


Is it sustainability or fashion? Young educated consumers' motivations for buying second-hand clothing

Sürdürülebilirlik mi moda mı? Genç eğitilmiş tüketicilerin ikinci el kıyafet satın almaya yönelik motivasyonları

İlkin Yaran Ögel¹ 

Abstract

Drawing upon the Theory of Planned Behaviour, this study explores young educated consumers' motivations for buying second-hand clothing, including four additional constructs; novelty-seeking, frugality, being environmentally friendly, and treasure hunting in the original model. The additional constructs are derived from the Theory of Basic Values. Data were gathered from 344 participants through the judgmental sampling technique. In addition, hypothesised associations between the variables were tested with structural equation modelling. The study's findings indicated that attitudes towards second-hand clothing, subjective norms and perceived behavioural control are the predictors of intention to buy second-hand clothing. Additionally, intention to buy second-hand clothing and perceived behavioural control predict second-hand clothing buying behaviour. Moreover, the direct effects of novelty-seeking, frugality, being environmentally friendly, and treasure hunting on the intention to buy second-hand clothing and second-hand clothing buying behaviour are significant and positive. However, when the intention to buy second-hand clothing is included in the model as a mediator, the effect of these variables on second-hand clothing buying behaviour is either partially reduced or finished. So, the study's findings reported the mediating role of intention to buy second-hand clothing in the extended model. Also, this study ensures applicable insights to young consumers and practitioners of the fashion industry.

Keywords: Theory of Planned Behaviour, Theory of Basic Values, Second-hand Clothing, Young Consumers

Jel Codes: M30, M31, M39

Öz

Planlı Davranış Teorisinden yola çıkan bu çalışma, genç eğitilmiş tüketicilerin ikinci el giysi satın alma motivasyonlarını yenilik arayışı, tutumluluk, çevre dostu olma ve hazine avcılığı olmak üzere dört ek değişkeni orijinal modele ekleyerek incelemektedir. Modele eklenen ek değişkenler Temel Değerler Teorisinden yola çıkarak oluşturulmuştur. Çalışmanın verileri yargısal örnekleme tekniği ile 344 katılımcıdan toplanmıştır. Değişkenler arasındaki varsayımsal ilişkiler yapısal eşitlik modellemesi ile test edilmiştir. Çalışmanın bulguları, ikinci el giysilere yönelik tutumların, öznel normların ve algılanan davranışsal kontrolün, ikinci el giysi satın alma niyetinin yordayıcıları olduğunu göstermiştir. Ayrıca, bulgular ikinci el kıyafet satın alma niyeti ve algılanan davranışsal kontrolün, ikinci el kıyafet satın alma davranışını yordadığını göstermiştir. Yenilik arama, tutumluluk, çevre dostu olma ve hazine avcılığının ikinci el kıyafet satın alma niyeti ve ikinci el kıyafet satın alma davranışı üzerindeki doğrudan etkisi anlamlı ve olumlu bulunurken, çalışmanın bulguları ikinci el kıyafet satın alma niyetinin genişletilmiş modelde aracılık rolü olduğunu ortaya koymuştur. Çalışma genç tüketicilere ve moda sektörünün uygulayıcılarına da önemli katkılar sağlamaktadır.

Anahtar Kelimeler: Planlı Davranış Teorisi, Temel Değerler Teorisi, İkinci El Kıyafet, Genç Tüketiciler

JEL Kodları: M30, M31, M39

¹ Research Assistant, PhD, Afyon Kocatepe University, Afyonkarahisar, Turkey, ilkinvaran@aku.edu.tr

ORCID: 0000-0003-3414-753X

Submitted: 19/05/2022

Revised: 31/07/2022

Accepted: 8/08/2022

Online Published: 25/09/2022

Citation: Ögel, İ.Y., Is it sustainability or fashion? Young educated consumers' motivations for buying second-hand clothing, *bmij* (2022) 10 (3): 817-834, doi: <https://doi.org/10.15295/bmij.v10i3.2064>

Introduction

The fashion industry is one of the socially and environmentally detrimental industries in terms of its contribution to waste production (Stanescu, 2021). While fashion clothing is being produced, water and other valuable resources are wasted, and many textile pieces are thrown. Besides, fast fashion bolsters variety, affordability and mass production, negatively influencing consumers' consumption patterns and leading to waste (Bukhari, Carrasco-Gallego and Ponce-Cueto, 2018). Today, a considerable amount of clothing is wasted through consumption because consumers frequently purchase new clothes and discard the old ones that are still in perfectly usable condition (Wrap, 2019). On the other hand, there has been a considerable increase in consumer awareness of adverse environmental effects produced by fashion clothing consumption, which leads to seeking sustainable solutions to mitigate waste in clothing (Peña-Vinces, Solakis and Guillen, 2020). Herein, buying second-hand clothing (SHC), which is described as buying already used clothing (Medalla et al., 2020), is widely accepted as one of the sustainable actions toward the environment because it may lessen avoidable clothing waste.

For sustainability, SHC shopping has received much attention for decades to understand what motivates consumers to buy SHC. In the relevant literature, SHC shopping has already been examined by several studies in terms of attitudes, perception and the buying motives towards, intention to buy, and purchase behaviours of SHC (e.g., Guiot and Roux, 2010; Hur, 2020; Kim and Kim, 2020; Kristia, 2021; Lee and DeLong, 2021; Medalla et al., 2020; Roux and Guiot, 2008; Seo and Kim, 2019). These previous studies of them have mainly concentrated on drivers of purchase of SHC in terms of utilitarian (e.g., Ferraro, Sands and Brace-Govan, 2016; Guiot and Roux, 2010; Isla, 2013; Liang and Xu, 2018; Yan, Bae and Xu, 2015), hedonic (e.g., Liang and Xu, 2018; Roux and Guiot, 2008; Yan et al., 2015), and ethical and ecological values (e.g., Liang and Xu, 2018; Seo and Kim, 2019; Yan et al., 2015). Though previous studies presented that a set of motives behind buying SHC includes economic and hedonic reasons (Roux and Guiot, 2008), buying SHC is a very complex behaviour in nature, as well as all buying behaviours. Herein, to comprehensively explain this complex behaviour, it is also crucial to examine the personal motives behind buying SHC. Nevertheless, the role of personal motives from personal values and traits in buying SHC has been neglected in the relevant literature. Little has been known about the personal motives that drive consumers to buy SHC due to the lack of adequate research on this specific issue. In addition, understanding next-generation values are essential to elicit sustainable actions because young consumers comprise a considerable percentage of global consumers (Burman, Chen and Xu, 2013), and their consumption patterns will shape the world. However, though there is little effort in extant literature to understand young consumers' shopping motivation for SHC (e.g., Burman et al., 2013), the role of young consumers' values in sustainable consumption has also been neglected (Kumar, Saha, Sekar and Dahiya, 2019). Finally, little is known about buying SHC, explained by adopting the Theory of Planned Behaviour (TPB) (Borusiak, Szymkowiak, Horska, Raszka and Żelichowska, 2020). Besides, to the best of our knowledge, there has been no study to establish and test the integrative model that incorporates both TPB and Theory of Basic Values (TBV) simultaneously to predict intention to buy SHC and SHC buying behaviour.

Drawing upon the abovementioned discussion, to address these gaps, this study attempts to figure out what would make young educated consumers buy SHC from the perspective of personal values depending on TBV Schwartz (1992). Since studies employing a single-theory approach have some drawbacks in explaining the psychological motivation of behaviours (Hagger, 2009), TBV is synthesized with the Theory of Planned Behaviour (TPB) to ensure a more comprehensive understanding of the different factors affecting SHC buying behaviour. Thence, an extended version of Ajzen's (1991) TPB was adopted as a conceptual framework for this research to predict the SHC buying behaviour of young consumers.

