Purpose – This study aims to explore the effect of eco-labels on green product purchase intention among consumers of electrical/electronic products in an emerging market context.

Design/methodology/approach – This study adopted an extended theory of planned behaviour to assess the effects of eco-labels. To measure the key constructs, scales pertaining to the relevant literature were used to design a structured questionnaire for empirical examination. A final data set of 680 consumers was analysed using structured equation modelling.

Findings – The results indicate that eco-labels significantly impact perceived behavioural control, attitude, subjective norms and consumers’ willingness to pay higher prices for environmentally friendly green products.

Practical implications – The findings not only complement research on green consumerism but also serve as an important direction for socially responsible marketers who aim to play an important role in propagating pro-social consumption among emerging cohorts of consumers. The importance of eco-labelling as an effective marketing tool is highlighted, with valuable insights for future research and practices pertaining to emerging consumer markets.

Originality/value – This study fills a void in contemporary research by examining consumers of electrical/electronic products that typically involve long-term usage, with potentially greater environmental footprints.

Keywords Eco-labels, Green product, Theory of planned behaviour, Emerging markets, Purchase intention

Paper type Research paper

1. Introduction
Eco-labelled products are widely accepted as environmentally friendly products that protect the environment. Eco-labelled products can be defined as products “that help to bridge the buyer-seller knowledge gap by highlighting their environmental friendliness” (Nguyen and Le, 2020). In marketing, eco-labels provide information cues that reduce the information gap between marketers and consumers to support consumption decisions (Taufique et al., 2017; Göçer and Oflaç, 2017). Therefore, eco-labels act as a seal of trust or credentials that benefits
manufacturing organisations in managing good public relations with customers, the government and other stakeholders (Lee et al., 2019; Horne, 2009).

Eco-labelling, as a voluntary practice of certifying the environmental performance of products/services, started with the launch of Blue Angel labelling by the German federal government in the late 1970s (Horne, 2009). Thereafter, nations launched various eco-labelling schemes worldwide. In 1991, the Government of India launched its first eco-label scheme, “Eco-mark”, issued by the Bureau of Indian Standards to mark products that conformed to the standards of most negligible adverse environmental impact. By 2022, 32 eco-labels had been operational in India across 13 identified categories, including food, paper, cosmetics, textiles and consumer durables. Eco-labelling ensures that the manufacturer’s environmental practices are streamlined according to the criteria set by the labelling authority (Lee et al., 2019).

A comprehensive understanding of the existing research on green product purchase reveals interesting research gaps. Firstly, research on consumer behaviour specific to eco-labelled products (Cai et al., 2017; Galati et al., 2021) is much less compared to those on generic green consumption behaviour (Wang et al., 2020; Budovska et al., 2020). Sharma et al. (2019) emphasised the difficulties that green consumers experience when attempting to purchase environmentally friendly products, including a lack of information availability, a lengthy procedure and greenwashing of environmentally friendly products. Moreover, researchers studying eco-labelled product choices have mostly concentrated on understanding consumption related to categories like food products (Galati et al., 2021; Giannoccaro et al., 2019). Secondly, consumers’ eco-labelling awareness, adoption and understanding vary significantly across markets (Darnall and Aragón-Correa, 2014). However, majority of research in the domain studied developed markets such as Italy, Spain and Germany (Galati et al., 2021; Moser, 2016; Testa et al., 2015) as opposed to very few in emerging markets (Nguyen and Le, 2020; Waris and Ahmed, 2020).

