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Modelling the predictors of young consumers' sustainable consumption intention

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Sustainable consumption refers to consumers' socially and environmentally responsible consumption practices. The present study is the first to investigate possible individual, behavioural, and situational factors that predict sustainable consumption intention among young consumers in India. A survey was carried out on 325 young consumers. Structural equation modelling was applied to check the extent to which the considered variables predicted sustainable consumption. The results determined drive for environmental responsibility, subjective norm, and attitude towards sustainable consumption as key predictors of consumers' sustainable consumption intention. The paper offers a better understanding of the main predictors of consumers' sustainable consumption intention. Such understanding may enable managers to design effective marketing strategies to encourage sustainable consumption intention and behaviour.

1 | INTRODUCTION

Over the period of last 2 decades, major ecological issues have emerged across the world because of the unplanned development and irresponsible consumption practices of the people (Wang, Liu, & Qi, 2014). Consequences of ecological harm are unnatural weather change and pollution (Tseng & Hung, 2013; Ulusoy, 2016). Different nations over the world have begun making efforts to curtail the damaging effect of their commercial practices on the nature. This acknowledgment and concern about the earth has prompted the rise of "sustainable development" that stresses to support sustainability and supports that type of development that diminishes adverse effect on the nature.

Although it has been widely accepted that production-side policies can decrease the negative ecological impact of manufacturing (Phipps et al., 2013), such strategies fail to address the deep environmental impacts of irresponsible consumption (Koklic, Golob, Podnar, & Zabkar, 2019). Change in patterns of human consumption is also important because endeavours by companies towards adoption of sustainable practices get dwarfed by the growth in consumption (Yadav & Pathak, 2017).

Sustainable consumption is defined as the "consumption process aimed to fulfil customer needs while considering earth carrying

capacity and without endangering future generation's life at risk" (Sharma & Jha, 2017, p. 2). Whereas some scholars consider sustainable consumption as a voluntary act of simplicity or anticonsumption (Black, 2010; Shaw & Moraes, 2009); some consider it as practice of adopting a green-oriented lifestyle (e.g., Gilg, Barr, & Ford, 2005). Fundamentally, sustainable consumption emphasises on minimising the adverse effect on the environment, society, and economy due to irresponsible purchase, use, and disposal of products and services. Such decision by customers not only affect the present generations, but also influence the upcoming generation's ability to fulfil their needs (Lee, 2014). Therefore, this becomes imperative to understand the relevance of sustainable consumption, as most of the individuals fail to understand the effect their decision to consume has on society and nature and towards the degeneration of ecology, society, and economy as a whole (Lee, 2014; Yadav & Pathak, 2017).

Governments and companies across the world are trying to educate consumers about the sustainable lifestyle and promote sustainable consumption practices (Joshi & Rahman, 2017). It has been observed that although the number of people keen to adopt sustainable consumption practices has risen through the years with individuals across the globe recognising the importance of sustainable consumption, this increased eagerness has not converted into action (Ponnapureddy et al., 2017). Several studies have found a poor

association between consumers' sustainable consumption attitude and their actual consumption practices, usually stated as the "attitude–behaviour gap" (Tanner & Wölfing Kast, 2003; Tseng & Hung, 2013). Reducing this attitude–behaviour gap and motivating people to embrace sustainable consumption behaviour has turned out to be a significant challenge for marketers as well as policy-makers.

Numerous studies in developed nations have investigated several personal, situational, and psychological variables affecting individuals' sustainable consumption exercises. However, most of the investigations have disregarded the effect of behavioural factors (such as supportive behaviour towards environmental organisations; Koklic et al., 2019; Ulusoy, 2016).

Phipps et al. (2013), via their theory of reciprocal determinism, suggested that besides individual and sociocultural factors, individuals' past sustainable practices may also influence their future sustainable conduct. Use of reciprocal determinism and consideration of past sensible practices as a determinant of future sustainable consumption conduct would give an improved understanding of individual behaviour that, in turn, might help in developing and reinforcing sustainable consumption practices among people. Such an understanding will also reveal how past behaviour, in combination with other sociocultural and individual factors, influences or shapes consumers' future sustainable consumption behaviour. Many recent studies also suggest that past behaviour can be an important predictor of consumers' future sustainable consumption behaviour and highlight the need to understand the role of past behaviour in examining consumers' present sustainable consumption behaviour (Koklic et al., 2019; Wu, Zeng, & Xie, 2017). However, most of the previous studies have ignored the importance of past behaviour (Koklic et al., 2019; Ulusoy, 2016); hence, it needs to be examined. The current study echoes the contention that past behaviour along with other individual and situational variables can affect consumers' future sustainable consumption behaviour.

In Asia, sustainable consumption studies are limited (Wang et al., 2014; Yadav & Pathak, 2017). The majority of prior research in India is limited to examining consumers' attitude towards green purchasing (Yadav & Pathak, 2017). The prevailing sustainable attitude–behaviour discrepancy and a lack of appropriate account thereof, paucity of research examining the effect of past sustainable behaviour on consumers' sustainable consumption practices, and an absence of adequate research on sustainable consumption practices in India act as motivation to investigate the crucial determinants of consumers' sustainable consumption intention (SCI).

Respondents selected for the study were young and educated. This segment of respondents was chosen because it acts crucially when bringing about preferred changes in sustainable consumption (Kanchanapibul, Lacka, Wang, & Chan, 2014; Moon, Javaid, Kiran, Awan, & Farooq, 2018). Also, this consumer group has rarely been examined in the past for sustainable consumption behaviour (Kanchanapibul et al., 2014). India is a large market and has substantial potential for sustainable consumption. Delhi is the capital of India and a probable entry point for global sustainable marketers to the country. An understanding of the predictors of sustainable consumption will assist in the development of appropriate marketing strategies for increasing consumers' adoption of sustainable consumption practices.

In light of the discussion above, the present examination addresses the following research questions:

1. How does past sustainable behaviour, supportive behaviour towards environmental organisations, consumers' knowledge regarding sustainability related issues, consumer attitude towards sustainable consumption, perceived behavioural control (PBC), subjective norm, and drive for environmental responsibility (DE) affect future SCI?
2. Does attitude towards sustainable consumption mediate the relationship between: (a) perceived knowledge towards sustainability issues (PKS) and SCI and (b) DE and SCI?

The paper is arranged as follows: Section 2 provides literature review and a proposed research model. Section 3 describes the various measures and the data collection procedure. Section 4 presents analysis while results are discussed in Section 5. Implications are specified in Section 6. Conclusions and future research guidelines are provided in the final section.

2 | LITERATURE REVIEW

Previous studies in sustainable consumption have explored the various values, attitudes, and intentions behind purchasing sustainable products (Liobikienė, Grincevičienė, & Bernatonienė, 2017; Tanner & Wölfing Kast, 2003). The theory of planned behaviour (TPB; Ajzen, 1985) is an important theoretical approach that has been used in sustainable consumption literature. According to the TPB (Fishbein & Ajzen, 2005), the behaviour is a function of behavioural intentions, which are in turn determined by the behavioural, normative, and control beliefs about a particular action.

Numerous studies have utilised TPB for investigating consumer attitude, intentions, and actual purchasing with respect to sustainable products (Arvola et al., 2008; Yadav & Pathak, 2016). Although it is evident from earlier studies that the TPB is a valid model to study green behaviour, it has rarely been examined in the context of SCI in India. Further, it is open for modification and extension (Ajzen, 1985). Although TPB proves to be a robust model for sustainable behaviour, various scholars (Lee, 2014; Wu et al., 2017), criticise the theory as TPB does not accommodate the role of respondent's past behaviour and habits.

