 1        |          |          |          |          |          |
|       | Sig      | .108     | .000     | .000     | .000     | .000     |          |          |          |          |          |          |
| ATT   | Pearson Correlation | −0.034   | .105*    | .386**   | −0.012   | .150**   | .621**   | 1        |          |          |          |          |
|       | Sig      | .422     | .013     | .000     | .776     | .000     | .000     |          |          |          |          |          |
| SN    | Pearson Correlation | .014     | .043     | .358**   | −0.008   | .119**   | .523**   | .651**   | 1        |          |          |          |
|       | Sig      | .738     | .313     | .000     | .859     | .005     | .000     | .000     |          |          |          |          |
| PBC   | Pearson Correlation | .020     | .128**   | .367**   | −0.022   | .144**   | .456**   | .506**   | .538**   | 1        |          |          |
|       | Sig      | .636     | .003     | .000     | .609     | .001     | .000     | .000     | .000     |          |          |          |
| PN    | Pearson Correlation | −0.028   | .131**   | .395**   | −0.009   | .136**   | .602**   | .626**   | .565**   | .536**   | 1        |          |
|       | Sig      | .518     | .002     | .000     | .841     | .001     | .000     | .000     | .000     | .000     |          |          |
| AR    | Pearson Correlation | .008     | .088*    | .358**   | −0.031   | .110**   | .493**   | .597**   | .541**   | .452**   | .557**   | 1        |
|       | Sig      | .850     | .039     | .000     | .473     | .010     | .000     | .000     | .000     | .000     | .000     |          |
| AC    | Pearson Correlation | −0.045   | .044     | .228**   | −0.055   | .086*    | .409**   | .484**   | .377**   | .350**   | .471**   | .446**   | 1        |
|       | Sig      | .294     | .303     | .000     | .195     | .044     | .000     | .000     | .000     | .000     | .000     | .000     |          |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Ethics Statement

The authors kept to all ethical concerns during the data gathering process. The authors got the consent of the respondent when conducting surveys and ensured that all information was used for research purposes and was absolutely confidential. The study was not conducted in accordance with the Declaration of Helsinki.

CRediT Author Statement

Le-Huy Tran: Writing – original draft preparation, Writing – review & editing; Ngoc-Anh Nguyen: Software, Formal analysis, Data Curation; Thi-Diu Tran: Conceptualization, Visualization, Investigation; Thi-Phuong-Linh Nguyen: Supervision, Methodology.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

Sustainable Consumption Intention in Vietnam (Original data) (Mendeley Data).

Acknowledgement

This research is funded by National Economics University, Hanoi, Vietnam.

References

[1] E. Svarstad, S. Helland, T. Morken, L. Bostad, A. Myking, B.M. Iversen, J. Ofstad, Renal effects of maintenance low-dose cyclosporin A treatment in psoriasis, Nephrology Dialysis Transplantation 9 (10) (1994) 1462–1467, doi: 10.1093/ndt/9.10.1462.
[2] S. Yang, L. Li, J. Zhang, Understanding consumers’ sustainable consumption intention at China’s double-11 online shopping festival: an extended theory of planned behavior model, Sustainability 10 (6) (2018) 1801, doi: 10.3390/su10061801.
[3] I. Waris, I. Hameed, Promoting environmentally sustainable consumption behavior: an empirical evaluation of purchase intention of energy-efficient appliances, Energ. Eff. 13 (8) (2020) 1653–1664, doi: 10.1007/s12053-020-09901-4.
[4] T.N. Nguyen, A. Lobo, S. Greenland, Energy efficient household appliances in emerging markets: the influence of consumers’ values and knowledge on their attitudes and purchase behaviour, Int J Consum Stud 41 (2) (2017) 167–177, doi: 10.1111/ijcs.12323.
[5] N.Thi Tuyet Mai, An investigation into the relationship between materialism and green purchase behavior in Vietnam and Taiwan, Journal of Economics and Development 21 (2) (2019) 247–258, doi: 10.1108/JED-10-2019-0044.
[6] S. Lockrey, H. Nguyen, E. Crossin, K. Verghese, Recycling the construction and demolition waste in Vietnam: opportunities and challenges in practice, J Clean Prod 133 (2016) 757–766, doi: 10.1016/j.jclepro.2016.05.175.
[7] H.T. Hùng, H.T. Quyên, H.T. Nhi, Các yếu tố ảnh hưởng đến hành vi tiêu dùng xanh của người tiêu dùng tại Thành phố Hồ Chí, Hue University Journal of Science: Economics and Development 127 (5A) (2018) 199–212.
[8] J. Park, S. Ha, Understanding consumer recycling behavior: combining the theory of planned behavior and the norm activation model, Fam. Consum. Sci. Res. J. 42 (3) (2014) 278–291, doi: 10.1111/fcsr.12061.
[9] J. Paul, A. Modi, J. Patel, Predicting green product consumption using theory of planned behavior and reasoned action, Journal of Retailing and Consumer Services 29 (1) (2016) 123–134, doi: 10.1016/j.jretconserv.2015.11.006.
[10] Y.H. Shin, J. Im, S.E. Jung, K. Severt, The theory of planned behavior and the norm activation model approach to consumer behavior regarding organic menus, Int. J. Hosp. Manag. 69 (2018) 21–29, doi: 10.1016/j.ijhm.2017.10.011.