The remaining sections of the research are arranged as follows. Initially, the theoretical background of the research is offered, and hypotheses of the research are developed. After that, the research methodology consisting of instrument design, sampling procedure and data collection process is precisely given. In the following section, the research findings are demonstrated and discussed. Then, the conclusion, theoretical contribution and managerial implications are presented. Finally, research limitations and suggestions for further research are highlighted.

Theoretical background and hypotheses development

SHC buying behaviour

Once its negative social, economic and environmental consequences are considered, overconsumption stimulated by demand for new products is not an environmentally sustainable practice. Thus, sustainable consumption, which leads to less production and more use of existing products, is essential

to mitigate the adverse effects of overconsumption. Also, as emphasized in the sustainable development goals (SDGs) of the United Nations (UN), the way we consume has to change with responsible and sustainable consumption to achieve economic growth, social welfare, and sustainable development (UNSDGs, 2021). As an outcome of this concern, today's "recycling-reusing-repairing" economy has received more attention than the "extracting-producing-discarding" economy (Jones et al., 2012). Accordingly, instead of buying something new, consumers eagerly use existing, recycled or renovated products.

There has been an increase in SHC shopping as a sustainable consumption practice in recent years. Roux and Guiot (2008) express second-hand (SH) shopping as acquiring and buying SH objects using places and methods generally outside those for acquiring or buying a new product. Through SH shopping, something, which is used and has an owner before, is bought from donations, garage sales, auctions or thrift stores (Bardhi, 2003). Herein, SH markets keep consumers' demand for new products, significantly reducing the negative influence of production on the environment (Thomas, 2003). Additionally, instead of buying expensive, eco-friendly, green products, consumers can support sustainability cost-efficiently by buying SH products (Reiley and DeLong, 2011).

Besides environmental values, utilitarian values related to having a limited budget and the desire to save money or spend less may motivate customers to buy SH products (Williams and Paddock, 2003). Thence, economic or utilitarian values are still welcome as a primary reason for buying SH products (Xu, Chen, Burman and Zhao, 2014). On the other hand, buying SH products has become a popular trend among increasing customers worldwide. Accordingly, financial and ecological matters and hedonic motivations stimulate consumers to buy SH products (Guiot and Roux, 2010). Notably, to find a unique piece (Morgan and Birtwistle, 2009), to get a nostalgic pleasure (Medalla et al., 2020); to socialize with other people (Bardhi, 2003), and due to other recreational reasons (Roux and Guiot, 2010), consumers would prefer to buy SHC.

Once the social, economic and environmental benefits of using SHC are considered, it is crucial to understand the motives guiding consumers to buy SHC. In the relevant literature, the purchase of SHC has been relatively well-documented in terms of utilitarian, hedonic and environmental values (e.g., Ferraro et al., 2016; Guiot and Roux, 2010; Isla, 2013; Liang and Xu, 2018; Roux and Guiot, 2008; Seo and Kim, 2019; Williams and Paddock, 2003; Yan et al., 2015; Zaman, Park, Kim and Park, 2019). Notwithstanding, particularly SHC buying behaviour of young consumers concurrently presents promising research areas to gain deeper insight into what motivates young consumers to buy SHC. Herein, this study attempts to understand the influence of personal values on young educated consumers' SHC buying behaviour by employing an extended version of TPB with TBV.

Theory of planned behaviour (TPB)

As the extension of the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), TPB by Ajzen (1991) is considered one of the most well-known and rigorous theoretical models to anticipate individuals' behaviour. The central tenet underlying TPB is the intention (INT) of the individual to act in a particular behaviour (BHV) which is guided by three constructs, including attitudes (ATT), subjective norm (SN) and perceived behavioural control (PBC). In this model, INT is the critical antecedent of BHV. As per the constructs governing the intention towards behaviour, ATT refers to individuals favoured or unfavoured state to behave in a certain way. SN refers to the social pressure individuals perceive when behaving in a certain way. Finally, PBC refers to the extent to ease or difficulty of control perceived by individuals over performing a specific behaviour (Ajzen, 1991). ATT and SN in TPB predict the behaviour that an individual is willing to perform or not, while PBC explains the behaviour which is outside the voluntary control of an individual.

TPB (Ajzen, 1991) proposes an excellent theoretical framework to explore SHC buying behaviour (e.g., Iran, Geiger and Schrader, 2019; Seo and Kim, 2019). To explain consumers' intention to buy SHC, ATT articulates a favourable or unfavourable evaluation of buying SHC. In this regard, when consumers have a favourable evaluation regarding SHC, their intention to buy SHC increases (Seo and Kim, 2019). SN expresses the perceived social pressure that customers feel when buying SHC. When customers perceive social pressure while buying SHC, they have a greater intention to buy SHC (Iran et al., 2019; Seo and Kim, 2019). PBC represents the ease or difficulty of control customers perceive over buying SHC. In this regard, if consumers feel that buying SHC is under their control, their intention to buy SHC increases, and they are more likely to perform SHC buying behaviour (Seo and Kim, 2019). Finally, consumers to buy SHC frequently buy SHC (Iran et al., 2019). Drawing upon the previous studies in extant SHC literature, we proposed that;

H₁: Attitudes towards SHC significantly positively influence intention to buy SHC.

H₂: Subjective norms have a significant positive influence on the intention to buy SHC.

H₃: Perceived behavioural control over buying SHC significantly positively influences intention to buy SHC.

H₄: Perceived behavioural control over buying SHC significantly positively influences SHC buying behaviour.

H₅: Intention to buy SHC significantly positively influences SHC buying behaviour.

Extension of TPB with the inclusion of new variables

Though TPB successfully explains behavioural intentions and behaviours, TPB is a flexible model in which additional predictors can be added (Ajzen, 1991). Additional predictors may enhance the model's predictability (Yuriev, Dahmen, Paillé, Boiral and Guillaumie, 2020). Extant research on SHC buying behaviour has already applied and extended the TPB (e.g., Iran et al., 2019; Seo and Kim, 2019). Since SHC buying behaviour is complex, all buying behaviours, including new factors, could also provide more insights to predict SHC buying behaviour. Herein, additional constructs to be included in the original TPB model were derived from TBV by Schwartz (1992).

According to Schwartz (1992), values are essential to understand the motivational reasons for attitudes and behaviour. However, as guiding principles in our life, values differ in importance, and the relative importance of diversified values leads to action such as buying SHC (Schwartz, 2012). Herein, novelty seeking, delineated as an individual's curiosity to look for difference (Hawkins et al., 1980), could be one of these values. For personal level TBV, as per ten values, novelty seeking can be related to stimulation values derived from the need for variety in life (Schwartz, 2012). Novelty seekers tend to seek variety and differences when purchasing marketing offerings (Phau and Teah, 2009). In this regard, their desire to try something different may drive them either to have an intention to buy it or to buy it. Indeed, no previous study presents the significant impact of novelty seeking on intention to buy SHC and SHC buying behaviour in the relevant literature. However, previous research has revealed that novelty-seeking is one of the antecedents of consumers' intention to buy and buying behaviours of different types of products such as counterfeit products (e.g., Wee, Ta and Cheok, 1995) and pirated products (e.g., Cheng, Sims and Teegen, 1997; Wang, Zhang, Zang and Ouyang, 2005). Herein, though novelty seeking is a novel construct to explain the SHC buying behaviour in the extant literature, this study hypothesized that;

H₆: Novelty seeking has a significant positive influence on the intention to buy SHC

H₇: Novelty seeking has a significant positive influence on SHC buying behaviour.