Phipps et al. (2013, p. 1229) through their theory of reciprocal determinism stressed that "one form of sustainable behaviour has the potential to impact other forms of sustainable behaviour, and that present sustainability related consumption behaviours affect future sustainable consumption behaviours." The framework stressed that considering past sustainable behaviour as a determinant of future sustainable behaviour combined with other factors could reveal new dimensions of consumer's sustainable consumption behaviour. Lee (2014) likewise proposed future research to think about these suggestions.

This study extends the TPB by including the recommendations of reciprocal determinism theory and incorporate three new variables and five new relationships. The proposed model investigates the influence of six antecedents (knowledge towards sustainability issues, attitude towards (ASC) sustainable consumption, subjective norm, PBC, supportive behaviour towards environmental organisations, and DE) on consumers' sustainable purchase intention. The present study advances research on sustainable consumption behaviour in three ways. First, it investigates the impact of past sustainable behaviour (supportive behaviour towards environmental organisations) on consumers' SCI. Second, the study includes DE and checks its impact on ASC, which further affects consumer's SCI. Third, it determines the direct and indirect impacts of sustainability knowledge on consumer's SCI. Figure 1 shows the proposed model.

2.1 | Supportive behaviour for environmental organisations

Although significant literature has covered sustainable consumption in the past, very few studies have studied the association between consumers' sustainable behaviour and their future sustainable behaviour (Phipps et al., 2013). In one such study, Eze & Ndubisi (2013) found that pro environmental behaviour positively influenced consumer green purchase behaviour. However, Laroche, Bergeron, and Barbaro-Forleo (2001) found contradictory results, and argued that environmentally friendly behaviour did not have a significant effect on consumers' willingness to pay extra for environmentally friendly goods. The theory of reciprocal determinism also proposes that past sustainable behaviour can predict future sustainable behaviour. Supportive behaviour for environmental organisations is a type of

sustainable conduct and refers to "consumer behaviour such as willingly serving an environmental association, making donations to environmental associations and joining in events planned by such associations" (Lee, 2014, p. 2190). It can also be defined as the behaviour shown by the consumers that monetarily, ethically, or socially bolsters an environmental association. Up to now, only one study (Lee, 2014) has noticed a positive influence of supportive behaviour towards environmental organisations on consumer sustainable consumption, and this field warrants further attention. Thus we propose:

H1 Supportive behaviours for environmental organisations has a positive impact on consumers sustainable consumption intention

2.2 | Attitude towards sustainable consumption

Joshi and Rahman (2017, p. 7) defined ASC as the "consumer's cognitive evaluation of sustainable consumption behaviour, it includes consumer attitude towards green and fair purchasing". Attitudes influence intentions and consequently behaviour (Ajzen, 1985; Zhao et al., 2014). Hines, Hungerford, and Tomera (1987), through meta-analysis reveal that there is a higher possibility that people with strong positive environmental attitudes will involve in ecologically accountable conduct and buy sustainable goods.

Though, many other studies also observed a weak link among consumer attitude and sustainable consumption conduct (e.g., Davis, 1995). As prior research has mixed observations, further research is essential to examine this relationship. Further, some of the prior studies have also suggested the need to study the impact of attitude on SCI (Joshi & Rahman, 2017; Zhao et al., 2014). Thus we propose:
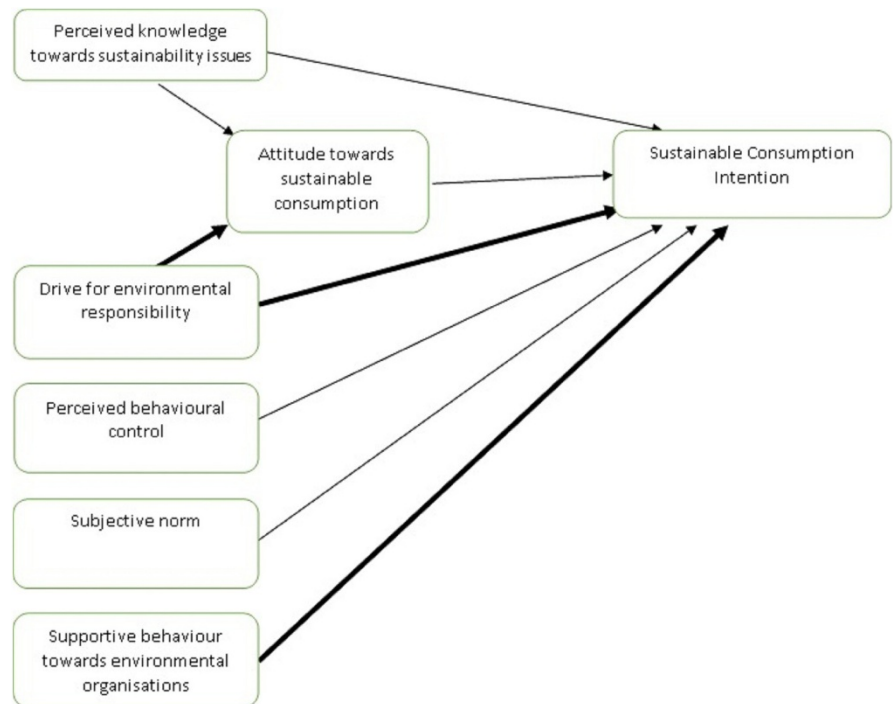
FIGURE 1 The proposed research model

H2 Consumers attitude towards sustainable consumption has a positive impact on their sustainable consumption intention.

2.3 | Perceived knowledge towards sustainability issues

Perceived knowledge towards sustainability issues can be explained as consumer's own perception or perceived knowledge of social and ecological concerns (Chan, 2001). Most of the previous studies on consumers' ecological knowledge have conveyed that environmental knowledge positively influences consumers to adopt sustainable consumption practices, and consumers with greater knowledge of ecological and social issues are more motivated to display ecologically and socially responsible behaviour (Joshi & Rahman, 2017; Kanchanapibul et al., 2014). Also consumers' inadequate awareness about sustainability issues were observed to make consumers unclear regarding which products to choose and hindered the consumption of sustainable products (De Carvalho, de Fátima, & Rita, 2015). Some researchers have observed a non-significant relationship between ecological knowledge and purchasing practices (Kollmuss & Agyeman, 2002; Wolsink, 2007). Based on the mixed results as discussed above, it can be said that the relationship between knowledge and conduct is still not clear and more investigations are required to uncover this relationship. Thus to determine this relationship, we propose:

H3 Consumers' perceived knowledge towards sustainability issues has a positive impact on their sustainable consumption intention.

While a direct relationship between knowledge and sustainable consumption behaviour (Kanchanapibul et al., 2014) has been reported, a link between knowledge and the attitude has also been established in the literature. Along this line, Kaiser, Wölfing, and Fuhrer (1999), provided environmental knowledge and attentiveness as an essential element for building up of pro environmental approach and belief. Further, such attitude advances consumers' orientation to behave in an environment friendly manner.

Some of the studies established a direct association among ecological attitude and ecological knowledge (e.g., Frick, Kaiser, & Wilson, 2006). Researchers have, in the past, observed the link between ecological knowledge, attitude, and behaviour. It was observed that increased environmental knowledge enhances the consumers' attitude towards the environment that further enhances consumer SCI and behaviour (Joshi & Rahman, 2015; Yadav & Pathak, 2017). On the basis of the discussion above, it is hypothesised:

H4 Consumers' perceived knowledge towards sustainability issues has a positive impact on their attitude towards sustainable consumption.