In view of the evidential gap in the scope of current studies dealing with consumption of eco-labelled products – studies concentrating on specific categories with long-term environmental implications like eco-labelled energy-saving household appliances will score as an important contribution (Tangari and Smith, 2012; Sonnenberg et al., 2011). The visible information of certified eco-labelled products signals a green product’s quality and environmental friendliness, which can foster pro-social behaviour among consumers amidst rising concerns about societal well-being (Tewari et al., 2022; Goçer and Oflaç, 2017). Although consumers may not fully understand the importance of eco-labels, research shows that environmentally friendly claims of green products are enhanced by eco-labels that lend considerable trust and transparency about the product to consumers (Nguyen and Le, 2020). Also, literature on green consumption suggests that consumers’ concerns for environmental well-being play a significant role in the adoption of green products (Lacroix, 2018; Lange and Dewitte, 2019; Verma and Chandra, 2018) in the wake of rising awareness and knowledge of environmental safety in emerging markets (Yin et al., 2022; Verma and Chandra, 2018). Motivations guiding eco-labelled product choices can emanate from consumers’ cognitive and affective dispositions (Prieto-Sandoval et al., 2016). Self-motivation towards green products, concern for the environment (Cai et al., 2017) and health and food safety have been cited as the primary reasons for purchasing eco-labelled products (Yin et al., 2022). Understanding the role of eco-labels as a trigger for green consumerism will serve with essential insights for marketers and policymakers in emerging markets as they repurpose business strategies that would also help propagate sustainable consumption practices.
Hence, a comprehensive understanding of the effects of eco-labelled products by applying strong theoretical principles is imperative. This study aims to empirically explore India’s highly populated market. Given India’s considerable consumer base and green product market expansion opportunities, these insights are important in formulating a roadmap for sustainable marketing practices. Therefore, in light of the global consensus on greening and environmental safety concerns faced by businesses worldwide (Lange and Dewitte, 2019; Carfora et al., 2017), this study aimed to answer the following research questions:

RQ1. How are eco-labels associated with the theory of planned behaviour (TPB) factors in determining green product purchase intentions among emerging market consumers?

RQ2. What is the relationship between TPB factors and willingness to pay a higher price for green products?

RQ3. Do consumer demographics (gender, age and education) play a significant role in the purchase intentions of emerging market consumers?

The remainder of this paper is organised as follows. Section 2 presents the theoretical background of the study and proposes a conceptual framework for the empirical analysis. Sections 3 and 4 describe the research methodology and the results of the empirical study, respectively. In Section 5, the key findings are discussed, and their implications are presented in Section 6. Finally, the limitations and future scope of this study are presented in Section 7.

2. Theoretical background and hypothesis development

2.1 Theory of planned behaviour in green product purchase intention

Researchers studying purchase intention for green products in developed as well as developing markets have tried to understand specific aspects of environmentally conscious buying behaviour across categories like hospitality services, food, cosmetics and apparel (Tewari et al., 2022; Yin et al., 2022). Studies in the Indian context have mostly considered green products as a broad category (Shukla, 2019; Yadav and Pathak, 2017) without making any distinction between eco-labelled green products from their generic counterparts. Because of the growing number of consumers in India, researchers have attempted to understand the determinants of and barriers to green product purchase intention (Ghose and Chandra, 2020). Nevertheless, irrespective of market or product category, researchers have frequently used extended TPB models to explain green product purchasing (Wang et al., 2020; Budovska et al., 2020; Wong et al., 2018; Shukla, 2019), as summarised in Table 1.