For TBV, frugality, which can be regarded as either a value or a personality trait (Todd and Lawson, 2003), could also be one of the personal values influencing the purchase of SHC. Herein, frugality can be related to conformity values derived from restraining actions (Schwartz, 2012). Borrowed from TBV, frugality can also be considered a lifestyle pattern described by the extent to which individuals are restrained in buying and utilizing economic offerings for long-term purposes (Lastovicka, Bettencourt, Hughner and Kuntze, 1999). As it is mainly associated with the limited purchasing power of consumers (Xu et al., 2014), frugality is more likely to affect customers' intention toward SH shopping (Cervellon, Carey and Harms, 2012). Consumers who purchase SHC by paying less than the market price display frugal behaviour because they can use the money they saved in their other activities (Machado, de Almeida, Bollick and Bragagnolo, 2019). In the relevant literature, as a personal value, frugality is directly related to economic motivations for the intention to buy and buy SHC (Guiot and Roux, 2010). So, this study hypothesized that;

H₈: Frugality has a significant positive influence on the intention to buy SHC

H₉: Frugality has a significant positive influence on SHC buying behaviour.

Being environmentally friendly is another personal value which may influence buying SHC. For TBV, being environmentally friendly can be associated with universalism value that emphasizes concern for nature within the context of unity with nature and protecting the environment (Schwartz, 2012). In this regard, consumers with environmental concerns develop strong attitudes toward protecting the environment (Edbring, Lehner and Mont, 2016), influencing their consumption patterns (Yan et al., 2015). Consumers have been flourishing and concerned about the negative influence of clothes production on their health and environment (Cervellon et al., 2012). Accordingly, environmentally friendly consumers, aware of their obligations to protect the environment by intentionally practising sustainable consumption, would prefer to buy SHC for pro-environment consumption (Joung and Park-Poaps, 2013). Previous research in relevant literature has also revealed that consumers concerned with nature are more likely to buy SHC (e.g., Hur, 2020; Liang and Xu, 2018). Hence, this study hypothesized that;

H₁₀: Being environmentally friendly has a significant positive influence on the intention to buy SHC

H₁₁: Being environmentally friendly has a significant positive influence on SHC buying behaviour.

Finally, treasure-hunting can also be treated as a personal value, leading to a motivation to buy SHC. Treasure hunting is mainly related to uniqueness and looking for pleasure (DeLong, Heinemann and Reiley, 2005). Accordingly, treasure-hunting can be associated with hedonistic values derived from organismic needs and the pleasure of satisfying them (Schwartz, 2012). Initiated by pleasure and enjoying life, treasure hunters, called adventurous buyers (Medalla et al., 2020), frequently feel the thrill of finding unexpected and unique pieces (Liang and Xu, 2018). Herein, notably, SHC provides a wide variety of hidden choices for treasure hunters to find stylish treasures without paying much (Yan et al., 2015). In the relevant literature, some studies have presented that hunting for unique pieces at affordable prices motivates treasure-hunters to buy SHC within the context of adventure shopping (e.g., Cervellon et al., 2012; Ferraro et al., 2006; Guiot and Roux, 2020). Thence, this study hypothesized that;

H₁₂: Treasure-hunting has a significant positive influence on intention to buy SHC

H₁₃: Treasure-hunting has a significant positive influence on SHC buying behaviour.

The mediating role of intention to buy SHC

Intention to buy is frequently treated as a mediating variable in the TPB model to explain sustainable behaviour in different contexts (e.g., Coşkun and Özbük, 2020; Kamalanon, Chen and Le, 2022). Drawing upon the previous research on mediating role of intention to buy in the TPB model, this study hypothesized that when the intention to buy SHC enters into the model as a mediator variable, the effect of perceived behavioural control, novelty seeking, frugality, being environmentally friendly and treasure-hunting on SHC buying behaviour could be partially reduced or finished. Thence, this study hypothesized that;

H₁₄: Intention to buy SHC mediates the relationship between (a) perceived behavioural control and SHC buying behaviour, (b) novelty seeking and SHC buying behaviour, (c) frugality and SHC buying behaviour, (d) being environmentally friendly and SHC buying behaviour, and (e) treasure hunting and SHC buying behaviour.

Based on the discussion mentioned above, the conceptual framework of the research is displayed in Figure 1.

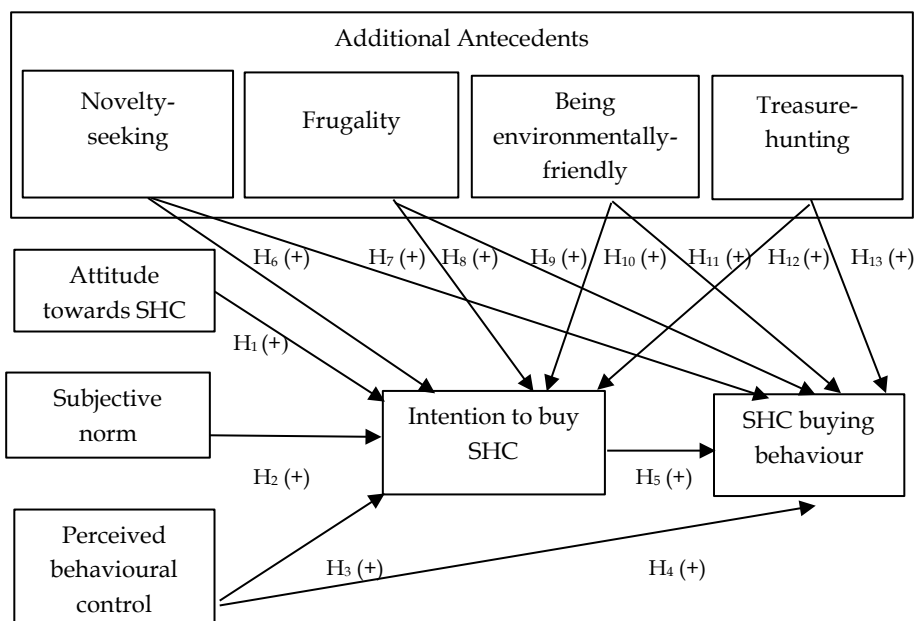


Figure 1: Conceptual Model of the Research

Methodology

Instrument design

In an attempt to figure out the antecedents of buying SHC, a self-administrated online questionnaire was executed. In the questionnaire, participants were initially asked: “whether they have ever bought second-hand clothing before in their life” as a filtering question to drop others from the final data set. Responses to this question were indicated on a dichotomous scale ranging from “(1) Yes” to “(2) No”. In the following section, nine research constructs were measured with multi-item scales borrowed from

existing literature but modified for the research to fit with the context of SHC (See Appendix A). Herein, as validated in previous studies adopting the TPB model as a theoretical framework, SN regarding buying SHC and ATT towards buying SHC were measured with four items recommended by Ajzen (2013) and Fishbein and Ajzen (2010). Similarly, PBC over buying SHC and intention to buy SHC was measured with three items recommended by Ajzen (2013) and Fishbein and Ajzen (2010). Besides, BHV was measured with four items developed by (Lee, 2009). Furthermore, novelty seeking (NS) was measured with five items developed by Bakhshian, Lee and Cao (2019). Frugality (FR) was measured with five items developed by Roux and Guiot (2008). Being environmentally friendly (EF) was measured with six items that Haws, Winterich and Naylor (2014) developed. Finally, treasure-hunting (TH) was measured with four items developed by Guiot and Roux (2010).

The final section included socio-demographics questions including gender, age and income. All items were initially translated and then translated from English to Turkish with the assistance of a scholar who is an expert in consumer behaviour discipline. A five-point Likert scale anchored from "1 = strongly disagree" to "5 = strongly agree" was utilized to measure these items.