H5 Attitude towards sustainable consumption mediates the relationship between perceived knowledge towards sustainability issues and sustainable consumption intention

2.4 | Perceived behavioural control

Perceived behavioural control reflects "one's perception of control over resources like necessary skills, confidence and the capability to carry out the behaviour, and also perceived control over external contexts like time and money to conduct a specific behaviour" (Armitage, Armitage, Conner, Loach, & Willetts, 1999, p. 302). People possessing the requisite resources or prospects to display a certain behaviour display strong behavioural intentions (White Baker, Al-Gahtani, & Hubona, 2007). White Baker et al. (2007) reported that PBC directly influenced intention to carry out a behaviour. In various studies related to sustainable consumption, PBC has been shown to significantly and positively impact SCI (Wang et al., 2014; Yadav & Pathak, 2017). However, Arvola et al. (2008) observed a non-association among PBC and green purchase intention. It may be said that although some evidence exists that PBC has a positive impact on green purchase intention, more empirical research is needed owing to inadequate research in the field. Further, previous studies (e.g., Wiederhold & Martinez, 2018) suggest to inspect the influence of PBC on SCI. Thus, it is hypothesised:

H6 Perceived behavioural control has a positive impact on consumers' sustainable consumption intention.

2.5 | Drive for environmental responsibility

Kumar and Ghodeswar (2015, p. 332) have explained DE as the "consumers' commitment and endeavour towards protecting the environment and individual-level activities intended to improve the quality of the environment." Customers may realise their duty towards ensuring their environment if they understand the impact of ecological degradation on people and other living animals (Yadav & Pathak, 2017). Consumers feel associated with issues linked with nature protection and trust that they can exclusively contribute towards ecological security by embracing ecologically favourable practices (Lee, 2008); in this way, they make genuine endeavours to ensure nature through the practice of appropriate individual level sustainable activities. They intrinsically care about the planet's fortune thus protect nature (Kumar & Ghodeswar, 2015).

Understanding of the environmental issues makes them sensitive towards the nature-related problems and lead them to act in an environmentally friendly manner (Pickett-Baker & Ozaki, 2008; Zuraidah et al., 2012) and show sustainable consumption behaviour. Thus, we propose:

H7 Drive for environmental responsibility has a positive impact on consumer's sustainable consumption intention.

Drive for environmental responsibility reflects the commitment for nature and the will to protect it (Chan, 2001). Consumers commitment for nature and their will to protect it frames a positive attitude towards environmental protection (Pickett-Baker & Ozaki, 2008;

Zuraidah et al., 2012) and promote sustainable consumption practices. Likewise, those showing higher DE care more for the environment and are more motivated to bolster green activities of firms or governments. Thus, higher DE would provoke positive attitude towards green practices. Some of the studies have shown a positive link between ecological orientation and ecological attitude (e.g., Mostafa, 2007).

Chan (2001) argued that DE functioned at the emotional level to inspire attitude that may further affect intention. Studies have found that attitude influence daily life activities via intention and behaviour (Ajzen, 1985; Joshi & Rahman, 2017). Despite of some empirical evidence, studies on the link between the DE and SCI are scarce and needs attention. (Kumar & Ghodeswar, 2015). This study furthers the examination of the aforementioned association on the basis of literature and anticipates that DE will enhance consumers' ASC that would further influence consumers' SCI. Thus, we propose:

H8 Drive for environmental responsibility has a positive impact on consumers' attitude towards sustainable consumption.

H9 Attitude towards sustainable consumption mediates the relationship between drive for environmental responsibility and sustainable consumption intention.

2.6 | Subjective Norm

Subjective norm has been defined as "perceived social force to carry out a particular behaviour" (Ajzen, 1985, p. 14). It states to the "individual's perception of significant referents' opinions toward a behaviour and can be explained as an individual's perception of the social response towards an action performed or not performed by the individual" (White Baker et al., 2007, p. 361). Subjective norm has been found to drastically alter individuals' consumption lifestyles (e.g., disposing of material objects and lowering the degree of consumption). People respond to social norm and social pressure and look up to social norm as an indicator of what is acceptable and expected (Connell, 2010; Lee, 2010).

Many studies have observed a positive association between social groups or social norms and sustainable consumption behaviour such as: sustainable products purchase intention and behaviour (Joshi & Rahman, 2017; Lee, 2010) and recycling intention and behaviour (Connell, 2010; Wan, Cheung, & Shen, 2012). However, some empirical research has found that subjective norm does not have an association with some types of sustainable consumption practices (such as domestic electricity conservation; He & Kua, 2013; Kua & Wong, 2012). Subjective norms were also observed to be weakly associated with the consumption of low-involvement items (Kuenzel & Musters, 2007). Mixed results from previous studies necessitate further research in the area.

To this end, we hypothesise:

H10 Subjective norm has a positive impact on consumer's sustainable consumption intention.

3 | METHODS

3.1 | Sample

The population of this study was young adults living in Delhi. Consumers selected for the study were young and educated because they act as a crucial factor in influencing preferred changes in green consumption. Young purchasers have versatile thoughts and ability in understanding the significance of green purchasing (Kanchanapibul et al., 2014). Recent studies have found that young educated consumers are more prone to engage in environmental behaviours in emerging economies (Khare, 2015; Yadav & Pathak, 2017), and understanding their consumption behaviour may provide valuable insights as to how their consumption patterns are going to shape up in future (Moon et al., 2018). Understanding students' green consumption is imperative because they constitute an understudied group of the population in environmental research (Chuvieco, Burgui-Burgui, Da Silva, Hussein, & Alkaabi, 2018; Yadav & Pathak, 2017). Therefore, 325 university/college students of Delhi constitute the sample of this study. The students were 15–30 years of age and represent pan India demographics (Table 1). Many of the prior studies have also considered this age group (Chaudhary & Bisai, 2018; Stobbelaar et al., 2007; Tuncer, Ertepinar, Tekkaya, & Sungur, 2005). In this study, the researcher included 25 items for seven distinct constructs. Kline (2015) and Hair, Hult, Ringle, Sarstedt, and Thiele (2017) suggest that there should be at minimum 5–10 responses against each observed indicator (item) to estimate the minimum sample size. In the present study, the total number of observed variables was 25, and multiplying it by 10 resulted in 250 respondents. Hence, the sample of 325 is found adequate for the study.

To collect the sample for the study, Delhi city is selected as Delhi is largely multicultural, multilinguistic, and cosmopolitan in nature due to the large number of people it harbours from all over India (Das &

TABLE 1 Descriptive statistics

Details of Respondents (n = 325)	Frequency (s)	Percentage (%)
Gender		
Male	187	57.53
Female	138	42.46
Age		
15-20	135	41.53
21-25	142	43.70
26 to 30	48	14.77
Education		
Under Graduate	182	56.00
Post Graduate	112	34.46
Others	31	9.54

Kini, 2018). Students come to Delhi from all over the country in search of education and work. Thus, it acts a microcosm of the Indian population and represent pan India demographics. Also Delhi is the capital of India and a possible passage for global sustainable marketers to make an entry in the country.

3.2 | Measures

Six items of PKS (α = 0.88) were adopted from Ellen, Eroglu, and Webb (1997). Three items of ASC (α = 0.90) were adopted from Chan (2001), and three items to measure PBC (α = 0.80) were adopted from Kim and Han (2010). Three items of subjective norm (α = 0.84) were adopted from Armitage et al. (1999), and five items of DE (α = 0.81) were adopted from Kumar and Ghodeswar (2015).

In order to analyse the supportive behaviour towards the environmental organisations, two items (α = 0.80) from Lee (2014) were adopted. For assessing consumers' SCI, Three items (α = 0.86) from Chan (2001) were adopted (see Appendix 1). As per Burns and Bush (2006), for a reliable scale, Cronbach alpha (α) should be equal to or greater than 0.65. Hence, all the scales considered in this study are valid.

3.3 | Procedure

We collected data through a self-administered survey questionnaire using convenience sampling from the university/college students. Before settling the final questionnaire, a pilot study of 50 respondents using convenience sampling was done. A final survey questionnaire was then made that comprises sustainable consumption items and some questions related to demographic information.