2.2 Eco-labels and perceived behavioural control

Eco-label information is a symbol of the environmental friendliness of a green product and is often used by marketers to attract consumers (Peschel et al., 2019). The significance of eco-labelled products has received extensive attention from several studies in the field of marketing (Waris and Ahmed, 2020; Waris et al., 2021). Eco-label-certified products can fill the information gap between buyers and sellers by communicating messages about the environmental friendliness of the products (Nguyen and Le, 2020). The positive effects of eco-labelled products stimulate green product purchasing (Taufique et al., 2017) because eco-labels effectively enhance consumers’ perceived behavioural control in the context of several markets (Testa et al., 2015). Therefore, we propose the following:
<table>
<thead>
<tr>
<th>#</th>
<th>Author(s), Year</th>
<th>Research objective</th>
<th>Tool of analysis</th>
<th>Sample</th>
<th>Major findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wang et al. (2020)</td>
<td>Examine the relationship between demographic variables, green purchase attitudes and green behavioural intention towards green hotel selection using TPB</td>
<td>Regression and descriptive analysis</td>
<td>China (659 respondents)</td>
<td>Age and income have a significant impact on green purchase attitudes. Education and income have a significant impact on green behavioural intention. Gender differences in green purchase attitudes and behavioural intention were found</td>
</tr>
<tr>
<td>2</td>
<td>Budovska et al. (2020)</td>
<td>Examine hotel guests’ environment-friendly behaviour using TPB model and past behaviour on towel reuse</td>
<td>Structured equation modelling</td>
<td>Norway (438 respondents)</td>
<td>Intention to reuse towels is influenced by attitude, subjective norms and perceived behaviour control. Past behaviour also has a direct effect on behavioural intention</td>
</tr>
<tr>
<td>3</td>
<td>Nimri et al. (2020)</td>
<td>Examine consumers’ behaviour regarding green hotels using the extended model of TPB</td>
<td>Structured equation modelling</td>
<td>Australia (781 respondents)</td>
<td>Attitude, perceived behavioural control, past experience and subjective injective norms are the key antecedents affecting green hotel booking</td>
</tr>
<tr>
<td>4</td>
<td>Shukla (2019)</td>
<td>Examine millennial purchase intention of green products using extended TPB model</td>
<td>Structured equation modelling</td>
<td>India (423 respondents)</td>
<td>Perceived environmental responsibility is the most vital determinant, and ecological concern positively influences green product purchase intention</td>
</tr>
<tr>
<td>5</td>
<td>Wong et al. (2018)</td>
<td>Develop an extended model of TPB adding environmental concern and sensory appeal to examine the consumer’s purchase intention</td>
<td>Structured equation modelling</td>
<td>Taiwan (539 respondents)</td>
<td>Attitude is the main predictor of purchase intention. Perceived behavioural control and subjective norms were not significant predictors. Sensory appeal and environmental concern influenced purchase intention positively</td>
</tr>
<tr>
<td>6</td>
<td>Ko and Jin (2017)</td>
<td>Examine green apparel purchase intention using TPB model</td>
<td>Structured equation modelling</td>
<td>USA and China (437 respondents)</td>
<td>Environmental knowledge increases green product purchase intention. Among the TPB constructs, subjective norms are the best, and attitude is the least influencing factor for purchase intention in USA and China</td>
</tr>
<tr>
<td>7</td>
<td>Nguyen et al. (2017)</td>
<td>Develop a model adding cultural values and long-term orientation using TPB to predict green purchase behaviour</td>
<td>Structured equation modelling</td>
<td>Vietnam (682 respondents)</td>
<td>Cultural values and long-term orientation enhance environmental attitude. Subjective norms accentuate green product purchase intention even more significantly than environmental attitude</td>
</tr>
<tr>
<td>8</td>
<td>Yadav and Pathak (2017)</td>
<td>Examine green purchase intention with an extended model of TPB, adding willingness to pay and perceived value as variables</td>
<td>Structured equation modelling</td>
<td>India (620 respondents)</td>
<td>TPB supported consumers’ intention to buy green products resulting in purchase behaviour. Perceived value had a significant positive influence while willingness to pay premium was not significant</td>
</tr>
<tr>
<td>9</td>
<td>Albayrak et al. (2013)</td>
<td>Examine the impact of environmental concern and skepticism on green purchase behaviour using TPB</td>
<td>Regression</td>
<td>Turkey (1,400 respondents)</td>
<td>E-invoice customers are more environmentally conscious and less skeptical with a strong attitude, subjective norms and perceived behavioural control than non-subscribers of the e-invoice</td>
</tr>
</tbody>
</table>