Sampling procedure and data collection process

Before data collection, items were initially checked concerning content validity with the assistance of two academicians working on consumer behaviour. Then, face validity was checked regarding the understandability of the items with the assistance of four master's students. Finally, after making minor revisions regarding the items' wording, the questionnaire was pretested with 35 undergraduate students to ensure that all items in the questionnaire were clear. Then, a final version of the questionnaire was prepared to collect data.

To reach young educated consumers, data were gathered from undergraduate students using a final form of the questionnaire on March 2022 in Afyonkarahisar, Turkey. A judgmental sampling method was preferred because participants must have some criteria consisting of undergraduate students who bought SHC. Completing the questionnaire took approximately 10 minutes for each participant. All participants were informed about the purpose of the questionnaire and the protection of their anonymity before completing the questionnaire.

A total of 347 participants completed the questionnaire. The dichotomous scale was also employed as a filtering question that enabled us to exclude the participants who had never bought SHC ($n = 3$) from the final data set. Overall, a total of 344 responses were deemed usable for data analysis. According to Kline (2011), the sample size in SEM studies should be about 200. Besides, Hair, Black, Babin, and Anderson (2013) proposed that the sample size should be five to ten times the number of questionnaire items. Since there were 38 items in the questionnaire, a sample size between 190 and 380 is enough for data analysis of this study. Thence, a total of 344 responses were accepted enough for data analysis.

Of the 344 participants, 52.03 per cent were female, and 47.97 per cent were male. Most of them (75.87 per cent) were between the ages of 19 and 24. 18.60 per cent of the sample had income levels varying between 4501 TL and 6000 TL, and 18.31 per cent of them had income levels varying between 3001 TL and 4500 TL. 16.28 per cent of the sample had income levels ranging between 1500 TL and less, and 15.99 per cent had income levels ranging between 1501 TL and 3000 TL. Finally, 9.01 per cent of them had income levels ranging between 7501 TL and 9000 TL, and 6.11 per cent of them had income levels ranging between 9001 TL and more. The details of the demographic profile are reported in Table 1.

Table 1: Sample's Demographics Profile

Demographics	Frequency	Per centage
Gender		
Female	179	52.03
Male	165	47.97
Age		
18 years old and below	42	12.21
19-24 years old	261	75.87
25 years old and above	41	11.92
Average monthly income		
1500 TL and less	56	16.28
1501 TL- 3000 TL	55	15.99
3001 TL- 4500 TL	63	18.31
4501 TL- 6000 TL	64	18.60
6001 TL- 7500 TL	54	15.70
7501 TL- 9000 TL	31	9.01
9001 TL and more	21	6.11

Data analysis

The two-step approach proposed by Anderson and Gerbing (1988) was used for data analysis. Herein, the measurement model was initially assessed by employing confirmatory factor analysis (CFA) to provide validity and construct reliability. Then, structural equation modelling (SEM) was performed to test the associated relationships.

Results

Measurement model

Validity check of the items

Before confirmatory factor analysis (CFA), the construct validity was checked through exploratory factor analysis (EFA), adopting principal component analysis as the extraction method. Since there was a high level of correlation between variables employed in the study, the Promax rotation method was preferred (Hair et al., 2013). To test the sampling adequacy, Kaiser-Meyer-Olkin (KMO) and Bartlett’s tests were performed for each construct (See Table 2).

Table 2: Factor Analysis Profile

Constructs	Factor Loadings	KMO Measure of Sampling Adequacy	Bartlett’s Test of Sphericity	Total Variance Explained	% of variance Explained
Novelty-seeking		0.885	$\chi^2 = 970.400$ df:10 p: 0.000	3.55	70.97
• NS1	0.868				
• NS2	0.857				
• NS3	0.748				
• NS4	0.779				
• NS5	0.864				
Frugality		0.898	$\chi^2 = 1322.360$ df:10 p: 0.000	3.91	78.09
• FR1	0.860				
• FR2	0.908				
• FR3	0.799				
• FR4	0.907				
• FR5	0.782				
Environmentally-friendly		0.922	$\chi^2 = 1498.718$ df:15 p: 0.000	4.42	73.63
• EF1	0.908				
• EF2	0.800				
• EF3	0.796				
• EF4	0.884				
• EF5	0.784				
• EF6	0.887				
Treasure-hunting		0.838	$\chi^2 = 760.767$ df:6 p: 0.000	3.00	75.13
• TH1	0.715				
• TH2	0.878				
• TH3	0.865				
• TH4	0.843				
Attitudes towards SHC		0.849	$\chi^2 = 900.624$ df:6 p: 0.000	3.15	78.65
• ATT1	0.880				
• ATT2	0.751				
• ATT3	0.925				
• ATT4	0.774				
Subjective norms		0.855	$\chi^2 = 973.560$ df:6 p: 0.000	3.21	80.30
• SN1	0.847				
• SN2	0.889				
• SN3	0.766				
• SN4	0.787				
Perceived behavioural control		0.747	$\chi^2 = 603.998$ df:3 p: 0.000	2.47	82.39
• PBC1	0.874				
• PBC2	0.782				
• PBC3	0.878				
Intention to buy SHC		0.723	$\chi^2 = 394.636$ df:3 p: 0.000	2.25	74.99
• INT1	0.902				
• INT2	0.787				
• INT3	0.775				
SHC buying behaviour		0.831	$\chi^2 = 1000.367$ df:6 p: 0.000	3.22	80.40
• BHV1	0.829				
• BHV2	0.784				
• BHV3	0.904				
• BHV4	0.940				
Promax Rotation Principal Component Factor Analysis					
KMO: 0.962 Bartlett: 10776.639 df: 703					
Total Variance Explained (%): 77.89 p < 0.05					

The results for KMO measures were over 0.70, and Bartlett’s test of sphericity values was significant ($p < 0.05$), indicating the fit of the data set for factor analysis (Field, 2007). Besides, since all factor loadings were higher than 0.50, all items were included in the data analysis (Costa-Font and Gil, 2009). Overall, the data analysis used nine factors and 38 items with an eigenvalue above 1, which explained 77.89 per cent of the total variance.

Common method variance

Since a self-administrated questionnaire was employed, the data was initially checked utilizing Harman’s single factor test to control whether it was inclined to common bias (Podsakoff and Organ, 1986). To check it, all items were loaded on a single factor without using any rotation method, and exploratory factor analysis was performed (Podsakoff, Scott, MacKenzie and Podsakoff, 2003). The findings regarding the exploratory factor analysis presented that a single factor only explained nearly 26 per cent of the total variance, which is below the threshold value of 50 per cent. In contrast, nine factors explained 77.89 per cent of the total variance. This result indicated that common method bias was not leading to a problem for the data set.

Confirmatory factor analysis

Confirmatory factor analysis (CFA) was conducted to check the measurement model (See Table 4). Herein, the goodness of fit indices signifying the fit between factor structure and data were initially checked (Hair et al., 2013). The values regarding the goodness of fit indices are shown in Table 3. The results of CFA presented that the fit of the measurement model was good enough for the sample ($n = 344$) ($\chi^2(629_{df}) = 951.29$; $\chi^2/df = 1.512$; $p=0.000$; GFI = 0.90; AGFI = 0.85; NFI = 0.98; NNFI = 0.99; IFI = 0.99; CFI = 0.99; RFI= 0.98; RMSEA = 0.039; RMR = 0.021; SRMR = 0.035).