The data has been collected by convenience sampling using a group administration approach on a face-to-face survey. The respondents were assured about anonymity and confidentiality. They were also given the right to refuse participation and also to refuse to answer any question they deemed to be too sensitive or that they felt uncomfortable about. The respondents were recruited by visiting the various universities/colleges and in a face-to-face administration approach. Responses were collected when the respondents were free from their commitments (i.e., at lunch, break, and other free time). The universities/colleges have been selected on the basis of convenience where researchers were able to get the access. A total of 380 questionnaires were circulated to prospective respondents in the university/college campuses and collected back once they were filled. Out of the 380 respondents, 45 did not return the survey questionnaire after excluding 20 questionnaires with missing responses; 325 responses were included in the study. Those participants who did not respond to the questionnaires mentioned lack of time as the main reason. The participation in the survey was purely voluntary. Consent regarding the survey has been taken from the parents of the students who are in the age group of 15–17 years. Although the findings of a convenience sampling approach may limit the generalizability of the study, authors such as Cheah and Phau (2011) and DelVecchio (2000) suggest that students and a young sample are reliable in such studies.

4 | DATA ANALYSIS AND RESULTS

Before proceeding for further analysis, the data were checked for common method biases (CMB). Self-reported surveys are susceptible to CMB and to control this potential bias, statistical solutions recommended by Podsakoff, MacKenzie, and Podsakoff (2012) were followed. Further Harman's single factor were calculated. The result of exploratory factor analysis shows that unrotated single factor explains only 19% of variation (<50%), which means 81% of the variation is explained by rest other factors. Hence, absence of common method bias. Further common latent factor (CLF < 50%) was calculated and the results determined that the data have no CMB issues.

To examine variations among groups based on gender, age, and educational status regarding supportive behaviour towards environmental organisations, social influence, exposure to sustainability related messages through media, ASC, knowledge towards sustainability related issues, perceived consumer effectiveness, and sustainable consumption, multivariate analysis of variance was done. Wilks' lambda (Λ) measures were used, and the result showed no significant effect of (a) gender ($F_{(3, 2,630)}$ = 1.62, Λ = .99, non-significant); (b) educational level ($F_{(12, 4,320)}$ = 1.53, Λ = .97, non-significant); and (c) age ($F_{(12, 5263)}$ = 1.21, Λ = .98, non-significant) on the study variables. These results, show that there is no likelihood of any conceivable interaction among sex, educational level, and age as covariates in further investigation. These results are in line with previous studies as some of the previous studies have suggested that young consumer segment is a relatively more homogeneous group and possesses uniform consumption habits (Chaudhary & Bisai, 2018; Joshi & Rahman, 2016; Lee, 2014; Uddin & Khan, 2016).

The Kaiser-Meyer-Olkin test was performed for determining sample adequacy, and the score acquired is 0.88 that specifies adequacy. Table 2 exhibits the mean, standard deviation, and correlation for each factor. In the present study, a two-stage modelling approach is used that includes: first, establishing a measurement model; and second, the structural model. Measurement model purification has been performed through confirmatory factor analysis and reliability tested through Cronbach's α coefficient.

The results of confirmatory factor analysis exhibit an excellent fit to the data ($\chi 2(251)$ = 407.75 p < .0001; CMIN/DF = 1.624, RMSEA = 0.044, NFI = 0.920, CFI = 0.967, GFI = 0.912, and AGFI = 0.886). The reliability for all the considered variables were more than the acceptable limit of 0.70, reflecting good internal consistency. After examination of reliability, validity of the constructs was evaluated. First, convergent validity was evaluated by assessing the factor loadings of the model (Anderson & Gerbing, 1988). All the factor loading emerged to be significant (all t values at p = .01 level) thereby confirming the convergent validity of the measurement model (Table 3).

Second, the discriminant validity of the total measurement model was evaluated by examining the value of significance of interconstruct correlation. The value was found to be less than 1 (Bagozzi & Heatherton, 1994). The average variance extracted was compared with the squared inter construct correlations among all variables

TABLE 2 Correlations, means, and standard deviations

n = 325	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	2.13	0.75	-	-	-	-	-	-	-	-	-	-
2. Gender	1.32	0.47	.033	-	-	-	-	-	-	-	-	-
3. Education	1.47	0.74	.066	.048	-	-	-	-	-	-	-	-
4. Drive for environmental responsibility	3.47	1.93	.082	−.087	−.003	**.544**	.193	.038	.085	.115	.256	.149
5. Perceived knowledge towards sustainability issues	3.48	1.89	.039	−.062	.034	.439**	**.585**	.031	.153	.089	.265	.169
6. Supportive behaviour towards environmental organisations	3.36	1.73	−.033	−.207**	−.065	.195**	.182**	**.677**	.1256	.175	.124	.219
7. Perceived behavioural control	3.37	1.66	.105	−.088	−.016	.292**	.393**	.353**	**.592**	.343	.204	.341
8. Subjective norm	3.42	1.74	.142**	−.083	−.027	.344**	.299**	.415**	.583**	**.654**	.221	.461
9. Attitude towards sustainable consumption	3.15	1.79	−.076	−.074	−.053	.509**	.517**	.356**	.452**	.474**	**.762**	.364
10. Sustainable consumption intention	3.68	1.76	−.023	−.112*	−.072	.393**	.416**	.471**	.587**	.68**	.600**	**.659**

Note: The bold numbers in the cells of diagonal line are the average variance extracted. The numbers in the cells above the diagonal line are the square of correlations. The numbers in the cells below the diagonal line are the correlations.
Abbreviations: *M*, mean; *SD*, standard deviation.
*$p < .05$.; **$p < .01$.

(Fornell & Larcker, 1981). As shown in Table 2, all average variance extracted estimates ranged from 0.55 to 0.75 and were greater than the corresponding squared inter construct correlation, demonstrating discriminant validity (Table 2).

The structural model was assessed, and the overall fit statistics as presented in Table 4 indicate an adequate level of fit. Estimated structural coefficients were then inspected to assess the various hypotheses. As per the research model, the study proposes various paths existing among the antecedents of attitude towards sustainable consumption and SCI.

As evident in Table 5, the study findings suggest that all the relationships hypothesised in the research model were significant. Hypothesis 1 stated that supportive behaviour towards environmental organisations positively influenced SCI. As depicted in the direct effect model, supportive behaviour towards environmental organisations positively predicted SCI of young consumers (ß = .19, p < .001), upholding Hypothesis 1. Hypothesis 2 stated that ASC has a positive impact on SCI. As depicted in the full mediation model, ASC positively influenced SCI (ß = .34, p < .001), supporting Hypothesis 2. Further, as depicted in the direct effect model, PKS positively influenced SCI (ß = .14, p < .05), supporting Hypothesis 3. As shown in the direct effect model, PKS positively influenced ASC, (ß = .30, p < .05) supporting Hypothesis 4.

Further subjective norm positively influenced SCI of young consumers (ß = .47, p < .001), supporting Hypothesis 10. Also, as depicted in the direct effect model, PBC positively predicted SCI of young consumers (ß = .17, p < .01), supporting Hypothesis 6. Hypothesis 7 stated that DE has a positive influence on SCI. As depicted in the direct effect model, DE positively influenced SCI of young consumers (ß = .10, p < .05), supporting Hypothesis 7. Further, as depicted in the full mediation model, DE positively influenced ASC (ß = .44, p < .001), supporting Hypothesis 8. Thus, all the direct hypotheses were found to be true, and a significant relationship was found among constructs.

To test the mediation hypotheses, a series of mediation analysis was performed. The results of mediating paths were summarised in the full mediation model (see Table 4). PKS was positively related to ASC (ß = .30, p < .001), and ASC was positively related to SCI (ß = .34, p < .001). The indirect influence of PKS on the SCI is (.30 × .34) = 0.10, which is greater than the direct effect, that is, .14 (see direct model); thus, Hypothesis 5 is supported. DE was positively related to ASC (ß = .44, p < .001), and ASC was positively related to SCI (ß = .34, p < .001). The indirect influence of DE on the SCI is (.44 × .34) =.14, which is greater than the direct effect, that is, .10 (see direct model); thus, Hypothesis 9 is supported.