Source: Created by author
2.3 Eco-labels and attitude

Eco-labels, as an element of product-related information stimuli on the package of a green product, play a crucial role in determining consumers’ positive attitudes and forming conscious-subconscious perception before trial or adoption of a green product (Thøgersen et al., 2010). The presence of an eco-label denotes the environmental friendliness of a product. Research investigating the role of eco-labels as credible sources of pro-environmental information for different categories of green products provides sound evidence of their positive effects on consumer attitudes and subsequent purchase intentions (Ghose and Chandra, 2020; Nguyen and Le, 2020). Recent studies show that consumers’ knowledge of eco-labels will positively influence consumers’ attitudes towards energy-efficient home appliances (Waris et al., 2021; Waris and Ahmed, 2020). Considering the importance of eco-labels across markets, we propose the following hypothesis:

**H2.** Eco-labels and attitude have a significant and positive relationship.

2.4 Eco-labels and willingness to pay the higher price

Eco-labels symbolise the standardisation of a product that triggers progressive cognitive values in consumers who are willing to pay a higher price for eco-labelled products (Prieto-Sandoval et al., 2016). Eco-labels are often used as a marketing strategy to help marketers command a higher price for high-quality products (Janssen and Hamm, 2012; De Chiara, 2016). The literature presents studies in a different category of green products that explore consumers’ willingness to pay premium prices for products ranging from organic food products (Wägeli et al., 2016) to olive oil (Giannoccaro et al., 2019). Studies also support that consumers in developed and developing countries wish to pay higher prices for eco-labelled products or green products (Tully and Winer, 2014; Lee et al., 2019). Based on these results, we propose the following hypothesis:

**H3.** Eco-labels and willingness to pay higher prices have a significant and positive relationship.

2.5 Eco-labels and subjective norms

Amidst growing environmental concerns, a substantial cohort of environmentally sensitive consumers have been noted. The use of green products is rapidly becoming a symbol of social status in modern consumption-driven societies (Kennedy and Horne, 2019). Literature indicates that social relationships create group belongingness in a nested cultural environment, and these groups must be in harmony (Song et al., 2018). In India, because of the highly embedded culture of matching ecological relationships, consumers’ adoption of eco-label products is gaining prominence (Tran and Paparoidamis, 2020). Some recent studies found consumers’ knowledge of eco-labels will positively influence subjective norms towards energy-efficient home appliances (Waris et al., 2021; Waris and Ahmed, 2020). Consumers’ motivation for green products also depends on their values, beliefs and ethics. For example, an earlier study found that electric cars manufactured in France were considered more eco-friendly than those manufactured in India (Tran and Paparoidamis, 2020). Therefore, we propose the following:
2.6 Eco-labels and green product purchase intention
Eco-labels are a marketing strategy that are used to provide information about environmentally friendly products (Waris et al., 2021; Waris and Ahmed, 2020). In green product purchase decisions and brand search, eco-labels serve as a reliable source of information for the consumers (Minoli et al., 2015). Marketers use eco-labels as a nonverbal platform for information communicators to induce positive evaluation of a product by consumers (Belanche et al., 2017). Knowledge of eco-labels bring the change in consumer behaviour towards green products. Different studies have shown that eco-labels significantly influence consumers’ purchase intentions in various countries (Waris et al., 2021; Waris and Ahmed, 2020; Lee et al., 2019). Thus, we propose the following:

H5. Eco-labels and green product purchase intention have a significant and positive relationship.

2.7 Perceived behaviour control and willingness to pay the higher price
PBC refers to an individual’s perception and control over paying a price premium for a product. Green product purchase decisions depend on consumers’ sense of control over paying higher prices. A higher price is the ratio of the costs to the benefits of the product. It is well researched that the product’s price influences the consumers’ product purchase decisions (Hsu et al., 2017; Yadav and Pathak, 2017; Moser, 2016). Because Indian consumers are susceptible to product prices (Yadav and Pathak, 2017), the perceived sense of control in paying a higher price for green products can lead to purchasing. Prakash and Pathak (2017) indicate that Indian consumers are willing to pay a higher price for green products if they perceive product features as benefits. Thus, we propose the following:

H6. Perceived behavioural control and willingness to pay a higher price have a significant and positive relationship.