Table 3: Goodness of Fit Indices

Fit Indices	Perfect Fit Indices Criteria	Acceptable Fit Indices Criteria	Findings	Results
^a χ^2/df	$0 \leq \chi^2/df \leq 2$	$2 \leq \chi^2/df \leq 3$	1.512	Perfect Fit
^b AGFI (Adjusted Goodness of Fit Index)	$0.90 \leq AGFI \leq 1.00$	$0.85 \leq AGFI \leq 0.90$	0.85	Acceptable Fit
^c GFI (Goodness of Fit Index)	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI \leq 0.95$	0.90	Acceptable Fit
^d CFI (Comparative Fit Index)	$0.95 \leq CFI \leq 1.00$	$0.90 \leq CFI \leq 0.95$	0.99	Perfect Fit
^e NFI (Normed Fit Index)	$0.95 \leq NFI \leq 1.00$	$0.90 \leq NFI \leq 0.95$	0.98	Perfect Fit
^f NNFI (Non-normed Fit Index)	$0.95 \leq NNFI \leq 1.00$	$0.90 \leq NNFI \leq 0.95$	0.99	Perfect Fit
^g RFI (Relative Fit Index)	$0.95 \leq RFI \leq 1.00$	$0.90 \leq RFI \leq 0.95$	0.98	Perfect Fit
^h IFI (Incremental Fit Index)	$0.95 \leq IFI \leq 1.00$	$0.90 \leq IFI \leq 0.95$	0.99	Perfect Fit
ⁱ RMSEA (Root Mean Square Error of Approximation)	$0.00 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	0.039	Perfect Fit
^j SRMR (Standardized Root Mean Square Residual)	$0.00 \leq SRMR \leq 0.05$	$0.05 \leq SRMR \leq 0.08$	0.035	Perfect Fit
^k RMR (Root Mean Square Residual)	$0 \leq RMR \leq 0.05$	$0 \leq RMR \leq 0.08$	0.021	Perfect Fit

^aKline (2011).

^bSchermelleh-Engel and Moosbrugger (2003).

^cBaumgartner and Homburg (1996), Marsh, Hau, Artelt, Baumert and Peschar (2006).

^dBrowne and Cudeck (1993).

^eGolob (2003).

Besides, in Table 4, standardized factor loadings ranged from 0.76 to 0.88, confirming that all observed items were over 0.50, and all t-values varied between 16.27 and 20.25, indicating that all links between latent and observed variables were statistically significant at 0.05 level ($t > 1.96$). Herein, convergent validity was ensured since all t-value was more significant than 3.0 and all standardized loadings were above 0.50 (Hair et al., 2013).

All Cronbach alphas ranging from 0.833 to 0.930 outstripped the threshold value of 0.70, indicating that all constructs have good reliability (Nunnally, 1978). Once composite reliability (CR) was assessed, it was seen that CR values ranged from 0.86 to 0.94, ensuring good construct reliability (Fornell and Larcker 1981). Furthermore, all average variance extracted (AVE) values varying between 0.68 and 0.75 were higher than 0.50, as Hair et al. (2013) proposed. Since all AVE values were above 0.50, and all CR values were higher than AVE values, convergent validity was also met (Fornell and Larcker, 1981).

To check the validity of the scales used in the study, divergent validity was assessed by calculating the square root of the AVE values for the latent variables and then comparing them with the correlations between latent variables. For example, in Table 5, the square root of the AVE values for all latent variables was more significant than the correlation coefficients between the relevant latent variable and other latent variables (Fornell and Larcker, 1981). Thence, divergent validity was also ensured.

Table 4: Measurement Model Profile

Constructs	Scale Items	Standardized Loadings	t-value	α	CR	AVE	Mean score	Item mean score	Item SD
Novelty-Seeking (NS)	NS1	0.76	*	0.897	0.91	0.68	3.89	3.77	0.75
	NS2	0.81	17.57					3.95	0.80
	NS3	0.79	16.86					3.79	0.73
	NS4	0.79	16.87					3.79	0.74
	NS5	0.86	19.26					4.17	0.77
Frugality (FR)	FR1	0.82	*	0.930	0.93	0.73	3.86	3.84	0.80
	FR2	0.85	19.35					3.85	0.79
	FR3	0.87	20.16					3.86	0.84
	FR4	0.85	19.41					3.92	0.82
	FR5	0.86	19.78					3.85	0.81
Being Environmentally-friendly (EF)	EF1	0.82	*	0.928	0.94	0.71	4.03	4.00	0.81
	EF2	0.82	18.19					3.95	0.80
	EF3	0.82	18.11					3.95	0.80
	EF4	0.87	20.15					4.22	0.79
	EF5	0.77	16.48					3.94	0.77
	EF6	0.87	20.03					4.14	0.81
Treasure Hunting (TH)	TH1	0.81	*	0.889	0.90	0.69	3.80	3.70	0.70
	TH2	0.82	18.11					3.89	0.82
	TH3	0.81	17.53					3.82	0.79
	TH4	0.83	18.45					3.79	0.78
Attitude towards buying SHC (ATT)	ATT1	0.83	*	0.909	0.90	0.70	3.74	3.69	0.77
	ATT2	0.85	19.17					3.80	0.81
	ATT3	0.83	18.43					3.70	0.77
	ATT4	0.87	20.10					3.77	0.80
Subjective Norms (SN)	SN1	0.86	*	0.918	0.89	0.68	3.68	3.68	0.76
	SN2	0.85	19.39					3.64	0.72
	SN3	0.86	19.69					3.71	0.74
	SN4	0.86	19.66					3.68	0.76
Perceived Behaviour Control (PBC)	PBC1	0.86	*	0.892	0.88	0.72	4.06	4.24	0.82
	PBC2	0.84	18.70					3.88	0.77
	PBC3	0.88	19.95					4.06	0.87
Intention to Buy SHC (INT)	IN1	0.79	*	0.833	0.86	0.68	3.74	3.74	0.77
	IN2	0.80	17.00					3.73	0.78
	IN3	0.78	16.27					3.74	0.79
Behaviour (BHV)	BHV1	0.86	*	0.919	0.92	0.75	3.81	3.84	0.78
	BHV2	0.88	20.25					3.83	0.82
	BHV3	0.88	20.22					3.80	0.79
	BHV4	0.82	18.31					3.75	0.79

*Item fixed to set the scale

Fit statistics: $\chi^2(629_{df}) = 951.29$ ($p=0.000$), $GFI = 0.90$, $AGFI = 0.85$, $NFI = 0.98$, $NNFI = 0.99$, $IFI = 0.99$, $CFI = 0.99$, $RFI = 0.98$, $RMSEA = 0.039$, $RMR = 0.021$, $SRMR = 0.035$

CR = composite reliability, AVE = average variance extracted, SD = standard deviation

Table 5: Divergent Validity Profile

Latent Variables	NS	EF	FR	TH	ATT	SN	PBC	INT	BHV
NS	*0.825								
EF	0.534	*0.843							
FR	0.538	0.534	0.854						
TH	0.475	0.538	0.416	*0.843					
ATT	0.556	0.475	0.415	0.548	*0.834				
SN	0.487	0.556	0.420	0.550	0.620	*0.825			
PBC	0.468	0.487	0.395	0.611	0.573	0.638	*0.849		
INT	0.524	0.468	0.434	0.495	0.570	0.527	0.539	*0.825	
BHV	0.488	0.524	0.359	0.482	0.647	0.557	0.560	0.557	*0.866

* The values given in the diagonal part of the table were the square root values of AVE

Structural model

Once the original TPB model was assessed, the overall fit of the original model seemed acceptable for the sample ($\chi^2/df = 1.687$, $GFI = 0.85$; $AGFI = 0.85$; $NFI = 0.95$; $NNFI = 0.95$; $IFI = 0.95$; $CFI = 0.95$; $RFI =$

0.95; RMSEA = 0.045, RMR = 0.023, SRMR = 0.037, $p < 0.05$). However, when four additional constructs (novelty seeking, frugality, environmentally friendly and treasure hunting) were included into the model, the overall fit of the extended model became more acceptable for the sample ($\chi^2/df = 1.524$, GFI = 0.90; AGFI = 0.85; NFI = 0.98; NNFI = 0.99; IFI = 0.99; CFI = 0.99; RFI = 0.98; RMSEA = 0.039, RMR = 0.021, SRMR = 0.035, $p < 0.05$). Besides, the variance in SHC buying behaviour was improved (from $R^2 = 0.53$ to $R^2 = 0.60$) when the original TPB model was extended with additional variables.