Additionally, the testing approach of Baron and Kenny (1986) was executed to inspect whether ASC was a mediating variable. According to the direct model in Table 5, DE and PKS demonstrated significant path coefficients (DE → SCI: 0.10, p < .05; PKS → SCI: 0.14, p < .05) on SCI; thus, they were upheld through the first step of the test. Further, in the full mediation model, the path coefficients of DE and PKS on ASC were found to be significant (DE → ASC: 0.44, p < .001; PKS → ASC: 0.30, p < .001), which qualifies the second step of the test. The path coefficients of ASC to SCI (ASC → SCI: 0.34, p < .001) was also significant, which qualified the next step of the test. Finally, in the regression path of partial mediation model, the path coefficients DE to SCI and PKS to SCI were observed to be insignificant, which qualified the final condition of Baron and Kenny's test, indicating that ASC acted as a significant mediator in the model.

TABLE 3 Overall reliability of the constructs and factor loadings of indicators

Construct	Indicators	AVE	Cronbach's α/CR	Factor loadings	T-value
Drive for environmental responsibility	DE 1	0.550	0.81/0.851	0.841	9.16***
	DE 2	-	-	0.848	10.572***
	DE 3	-	-	0.726	9.733***
	DE 4	-	-	0.768	10.034***
	DE 5	-	-	0.429	6.818***
Perceived knowledge towards sustainability issue	PKS 1	0.570	0.88/0.889	0.588	9.388***
	PKS 2	-	-	0.535	8.727***
	PKS 3	-	-	0.855	12.096***
	PKS 4	-	-	0.886	12.349***
	PKS 5	-	-	0.890	12.380***
	PKS 6	-	-	0.734	10.994***
Subjective norm	SN 1	0.660	0.84/0.852	0.864	12.305***
	SN 2	-	-	0.805	11.782***
	SN3	-	-	0.761	11.356***
Perceived behavioural control	PBC 1	0.582	0.80/0.817	0.756	11.197***
	PBC 2	-	-	0.767	11.309***
	PBC 3	-	-	0.796	11.581***
Supportive behaviour towards environmental organisations	SB 1	0.682	0.80/0.805	0.811	11.045***
	SB 2	-	-	0.831	11.185***
Attitude towards sustainable consumption	ASC 1	0.759	0.90/0.904	0.891	12.332***
	ASC 2	-	-	0.898	12.337***
	ASC 3	-	-	0.823	11.744***
Sustainable consumption intention	SCI 1	0.659	0.86/0.853	0.769	11.372***
	SCI 2	-	-	0.856	12.158***
	SCI 3	-	-	0.873	12.298***

Abbreviations: AVE, average variance extracted; ASC, attitude towards sustainable consumption; CR, construct or composite reliability; DE, drive for environmental responsibility; PBC, perceived behavioural control; PKS, perceived knowledge towards sustainability issue; SB, supportive behaviour towards environmental organisations; SCI, sustainable consumption intention; SN, subjective norm.
***$p < .001$.

TABLE 4 Results for fit indices of structural models

Model	χ^2	χ^2/df (<3)	$\Delta\chi^2$	GFI (>0.9)	AGFI (>0.9)	CFI (>0.9)	NFI (>0.9)	RMSEA (<0.08)
Direct effects model	316.21** (df = 194)	1.63	-	0.923	0.899	0.969	0.924	0.044
Full mediation model	455.22*** (df = 254)	1.79	139.01	0. 904	0.877	0.958	0.911	0.049
Partial mediation model	458.03*** (df = 253)	1.81	2.81	0.903	0.876	0.957	0.910	0.050

Note: $\Delta\chi^2$ represents the χ^2 differences between the model and the following model. Fit indices criteria refer to Hair et al. (2006).
Abbreviations: AGFI, adjusted goodness of fit index; CFI, comparative fit index; GFI, goodness of fit index; NFI, normed fit index; RMSEA, root mean square error of approximation.
***$p < .001$.

Further, the parameters of model fit indices show an excellent model fit for the full mediation model. The value of the adaptable indices are χ^2 = 455.22, df = 254, χ^2/df = 2.03, GFI = 0.902, AGFI = 0.875, CFI = 0.952, NFI = 0.910, and RMSEA = 0.054. The adaptability indices were satisfactory. Additionally, the direct relations of DE to SCI and PKS to SCI became insignificant in the partial mediation model. Therefore, the full mediation model is best suited to the study,

and path analysis of structural model confirmed the full mediation of ASC between DE and SCI and PKS and SCI (see Table 5).

Further to strengthen the results, mediation analysis was again checked by adopting the bootstrap procedure using structural equation modeling (SEM), which also helps in overcoming the certain key problem associated with Baron and Kenny (1986) approach (unable to explain and provide a statistical test for the indirect effect caused by

TABLE 5 Path analysis of structural model

	Standardised path coefficients (*t*-value)		
	Direct effects model	**Full mediation model**	**Partial mediation model**
DE → SCI	0.10 (2.12*)		0.02 (.40)
PKS → SCI	0.14 (2.44*)		0.06 (1.11)
SB → SCI	0.19 (3.67***)	0.14 (2.61**)	0.15 (2.81**)
PBC → SCI	0.17 (2.01*)	0.22 (2.78**)	0.17 (2.04*)
SN → SCI	0.47 (5.61***)	0.40 (5.07***)	0.43 (5.04***)
DE → ASC		0.44 (6.53***)	0.44 (6.59***)
PKS → ASC		0.30 (4.53***)	0.30 (4.53***)
ASC → SCI		0.34 (7.13***)	0.32(5.26***)

Abbreviations: DE, drive for environmental responsibility; PBC, perceived behavioural control; PKS, perceived knowledge towards sustainability issues; SB, supportive behaviour towards environmental organisations; SCI, sustainable consumption intention; SN, subjective norm.
***p < .001;; **p < .01;; *p < .05

independent variables on dependent variables through proposed mediating variables) and Sobel test for mediation (undefined assumption of normality in cases of small samples and possibility of a Type I error; Shrout & Bolger, 2002; Preacher & Hayes, 2004).

Instead of determining the mediation effect through ordinary least squares through SPSS, SEM is used in Amos using maximum likelihood estimation to examine the magnitude and direction of the direct and indirect effect that one variable has on another, in accordance to the hypotheses. In a bootstrap method, random sampling using replacement procedure is used to create 1,000 samples from the original data set (Shrout & Bolger, 2002). The next SEM model was tested using these bootstrapped procedures to produce 1,000 estimates of each path coefficient. The further indirect effect of predictor variable is estimated through the output from 1,000 estimates of each path coefficient. Results obtained through bootstrapping mediation analysis indicate that consumer ASC mediates all the relationships existing between predictor variables (PKS and DER), and consumer SCI as the indirect effect of all the hypothesised paths are significant.

5 | DISCUSSION

As depicted in the direct effect model, supportive behaviour towards environmental organisations positively predicted SCI of young consumers (H1, ß = .19). This result is complemented by the findings of Lee (2014) who also observed similar results. Therefore, findings specify that past sustainable behaviour has an effect on consumers' intention to adopt sustainable consumption behaviour. Based on their experience from previous sustainable activities, they develop a sense of accountability and social responsibility that encourages them to adopt such behaviour in the present.

Further, consumer ASC was found to positively predict SCI (H2, ß = .34). These findings complement previous findings on sustainable consumption (Moon et al., 2018; Yadav & Pathak, 2017.). This finding implies that an individual's ASC is shaped through the individual's cognitive assessment of the significance of sustainable consumption

practices (Chan, 2001). While displaying sustainable consumption behaviour, people are in all likelihood going to make subjective judgement (Joshi & Rahman, 2017).

Consumers' PKS appeared as a significant predictor of SCI (H3, ß = .14), thereby supporting Hypothesis 3. Although Hypothesis 3 was proven to be true, results showed that knowledge of sustainability issues had a weak impact on consumer SCI. This finding appears to validate the findings of previous studies that stated similar results (e.g. Kanchanapibul et al., 2014). The finding implies that although consumers may possess basic environmental knowledge relevant to daily life, they might not necessarily have solutions to ecological problems; inadequate awareness of sustainability problems hinders sustainable consumption practices of people.

Further, it was found that ASC mediates the relationship between PKS and SCI. This finding validates the results obtained by previous studies (e.g., Ramayah, Lee, & Lim, 2012). Thus, adequate knowledge is supposed to have a positive influence on the attitude, which further affects consumers' SCI.

Perceived behavioural control has a positive influence on SCI (H6, ß = .17). This finding supports results obtained by previous studies that found PBC to be a key determinant of various forms of SCI (e.g. Wang et al., 2014).

Further, it was found that ASC mediates the relationship between DE and SCI. Findings suggest that consumers that are internally driven towards environmental protection and believe that environmental issues are threatening our well-being and need to be dealt with urgently develop favourable feelings towards the idea of sustainable consumption. This is in agreement with previous studies (Kumar & Ghodeswar, 2015).

Subjective norm was observed to have a positive influence on SCI (H10, ß = .47). This result can be enlightened on the basis of consumer socialisation theory which described that social surrounding has a significant effect on youngster's choice of consumption practices (John, 1999).

The findings of this study are similar to some of the studies in the developed countries who have found TPB a strong theoretical framework for examining the consumer's SCI (Chi, Gerard, Dephillips, Liu, &

Sun, 2019; Judge, Warren-Myers, & Paladino, 2019). However the strong impact of subjective norm might be attributed to the Indian collectivistic culture. Being a collectivist culture, the individuals are highly impacted by subjective norms and therefore show values and behaviour affirmative to their social groups (Sinha, Sinha, Verma, & Sinha, 2001; Triandis, 1995). Further, the results of the studies are also similar to some of the studies in the developed countries who have found past sustainable behaviour as an important determinant of consumers' future sustainable intention and behaviour (e.g., Koklic et al., 2019).

Findings of this study provide marketers and policy makers opportunities to consider crucial determinates of SCI in their marketing and policy decisions. This is of specific significance in regard to sustainable consumption as ecological issues will probably become more serious in the future (Wang et al., 2014).

These implications can be extended to other young consumer segments as previous studies have suggested that the young consumer segment is a relatively more homogeneous group and possess uniform consumption habits (Kjeldgaard & Askegaard, 2004). However, these findings cannot be extended to other age groups because young buyers differ from elderly people in thinking, habit, and attitude (Joshi & Rahman, 2017)

6 | IMPLICATIONS

Findings of the study have major theoretical and managerial implications. The current study establishes SCI as an outcome of supportive behaviour towards environmental organisations and confirms a reciprocal determinism theory-based behaviour–behaviour mechanism.

Further, the study highlights the role of ASC as a mediator between: (a) DE and SCI; and (b) PKS and SCI.

The findings of this study contradict previous theories and research that proposed behaviour as merely the outcome of situational and individual variables. The present study suggests that sustainable consumption practices can be fostered by involving people in sustainable consumption activities, for example, reusing and recycling of products, planting of trees, and so forth. These activities may give participants a feeling of involvement with nature and sustainable behaviour; they may become more committed to showing ecologically or socially responsible behaviour through emotional and rational involvement.

Findings reveal that for young educated consumers, there exists a favourable relationship between ASC and SCI, which supports the sustainable attitude–behaviour relationship suggested in several studies (Chan, 2001; Zhao et al., 2014). However, there are studies that have observed a poor or non-significant relationship between ecological attitude and behaviour. This might be attributable to the presence of various factors (such as eco-labelling and price) that intervene in this attitude–behaviour relationship. This discrepancy between results may be settled by recognising the basic factors that encourage or hinder the environmental attitude–behaviour relationship. In order to promote sustainable consumption, marketers could opt to influence

consumer ASC. Social influence as another major determinant of sustainable consumption behaviour suggests that a potentially successful way to promote SCI could be to reinforce the social norm advocating sustainable consumption behaviour.

Further, this study bridges the gap that exists due to lack of research on the impact of DE on young consumers' SCI. (Lee, 2014) by establishing a positive association between the two. DE and sustainability knowledge were found to play a vital role in framing SCI. For this reason, marketing experts for environmentally sustainable products should communicate that by adopting sustainable consumption practices, individuals can satisfy their commitments and duties towards nature. Techniques that make individuals realise their environmental responsibilities and that such responsibilities could be fulfilled by purchasing sustainable products would play a vital role in converting consumers' DE into sustainable consumption choices.

The significant positive impact of PBC on consumers' SCI suggests that those with greater confidence about performing sustainable consumption activities would most likely exhibit such behaviour. To increase consumers' perceived control to purchase sustainable products, marketers may provide more information on ecological issues. In order to strengthen the PBC, clear communications should be ensured to make individuals trust that their role is important to fight against social and environmental issues.

7 | CONCLUSIONS

The unique contribution of this study that highlights its originality value is the fact that the study establishes supportive behaviour towards environmental organisations and DE as a predictor of future SCI of consumers. It was found that SCI in young Indian consumers is a combined function of their sociocultural factors (subjective norm), individual variables (ASC, consumers' perceived knowledge of sustainability issues, PBC, and DE), and past sustainable behaviour (supportive behaviour towards environmental organisations). Results are largely similar to previous studies conducted in other countries (e.g., Lee, 2014).

Findings of this study show the insightful rigour of the extended TPB in explaining consumers' SCI. Influence of all considered factors assumes importance in shaping consumers' SCI. The results of the study guide us to believe that policymakers and practitioners can use different approaches to develop people's SCI. This study is thus successful in providing an applicable model to determine SCI of Indian consumers.

Like any other research, this study also has certain limitations. The study uses self-respond surveys to collect data, which may cause social responsibility bias. To lessen this possibility, measurement items were taken from various sources. Respondents were told that there was no right or wrong response. Participants were also requested to fill the survey instruments by themselves and not copy answers. Findings are applicable to young consumers only and cannot be generalised to other age groups because young buyers differ from elderly people in thinking, habit, and attitude. Future studies can collect data

from other age groups. Studies can also investigate the impact of different social groups (parents or friends, environmental activists, etc.) on consumers' sustainable consumption practices. The influence of other factors (such as eco-label, green-brand, store environment, etc.) on sustainable consumption may also be explored.

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REFERENCES

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11–39). Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-69746-3_2

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. https://doi.org/10.1037/0033-2909.103.3.411

Armitage, C. J., Armitage, C. J., Conner, M., Loach, J., & Willetts, D. (1999). Different perceptions of control: Applying an extended theory of planned behavior to legal and illegal drug use. *Basic and Applied Social Psychology*, *21*(4), 301–316. https://doi.org/10.1207/S15324834BASP2104_4

Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behaviour. *Appetite*, *50*(2–3), 443–454. https://doi.org/10.1016/j.appet.2007.09.010

Bagozzi, R. P., & Heatherton, T. F. (1994). A general approach to representing multifaceted personality constructs: Application to state self-esteem. *Structural Equation Modeling: A Multidisciplinary Journal*, *1*(1), 35–67. https://doi.org/10.1080/10705519409539961

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Black, I. (2010). Sustainability through anti-consumption. *Journal of Consumer Behavior*, *9*, 403–411. https://doi.org/10.1002/cb.340

Burns, A. C., & Bush, R. F. (2006). *Marketing research*. Upper Saddle River, NJ: Prentice Hall.

Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & Marketing*, *18*(4), 389–413. https://doi.org/10.1002/mar.1013

Chaudhary, R., & Bisai, S. (2018). Factors influencing green purchase behavior of millennials in India. *Management of Environmental Quality: An International Journal*, *29*(5), 798–812. https://doi.org/10.1108/MEQ-02-2018-0023

Cheah, I., & Phau, I. (2011). Attitudes towards environmentally friendly products: The influence of ecoliteracy, interpersonal influence and value orientation. *Marketing Intelligence & Planning*, *29*(5), 452–472. https://doi.org/10.1108/02634501111153674

Chi, T., Gerard, J., Dephillips, A., Liu, H., & Sun, J. (2019). Why US consumers buy sustainable cotton made collegiate apparel? A study of the key determinants. *Sustainability*, *11*(11), 3126. https://doi.org/10.3390/su11113126

Chuvieco, E., Burgui-Burgui, M., Da Silva, E. V., Hussein, K., & Alkaabi, K. (2018). Factors affecting environmental sustainability habits of university students: Intercomparison analysis in three countries (Spain, Brazil and UAE). *Journal of Cleaner Production*, *198*, 1372–1380. https://doi.org/10.1016/j.jclepro.2018.07.121

Connell, K. Y. H. (2010). Internal and external barriers to eco-conscious apparel acquisition. *International Journal of Consumer Studies*, *34*(3), 279–286. https://doi.org/10.1111/j.1470-6431.2010.00865.x

Das, S., & Kini, S. S. (2018). Children's entertainment television in India: The changing scenario and the Indian child. *Interactions: Studies in Communication & Culture*, *9*(3), 335–352.

Davis, J. J. (1995). The effects of message framing on response to environmental communications'. *Journalism and Mass Communication Quarterly*, *72*(3), 285–299. https://doi.org/10.1177/107769909507200203

De Carvalho, B. L., de Fátima, S. M., & Rita, P. (2015). Consumer sustainability consciousness: A five dimensional construct. *Ecological Indicators*, *58*, 402–410. https://doi.org/10.1016/j.ecolind.2015.05.053

DelVecchio, D. (2000). Moving beyond fit: The role of brand portfolio characteristics in consumer evaluations of brand reliability. *Journal of Product and Brand Management*, *9*(7), 457–471. https://doi.org/10.1108/10610420010351411

Ellen, P., Eroglu, D., & Webb, D. (1997). Consumer judgments in a changing information environment: How consumers respond to 'green marketing' claims. *Georgia State University*.

Eze, U. C., & Ndubisi, N. O. (2013). Green buyer behavior: Evidence from Asia consumers. *Journal of Asian and African Studies*, *48*(4), 413–426. https://doi.org/10.1177/0021909613493602

Fishbein, M., & Ajzen, I. (2005). Theory-based behavior change interventions: Comments on Hobbis and Sutton. *Journal of Health Psychology*, *10*(1), 27–31. https://doi.org/10.1177/1359105305048552

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Frick, J., Kaiser, F. G., & Wilson, M. (2006). Environmental knowledge and conservation behavior: Exploring prevalence and structure in a representative sample. *Personality and Individual Differences*, *37*(8), 1597–1613.

Gilg, A., Barr, S., & Ford, N. (2005). Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures*, *37*(6), 481–504. https://doi.org/10.1016/j.futures.2004.10.016

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Prentice Hall, Upper Saddle River, NJ: Pearson.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, *45*(5), 616–632. https://doi.org/10.1007/s11747-017-0517-x

He, H. Z., & Kua, H. W. (2013). Lessons for integrated household energy conservation policy from Singapore's southwest Eco-living Program. *Energy Policy*, *55*, 105–116. https://doi.org/10.1016/j.enpol.2012.10.067

Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *The Journal of Environmental Education*, *18*(2), 1–8. https://doi.org/10.1080/00958964.1987.9943482

John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, *26*(3), 183–213. https://doi.org/10.1086/209559

Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, *3*(1), 128–143. https://doi.org/10.1016/j.ism.2015.04.001

Joshi, Y., & Rahman, Z. (2016). Predictors of young consumer's green purchase behaviour. *Management of Environmental Quality: An International Journal*, *27*(4), 452–472. https://doi.org/10.1108/MEQ-05-2015-0091

Joshi, Y., & Rahman, Z. (2017). Investigating the determinants of consumers' sustainable purchase behaviour. *Sustainable Production and*

Consumption, 10, 110–120. https://doi.org/10.1016/j.spc.2017.02.002

Judge, M., Warren-Myers, G., & Paladino, A. (2019). Using the theory of planned behaviour to predict intentions to purchase sustainable housing. *Journal of Cleaner Production*, 215, 259–267. https://doi.org/10.1016/j.jclepro.2019.01.029

Kaiser, G. F., Wölfing, S., & Fuhrer, U. (1999). Environmental attitude and ecological behavior. *Journal of Environmental Psychology*, 19(1), 1–19. https://doi.org/10.1006/jevp.1998.0107

Kanchanapibul, M., Lacka, E., Wang, X., & Chan, H. K. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528–536. https://doi.org/10.1016/j.jclepro.2013.10.062

Khare, A. (2015). Antecedents to green buying behaviour: A study on consumers in an emerging economy. *Marketing Intelligence & Planning*, 33(3), 309–329. https://doi.org/10.1108/MIP-05-2014-0083

Kim, Y., & Han, H. (2010). Intention to pay conventional-hotel prices at a green hotel—A modification of the theory of planned behavior. *Journal of Sustainable Tourism*, 18(8), 997–1014. https://doi.org/10.1080/09669582.2010.490300

Kjeldgaard, D., & Askegaard, S. (2004). Consuming modernities: The global youth segment as a site of consumption. *NA-Advances in Consumer Research*, 31, 104–105.

Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.

Koklic, M. K., Golob, U., Podnar, K., & Zabkar, V. (2019). The interplay of past consumption, attitudes and personal norms in organic food buying. *Appetite*, 137, 27–34. https://doi.org/10.1016/j.appet.2019.02.010

Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior. *Environmental Education Research*, 8(3), 239–260. https://doi.org/10.1080/13504620220145401

Kua, H. W., & Wong, S. E. (2012). Lessons for integrated household energy conservation policies from an intervention study in Singapore. *Energy Policy*, 47, 49–56. https://doi.org/10.1016/j.enpol.2012.04.009

Kuenzel, J., & Musters, P. (2007). Social interaction and low involvement products. *Journal of Business Research*, 60(8), 876–883. https://doi.org/10.1016/j.jbusres.2007.02.008

Kumar, P., & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence & Planning*, 33(3), 330–347. https://doi.org/10.1108/MIP-03-2014-0068

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503–520. https://doi.org/10.1108/EUM0000000006155

Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence & Planning*, 26(6), 573–586. https://doi.org/10.1108/02634500810902839

Lee, K. (2010). The green purchase behavior of Hong Kong young consumers: The role of peer influence, local environmental involvement, and concrete environmental knowledge. *Journal of International Consumer Marketing*, 23(1), 21–44. https://doi.org/10.1080/08961530.2011.524575

Lee, K. (2014). Predictors of sustainable consumption among young educated consumers in Hong Kong. *Journal of International Consumer Marketing*, 26(3), 217–238. https://doi.org/10.1080/08961530.2014.900249

Liobikienė, G., Grincevičienė, Š., & Bernatonienė, J. (2017). Environmentally friendly behaviour and green purchase in Austria and Lithuania. *Journal of Cleaner Production*, 142, 3789–3797. https://doi.org/10.1016/j.jclepro.2016.10.084