Table 6 and Figure 2 summarize the SEM results regarding the hypothesized relationships in the extended TPB model. In line with H_1 , H_2 , and H_3 , the hypothesized relationships between attitudes towards SHC ($\beta = 0.22$, $t = 2.72$, $p < 0.05$); subjective norms ($\beta = 0.33$, $t = 4.28$, $p < 0.05$); perceived behavioural control ($\beta = 0.36$, $t = 5.25$, $p < 0.05$) and intention to buy SHC was found as statistically significant in a positive way, and so H_1 , H_2 , and H_3 were substantiated on the basis of significance values ($p < 0.05$) and t -values ($t \pm > 1.96$). As hypothesized in H_4 and H_5 , perceived behavioural control ($\beta = 0.68$, $t = 12.05$, $p < 0.05$) and intention to buy SHC ($\beta = 0.52$, $t = 7.01$, $p < 0.05$) has a significant and positive effect on SHC buying behaviour. Thence, H_4 and H_5 were also substantiated. Consistent with H_6 , H_8 , H_{10} , and H_{12} , being novelty seeker ($\beta = 0.46$, $t = 7.48$, $p < 0.05$), being frugal ($\beta = 0.59$, $t = 9.70$, $p < 0.05$), being environmentally friendly ($\beta = 0.56$, $t = 9.38$, $p < 0.05$), and being treasure hunter ($\beta = 0.57$, $t = 9.43$, $p < 0.05$) has a significant and positive impact on intention to buy SHC, respectively. Hence, H_6 , H_8 , H_{10} , and H_{12} were also substantiated. Finally, as predicted in H_7 , H_9 , H_{11} , and H_{13} , being novelty seeker ($\beta = 0.47$, $t = 8.18$, $p < 0.05$), being frugal ($\beta = 0.64$, $t = 11.43$, $p < 0.05$), being environmentally friendly ($\beta = 0.61$, $t = 11.03$, $p < 0.05$), and being treasure hunter ($\beta = 0.64$, $t = 11.40$, $p < 0.05$) has a significant and positive impact on SHC buying behaviour, respectively. Hence, H_7 , H_9 , H_{11} , and H_{13} were also substantiated.

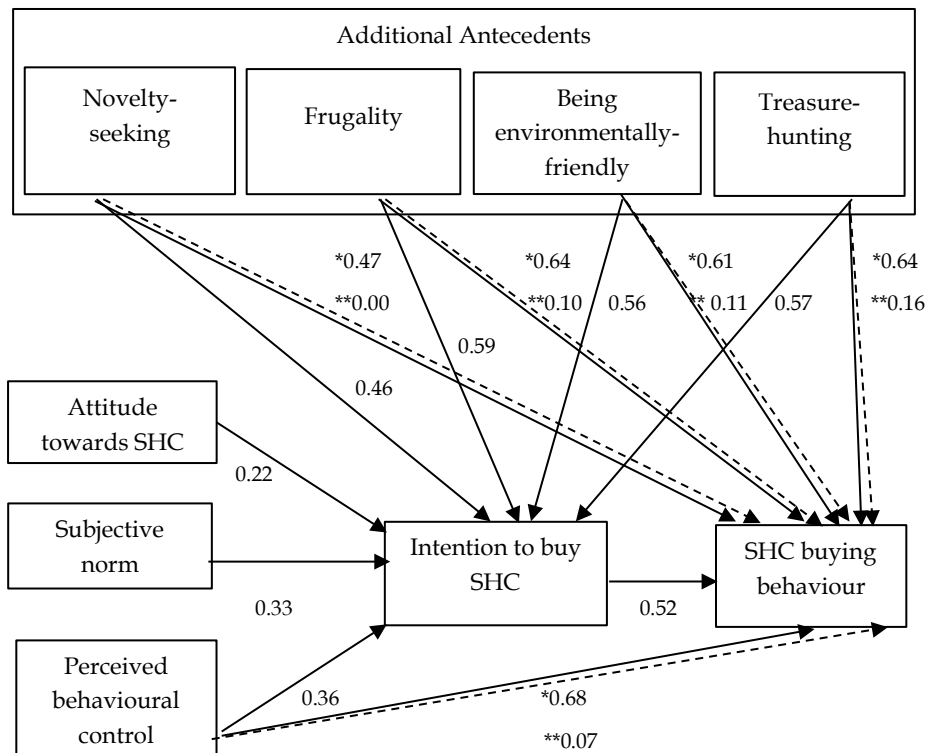
Testing the mediating role of intention to buy SHC

The results revealed that when testing the mediating impact of intention to buy SHC, the significant relationship between perceived behavioural control ($\beta = 0.68$, $p < 0.05$); novelty seeking ($\beta = 0.47$, $p < 0.05$); frugality ($\beta = 0.64$, $p < 0.05$); environmentally friendly ($\beta = 0.61$, $p < 0.05$) and SHC buying behaviour as observed in the first condition has been considerably decreased and became statistically insignificant (See Figure 2). Since the effect of perceived behavioural control ($\beta = 0.07$, $t = 1.05$, $p > 0.05$); novelty seeking ($\beta = 0.00$, $t = 0.02$, $p > 0.05$); frugality ($\beta = 0.10$, $t = 1.53$, $p > 0.05$); and environmentally friendly ($\beta = 0.11$, $t = 1.79$, $p > 0.05$) on SHC buying behaviour is insignificant when intention to buy SHC entered in the extended model, this outcome indicated a full mediation impact of intention to buy SHC on the relationship between perceived behavioural control; novelty seeking; frugality; environmentally friendly and SHC buying behaviour, respectively. Thence, H_{14a} , H_{14b} , H_{14c} , and H_{14d} were substantiated (See Table 6). However, the effect of treasure hunting on SHC buying behaviour was partially reduced ($\beta = 0.16$, $t = 2.33$, $p < 0.05$) from the first condition ($\beta = 0.64$, $p < 0.05$) when the intention to buy SHC was added into the model as a mediator variable. This outcome indicated a partial mediation impact of intention to buy SHC on the relationship between treasure hunting and SHC buying behaviour. Overall, H_{14e} was partially substantiated.