Moon, M. A., Javaid, B., Kiran, M., Awan, H. M., & Farooq, A. (2018). Consumer perceptions of counterfeit clothing and apparel products attributes. *Marketing Intelligence & Planning*, 36(7), 794–808. https://doi.org/10.1108/MIP-11-2017-0272

Mostafa, M. M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology & Marketing*, 24(5), 445–473. https://doi.org/10.1002/mar.20168

Phipps, M., Ozanne, L. K., Luchs, M. G., Subrahmanyan, S., Kapitan, S., Catlin, J. R., … Weaver, T. (2013). Understanding the inherent complexity of sustainable consumption: A social cognitive framework. *Journal of Business Research*, 66(8), 1227–1234. https://doi.org/10.1016/j.jbusres.2012.08.016

Pickett-Baker, J., & Ozaki, R. (2008). Pro-environmental products: marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, 25(5), 281–293. https://doi.org/10.1108/07363760810890516

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. https://doi.org/10.1146/annurev-psych-120710-100452

Ponnapureddy, S., Priskin, J., Ohnmacht, T., Vinzenz, F., & Wirth, W. (2017). The influence of trust perceptions on German tourists' intention to book a sustainable hotel: A new approach to analysing marketing information. *Journal of Sustainable Tourism*, 25(7), 970–988.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731. https://doi.org/10.3758/BF03206553

Ramayah, T., Lee, J. W. C., & Lim, S. (2012). Sustaining the environment through recycling: An empirical study. *Journal of Environmental Management*, 102, 141–147. https://doi.org/10.1016/j.jenvman.2012.02.025

Sharma, R., & Jha, M. (2017). Values influencing sustainable consumption behaviour: Exploring the contextual relationship. *Journal of Business Research*, 76, 77–88. https://doi.org/10.1016/j.jbusres.2017.03.010

Shaw, D., & Moraes, C. (2009). Voluntary simplicity: An exploration of market interactions. *International Journal of Consumer Studies*, 33(2), 215–223.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: new procedures and recommendations. *Psychological Methods*, 7(4), 422–445. https://doi.org/10.1037/1082-989X.7.4.422

Sinha, J. B. P., Sinha, T. N., Verma, J., & Sinha, R. B. N. (2001). Collectivism coexisting with individualism: An Indian scenario. *Asian Journal of Social Psychology*, 4(2), 133–145. https://doi.org/10.1111/j.1467-839X.2001.00081.x

Stobbelaar, D. J., Casimir, G., Borghuis, J., Marks, I., Meijer, L., & Zebeda, S. (2007). Adolescents' attitudes towards organic food: a survey of 15-to 16-year old school children. *International Journal of Consumer Studies*, 31(4), 349–356. https://doi.org/10.1111/j.1470-6431.2006.00560.x

Tanner, C., & Wölfing Kast, S. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology & Marketing*, 20(10), 883–902. https://doi.org/10.1002/mar.10101

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.

Tseng, S. C., & Hung, S. W. (2013). A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production*, 59, 174–184. https://doi.org/10.1016/j.jclepro.2013.06.050

Tuncer, G., Ertepinar, H., Tekkaya, C., & Sungur, S. (2005). Environmental attitudes of young people in Turkey: Effects of school type and gender. *Environmental Education Research*, 11(2), 215–233. https://doi.org/10.1080/1350462042000338379

Uddin, S. F., & Khan, M. N. (2016). Exploring green purchasing behaviour of young urban consumers: Empirical evidences from India. *South Asian Journal of Global Business Research*, 5(1), 85–103.

Ulusoy, E. (2016). Experiential responsible consumption. *Journal of Business Research*, 69(1), 284–297. https://doi.org/10.1016/j.jbusres.2015.07.041

Wan, C., Cheung, R., & Shen, G. Q. (2012). Recycling attitude and behaviour in university campus: A case study in Hong Kong. *Facilities*, *30* (13/14), 630–646.

Wang, P., Liu, Q., & Qi, Y. (2014). Factors influencing sustainable consumption behaviors: A survey of the rural residents in China. *Journal of Cleaner Production*, *63*, 152–165. https://doi.org/10.1016/j.jclepro.2013.05.007

White Baker, E., Al-Gahtani, S. S., & Hubona, G. S. (2007). The effects of gender and age on new technology implementation in a developing country: Testing the theory of planned behavior (TPB). *Information Technology & People*, *20*(4), 352–375. https://doi.org/10.1108/09593840710839798

Wiederhold, M., & Martinez, L. F. (2018). Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. *International Journal of Consumer Studies*, *42*(4), 419–429.

Wolsink, M. (2007). Wind power implementation: The nature of public attitudes: equity and fairness instead of 'backyard motives'. *Renewable and Sustainable Energy Reviews*, *11*(6), 1188–1207. https://doi.org/10.1016/j.rser.2005.10.005

Wu, J., Zeng, M., & Xie, K. L. (2017). Chinese travelers' behavioral intentions toward room-sharing platforms: The influence of motivations, perceived trust, and past experience. *International Journal of Contemporary Hospitality Management*, *29*(10), 2688–2707. https://doi.org/10.1108/IJCHM-08-2016-0481

Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, *96*, 122–128. https://doi.org/10.1016/j.appet.2015.09.017

Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*, *134*, 114–122. https://doi.org/10.1016/j.ecolecon.2016.12.019

Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., Zhu, X., & D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, *63*, 143–151. https://doi.org/10.1016/j.jclepro.2013.05.021

Zuraidah, R., Hashima, H., Yahya, K., & Mohamad, S. (2012). Environmental conscious behaviour among male and female Malaysian consumers. *OIDA International Journal of Sustainable Development*, *4*(8), 55–64.

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APPENDIX

A.1. | MEASUREMENT ITEMS

Constructs and scale items	Sources
Perceived knowledge towards sustainability issues (PKS) PKS 1: I know I buy products and packages that are environmentally safe. PKS 2: I know more about recycling than the average person. PKS 3: I know how to select products and packages that reduce the amount of waste ending up in landfills. PKS 4: I understand the environmental phrases and symbols on the product package. PKS 5: I am very knowledgeable about environmental and social issues.	Ellen et al. (1997)
Attitude towards sustainable consumption (ASC) ASC 1: I like the idea of sustainable consumption. ASC 2: Sustainable consumption is a good idea. ASC 3: I have a favourable attitude towards purchasing a sustainable version of a product.	Chan (2001)
Subjective norm (SN) SN 1: People who are important to me think I should purchase sustainable products. SN 2: People who are important to me would approve my adoption of sustainable consumption practices. SN 3: People who are important to me want me to adopt a sustainable consumption lifestyle.	Armitage et al. (1999)
Sustainable consumption intention (SCI) SCI 1: In future, I will consider adopting a sustainable consumption lifestyle. SCI 2: In future, I will consider switching to other brands for ecological reasons. SCI 3: In future, I plan to switch to a sustainable version of a product.	Chan (2001)
Perceived behavioural control (PBC) PBC 1: Whether or not I buy sustainable products in place of conventional unsustainable products is completely up to me. PBC 2: I have resources, time, and opportunities to go for sustainable consumption practices. PBC 3: I am confident that if I want, I can go for sustainable consumption practices instead of conventional unsustainable practices.	Kim and Han (2010)
Drive for environmental responsibility (DER) DER 1: Supporting environmental protection makes me feel like an environmentally responsible person. DER 2: I should be responsible for protecting our environment. DER 3: Environmental protection starts with me. DER 4: I would say I am emotionally involved in environmental protection issues. DER 5: Supporting environmental protection makes me special.	Kumar and Ghodeswar (2015)
Supportive behaviour for environmental organisations (SB) SB 1: How often do you serve as a volunteer helper in an environmental organisation? SB 2: How often do you join an activity that is organised by an environmental organisation?	Lee (2014)