Table 6: SEM Results

Hypotheses	Standardized parameter estimates	t-value	p-value	Hypothesis status
H_1 : ATT \rightarrow INT	0.22	2.72	<0.05	Supported
H_2 : SN \rightarrow INT	0.33	4.28	<0.05	Supported
H_3 : PBC \rightarrow INT	0.36	5.25	<0.05	Supported
H_4 : PBC \rightarrow BHV	0.68	12.05	<0.05	Supported
H_5 : INT \rightarrow BHV	0.52	7.01	<0.05	Supported
H_6 : NS \rightarrow INT	0.46	7.48	<0.05	Supported
H_7 : NS \rightarrow BHV	0.47	8.18	<0.05	Supported
H_8 : FR \rightarrow INT	0.59	9.70	<0.05	Supported
H_9 : FR \rightarrow BHV	0.64	11.43	<0.05	Supported
H_{10} : EF \rightarrow INT	0.56	9.38	<0.05	Supported
H_{11} : EF \rightarrow BHV	0.61	11.03	<0.05	Supported
H_{12} : TH \rightarrow INT	0.57	9.43	<0.05	Supported
H_{13} : TH \rightarrow BHV	0.64	11.40	<0.05	Supported
H_{14a} : PBC \rightarrow INT \rightarrow BHV	0.07	1.05	>0.05	Supported
H_{14b} : NS \rightarrow INT \rightarrow BHV	0.00	0.02	>0.05	Supported
H_{14c} : FR \rightarrow INT \rightarrow BHV	0.10	1.53	>0.05	Supported
H_{14d} : EF \rightarrow INT \rightarrow BHV	0.11	1.79	>0.05	Supported
H_{14e} : TH \rightarrow INT \rightarrow BHV	0.16	2.33	<0.05	Partially supported

Fit statistics: ($\chi^2(631_{df}) = 961.86$ ($p=0.000$), GFI = 0.90, AGFI = 0.85, NFI = 0.98, NNFI = 0.99, IFI = 0.99, CFI = 0.99, RMSEA = 0.039, RMR = 0.021, SRMR = 0.035).



* Direct effect
 **Indirect effect

Figure 2: SEM Results for the Conceptual Model

Discussion

This study attempts to analyse the extended TBP model, including four personal values, novelty-seeking, frugality, being environmentally friendly and treasure hunting, to gain deeper insight into what motivates young consumers to buy SHC. It was hypothesized that attitudes towards SHC, subjective norms and perceived behavioural control would predict intention to buy SHC. Furthermore, intention to buy SHC and perceived behavioural control predict SHC buying behaviour. Besides, it was also hypothesized that being a novelty seeker, frugal, environmentally friendly, and treasure hunter would be significant antecedents of intention to buy SHC and SHC buying behaviour of young educated consumers.

In line with the findings of the previous studies, the results of the study revealed that the effects of attitudes towards SHC (H₁), subjective norms (H₂), and perceived behaviour control (H₃) on the intention to buy SHC were significant and positive, respectively. Herein, the extent to which young consumers positively evaluate SHC would increase their intention to buy SHC. Besides, drawing upon the TPB by Ajzen (1991), if young consumers’ perception of what others think about SHC and their perception of their ability to buy SHC increase, their intention to buy SHC would also increase.

Consistent with previous research, this study also found that the direct effect of perceived behaviour control on SHC buying behaviour (H₄) was significant and positive (Iran et al., 2019). However, contrary to the findings of previous research (Iran et al., 2019; Seo and Kim, 2019), perceived behaviour control is determined as the most important predictor of intention to buy SHC among the other constructs in the original TPB model. Thence, if the more the young consumers consider that they have control over their SHC buying behaviour, the more their intention to buy SHC would enhance. Furthermore, referring to the results of direct effects, perceived behaviour control could also be considered the most significant driver of SHC buying behaviour in the extended model. Finally, the effect of intention to buy SHC on SHC buying behaviour (H₅) was found as significant and positive, confirming the findings of previous research (e.g., Borusiak et al., 2020; Iran et al., 2019).

This present study also included four additional constructs to shed light on SHC buying behaviour from the standpoint of personal values. Regarding these additional antecedents, the results confirmed that novelty seekers would intend to buy SHC (H₆) and perform SHC buying behaviour (H₇). Indeed, novelty-seeking has not been previously used to predict intention to buy SHC and SHC buying

behaviour in the relevant literature. However, the findings presented that the younger consumers seek variety and differences while buying clothes, the more likely they would prefer and buy SHC. Herein, whereas this outcome is opposed to the findings of Bakhshian et al. (2019) on counterfeit products, it was in line with the findings of previous studies regarding the significant and positive effect of novelty seeking on buying counterfeit products (Wee et al., 1995) and pirated products (Cheng et al., 1997; Wang et al., 2005).

Regarding frugality, this study reported that the direct effect of frugality on intention to buy SHC (H_8) and SHC buying behaviour (H_9) was significant and positive, respectively. Besides, the study's results also found that frugality was the most significant driver of intention to buy SHC, among other personal value constructs in the extended model. These outcomes broadly supported the findings of other studies which previously stated that frugality as a personal value is related to SHC buying behaviour (e.g., Guiot and Roux, 2010; Roux and Guiot, 2008).

The findings of the study also reported that, contrary to the findings of Burman et al. (2013), environmentally-friendly young consumers had an intention to buy SHC (H_{10}) and performed SHC buying behaviour (H_{11}). Accordingly, when young consumers are concerned about protecting the environment, they prefer to adopt sustainable consumption practices like buying SHC (Kristia, 2021). Thence, the study's findings broadly confirmed the previous findings regarding sustainable consumption patterns of environmentally friendly consumers (e.g., Paço, Leal Filho, Ávila and Dennis, 2021).

Confirming findings of other studies (e.g., Burman et al., 2013), this study revealed that the direct effect of treasure hunters on intention to buy SHC (H_{12}) and SHC buying behaviour (H_{13}) was significant and positive, respectively. As is linked to hedonic and recreational values (Guiot and Roux, 2010), treasure hunters would be more likely to have a thrill of finding something valuable while buying SHC, and this motivates them to buy SHC (Yan et al., 2015). Regarding a direct effect on SHC buying behaviour, being a frugal and treasure hunter was the most critical driver of SHC buying behaviour. This outcome emphasized that finding a hidden treasure among SHC at a cheaper cost would lead to an essential motivation for young customers to buy SHC (Weil, 1999). Herein, we could infer that concerning TBV, conformity and hedonism values provide more motivational bases for SHC buying behaviour of young consumers. Besides, we could conclude that as well as it is a sustainability issue, buying SHC is more seen as a fashion and economic issue by young educated consumers.

Finally, in the extended model, perceived behavioural control failed to significantly influence SHC buying behaviour, similar to the previous findings (Seo and Kim, 2019). Besides, the effect of novelty seeking, frugality and being environmentally friendly on SHC buying behaviour in the extended model was also insignificant. This outcome indicated that intention to buy SHC would have a full mediation impact on the relationship between perceived behavioural control and SHC buying behaviour (H_{14a}); novelty seeking and SHC buying behaviour (H_{14b}); frugality and SHC buying behaviour (H_{14c}); and being environmentally-friendly and SHC buying behaviour (H_{14d}); while it has a partial mediation impact on the relationship between treasure hunting and SHC buying behaviour (H_{14e}). Overall, this present study extended the original TBP model integrating constructs in the original model with the four new constructs to explain the SHC buying behaviour from the standpoint of personal values derived from TBV.

Theoretical implications

TPB is one of the well-established theoretical models to explain consumers' behaviours in different contexts. TPB has also been notably adopted to understand SH buying behaviour in the relevant literature (e.g., Borusiak et al., 2020; Iran et al., 2019; Seo and Kim, 2019). In this regard, one of the significant theoretical contributions of this research is to confirm that TPB could be a fruitful model to explain consumers' SHC buying behaviour. Second, this research would provide an integrative theoretical framework by incorporating TPB and TBV simultaneously. Accordingly, a theoretical synthesis was provided to comprehensively understand the different personal motives influencing young educated consumers' intention to buy SHC and SHC buying behaviour. Third, adding additional variables drawing upon TBV to the original TPB model enhanced the explanatory power of the extended model, increasing significant variance for SHC buying behaviour. This outcome strengthens the idea that additional predictors may enhance the model's predictability (Yuriev et al., 2020). Thence, the extended model would improve the understanding of how novelty-seeking, frugality, being environmentally friendly, and treasure hunting could enhance predictions of constructs in the original TPB model in explaining SHC buying behaviour.

The research revealed that perceived behavioural control is the most critical driver of SHC buying behaviour. However, novelty seeking, frugality, being environmentally friendly and treasure hunting would be considered reliable drivers of intention to buy SHC and buying SHC behaviour once their direct effects are considered. Finally, the results indicated that the intention to buy SHC would act as a mediator in the extended TPB model. In this context, the research findings integrated and extended the TBV and TPB within a promising special issue in marketing literature. Overall, the study's findings contribute to a growing body of relevant literature and motivate other researchers to extend the TPB model with new constructs to gain a deeper understanding of SHC buying behaviour in different contexts by adopting different consumer behaviour theories.

Practical implications

Once the growth in spending on clothing and its negative environmental impacts are considered, textile waste gives a sense of challenge for economic growth and sustainable development. So, as overconsumption and mass production make companies dramatically emit more carbon leading to global warming, textile waste has also become one of the sustainability concerns for the next generations (Ionescu, 2020). Therefore, to ensure sustainable consumption and production patterns as suggested by the SDGs of the UN, consumers and practitioners of the fashion industry should dedicate themselves to changing their current consumption and production practices with responsible ones. Herein, the research results would also suggest several practical implications to them as follows.

First, young consumers would adopt the recycling-reusing-repairing philosophy for sustainability instead of discarding old clothes and buying new ones. In terms of recycling, young consumers would give their usable SHC to charity shops, textile banks and schools, and corporate and community schemes or at least they would leave them curbsides for the use of others. Since frugality is one of the motivations to buy SHCs (Guiot and Roux, 2010), frugal consumers would be more likely to buy these SHCs from charity shops, donations, garage sales or auctions, paying less. Furthermore, consumers would give their SHC to waste and recycling centres to reduce the water footprint in growing and producing fibres for new clothes. This could also be one of the actions of frugal consumers who are restrained in using economic offerings for long-term purposes (Lastovicka et al., 1999). Finally, for reusing and repairing, young consumers would look for do-it-yourself projects to upcycle SHC clothes, converting them into new items with higher value (Yu and Lee, 2019). Herein, mainly treasure hunter and novelty-seeker customers would buy SHC to find hidden treasures which have the potential to turn into something more novel and valuable pieces at affordable prices (Cervellon et al., 2012).

To mitigate the negative impact of clothing on the environment, fashion industry practitioners should also motivate young customers to buy SHC. Designing awareness companies for the negative impacts of textiles on the environment and economy, fashion producers and retailers would inform and enable young customers to improve care, repair and reuse of SHC. Thence, they could also enhance their image as the outcome of socially responsible marketing (Sirgy and Lee, 1996). Additionally, by developing exchange scheme campaigns, fashion producers and retailers could offer an exchange of old clothes for new cloth at a price lower than the original price of the new cloth. In doing so, they would collect SHCs and recycle them to produce new clothes. Accordingly, they would reduce the water footprint in the growing and production of the fibres and the production of new clothing. Finally, fashion producers and retailers would open their thrift stores for novelty seekers, treasure hunters, and environmentally friendly and frugal young consumers who intend to buy SHC with less perceived risks.

Conclusion

This paper explores the effects of original TPB constructs and four additional constructs derived from TBV on intention to buy SHC and SHC buying behaviour to shed light on personal motives guiding young educated customers to buy SHC. Including novelty seeking, frugality, being environmentally friendly, and treasure hunting in the original TPB model, it was more likely to enhance the explanatory power of the extended TPB model. Furthermore, all the hypothesized relationships in the extended model were significant in explaining SHC buying behaviour, indicating that the data confirmed the role of constructs in the original and extended TPB model. Herein, though the research results would provide fruitful contributions to both literature and practice, it is also essential to consider the limitations of the research.

Limitations and further research

There are several limitations of the research that should be acknowledged. First, buying SHC could be considered a sensitive subject for many people. Herein, since a self-administered questionnaire was used for data collection, participants might not have felt comfortable enough to answer the items

regarding SHC. To address this limitation, further research could use qualitative data collection techniques like in-depth interviews to gain better insight into what motivates consumers to buy SHC. Second, the research sample was derived using judgmental sampling as a non-probability method. Thence, the findings of this present study could not be generalized. To overcome the generalization problem, further research would use probabilistic sampling methods if there is a sampling frame. Third, the motivations of consumers behind buying SHC have already been explored within the context of utilitarian, hedonic, ethical and ecological aspects (e.g., Guiot and Roux, 2010; Liang and Xu, 2018; Machado et al., 2019; Roux and Guiot, 2008) in the relevant literature. So, the personality values used in the extended model were related to these aspects. For further research, new personal traits such as openness, conscientiousness and extraversion could be included in the original TPB model to explain other personal motives guiding customers to buy SHC. Overall, the study's findings have confirmed the TPB model's applicability with the inclusion of new predictors that explain SHC buying behaviour. So, this study would present a promising research area to the researchers to comprehend SHC buying behaviour by including additional variables into the original TPB model.

Peer-review:

Externally peer-reviewed.

Conflict of interests:

The author has no conflict of interest to declare.

Grant Support:

The author declared that this study had received no financial support.

Ethics Committee Approval:

Ethics committee approval was received for this study from Afyon Kocatepe University, Ethics Committee on 11/04/2022 and 91897 document number.

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Appendix A. Survey Items

Constructs	Operationalization	Source
Novelty-seeking	NS1: I am always the first one who try new apparel. NS2: I am excited to purchase some interesting apparel. NS3: I have a lot of popular apparel. NS4: I always keep up with fashion NS5: I like my newest second-hand apparel.	Bakhshian et al. (2019)
Frugality	FR1: I feel I spend less by buying SHC. FR2: I buy SHC because I don't want to spend a lot of money. FR3: With SHC buying, I am happy to buy things less expensively. FR4: By using SHC, I can get something without ruining myself. FR5: I like buying SHC because I feel I'm paying less.	Roux and Guiot (2008)
Being Environmentally Friendly	EF1: It is important to me that the products I use do not harm the environment. EF2: I consider the potential environmental impact of my actions when making many of my decisions EF3: My purchase habits are affected by my concern for our environment. EF4: I am concerned about wasting the resources of our planet. EF5: I would describe myself as environmentally responsible. EF6: I am willing to be inconvenienced in order to take actions that are more environmentally friendly.	Haws et al. (2014)
Treasure Hunting	TH1: While I am buying SHC, I always hope I'll come across a real find. TH2: When I buy SHC, I try to find something. TH3: I'm often on the look-out for a find when I buy SHC. TH4: While buying SHC, I feel rather like a treasure hunter.	Guiot and Roux (2010)
Attitude towards buying SHC	ATT1: For me, buying SHC is interesting. ATT2: For me, buying SHC is good. ATT3: For me, buying SHC is valuable. ATT4: For me, buying SHC is pleasant.	
Subjective Norms	SN1: Most people who are important to me think that I should buy SHC SN2: Most of the people with whom I am acquainted with buy SHC SN3: Most people whose opinions I value would approve of my purchase of SHC SN4: It is expected of me that I buy SHC	Ajzen (2013); Fishbein and Ajzen (2010)
Perceived Behaviour Control	PBC1: Whether or not I buy SHC is completely up to me PBC2: For me, buying SHC is easy. PBC3: I am confident that if I wanted to, I could buy SHC.	
Intention to Buy SHC	INT1: I plan to buy SHC in the future. INT2: I will buy SHC in the future. INT3: I am willing to buy SHC.	
SHC buying behaviour	BHV1: I more frequently deliberately buy a used SHC instead of a new clothing. BHV2: When there is a choice, I prefer to buy SHC instead of a comparable new one. BHV3: I buy SHC whenever it is possible. BHV4: I often buy SHC instead of new clothing.	Lee (2009)