2.8 Attitude and willingness to pay a higher price
A product’s eco-friendliness is the reason for changing consumer attitudes towards products and motivating factors for purchasing such products at a higher price (Hsu et al., 2017). Chekima et al. (2016) clarified that consumers’ positive attitudes towards the environment can result in willingness to pay a higher price for green products. However, contrasting findings in the Indian context have been put forth by a few researchers, who show that owing to the high price sensitivity of Indian consumers, willingness to pay higher prices may not always be the case always (Kumar and Kapoor, 2014). Interestingly, studies on young Indian consumers have confirmed their acceptance of high-priced green products (Prakash and Pathak, 2017). Although the findings and the literature fail to reach a consensus on any conclusive results, we propose the following:

H7. Attitude and willingness to pay higher prices have a significant and positive relationship.
2.9 Subjective norms and willingness to pay a higher price
Consumers’ willingness to pay a higher price for eco-friendly products is of paramount importance for marketers’ production of green products that involve higher investment (Gleim et al., 2013). Consumers’ social participation supports environmentally friendly buying decisions. Consumers’ willingness to pay a higher price for green products is an outcome of their environmental concern (Ajzen, 1991). When consumers do not possess favourable characteristics for green product purchase behaviour, customer participation can still play an essential role in influencing their purchase of higher-priced green items (Wei et al., 2018). Some studies have shown a negative correlation (Yadav and Pathak, 2017), while others have shown a positive correlation between willingness to pay higher prices and green product purchase intention (Kang et al., 2012; Chekima et al., 2016). Thus, we propose the following:

H8. Subjective norms and willingness to pay higher prices have a significant and positive relationship.

2.10 Perceived behaviour control and green product purchase intention
PBC is an amalgamation of an individual’s perceived power and belief. It has been discovered that the influence of perceived behavioural control on pro-environmental behaviour is considerable in energy conservation (Albayrak et al., 2013), as well as in household items such as soaps, toilet paper rolls, laundry detergents and dishwashing solutions (Arli et al., 2018). The purchase intention of eco-labelled products depends on individuals’ perceptions of their capacity to control the use of such products. A recent hospitality industry study found that PBC has a positive impact on intention to stay in green hotels (Nimri et al., 2020). Recent research on the purchase of energy efficient appliances shows that PBC has a favourable influence on customer purchasing intentions (Bhutto et al., 2020; Aslam et al., 2021). Ko and Jin (2017) suggested that individuals with strong confidence, skill and ability (high PBC) prefer to purchase green apparel products:

H9. Perceived behaviour control and purchase intention has a significant and positive relationship.

2.11 Attitude and green product purchase intention
The role of attitude in predicting green product purchase intention has been widely. Arli et al. (2018) and Ghazali et al. (2018) show that green buy attitudes efficiently transfer into green purchase intentions. Environmentally conscious consumers tend to purchase more green products. In studies conducted in the USA and China, purchasing green apparel was found to be significantly and directly associated with consumer attitudes (Ko and Jin, 2017). Similarly, Nguyen and Le (2020) found that consumer attitudes directly influence green agricultural product purchase and consumption in Vietnam. Referring to Ghose and Chandra’s (2020) review article that depicts how attitude influences behavioural intention to buy green apparel. Recent research on the purchase of energy efficient appliances show that attitude has a favourable influence on customer purchasing intentions (Bhutto et al., 2020; Aslam et al., 2021; Waris and Ahmed, 2020; Waris et al., 2021). We propose the following:

H10. Attitude is significantly and positively associated with intention to purchase green products.
2.12 Willingness to pay the higher price and purchase intention
The willingness to pay can be defined as a consumer’s willingness to spend as much as possible for a product/service (Krishna, 1991). The inherent environmental friendliness of eco-labels triggers their willingness. The existing literature presents mixed results on willingness to pay a higher price and purchase intention. While some researchers (Yadav and Pathak, 2017) found that consumers do not intend to pay a price premium for green products, others indicate a certain readiness to support higher-priced green alternatives (Kang et al., 2012; Namkung and Jang, 2017). Thus, we propose the following:

H11. Willingness to pay higher prices and green product purchase intention have a significant relationship.

2.13 Subjective norms and green product purchase intention
Subjective norm acknowledges the relevance of reference groups and is interested in determining the extent to which a person will be driven to comply with these groups. The feeling of social acceptance makes an individual consumer behave accordingly and conform to the prevalent norms of society. Depending on societal or pressure group behaviour towards the environment, consumers start to show their behaviour in conformance. Such concerns of individuals towards the environment may increase favourable behaviour towards green products (Turkyilmaz et al., 2015). In addition, Ko and Jin (2017) indicate that subjective norms are a better influencer construct for predicting the purchase of green products than other TPB constructs such as attitude and PBC. In household products consumption, subjective norm has a direct, positive influence on purchase intention (Arli et al., 2018). Recent research on the purchase of energy efficient appliances show that subjective norms have favourable influence on customer purchasing intentions (Bhutto et al., 2020; Aslam et al., 2021; Waris and Ahmed, 2020; Waris et al., 2021). Furthermore, in the hospitality and tourism fields, subjective norms significantly influence purchase intentions significantly (Jordan et al., 2017); we propose the following:

H12. Subjective norms and green product purchase intention has a significant and positive relationship.

2.14 Demographic variables and green product purchase intention
Demographic variables (i.e. age, gender and education) play a crucial role in understanding consumers’ purchase behaviour. However, the impact of consumers’ demographic characteristics on green product purchase intentions remains inconsistent (Roberts, 1996). Firstly, researchers have different opinions on age and whether young consumers are more eco-friendly than their elderly counterparts are. While some studies suggest that age plays no role in purchasing green products (Wang et al., 2020; Paul and Rana, 2012), others show a significant association (Galati et al., 2021; Namkung and Jang, 2017). In marketing, customer literacy-based research has only begun in the past decade and has confirmed that it significantly affects consumption behaviour (Galati et al., 2021; DelVecchio et al., 2019). Therefore, the literature provides mixed results on education levels and consumers’ behavioural intentions towards green product purchases. Testa et al. (2015) suggested no connection between education and consumer green product purchasing, whereas others (Galati et al., 2021; Wang et al., 2020) suggested that education plays a critical role in influencing purchase intention for green products. However, the role of higher education as an influencer has been rejected (Wang et al., 2020). Finally, female consumers are more
interested in green products than their male counterparts (Chekima et al., 2016). In contrast, Wang et al. (2020) suggested that gender is insignificant when purchasing green products. Based on earlier research on the role of demographic variables in influencing green product purchase intentions, we propose the following:

\[H13a.\] Gender significantly influences consumer purchase intention of green products.

\[H13b.\] Female consumers show more purchase intention towards green products.

\[H14a.\] Age significantly influences consumer purchase intention of green products.

\[H14b.\] Younger consumers show more purchase intention towards green products.

\[H15a.\] Education significantly influences consumer purchase intention of green products.

\[H15b.\] Higher education consumers show more purchase intention towards green products.

2.15 Conceptual framework
To understand consumers’ genuine intention to purchase green products, there is a strong need to incorporate additional variables in the TPB model. Therefore, the proposed theoretical framework for the present study is based on TPB (Ajzen, 1991) which depicts the positive relationships between the constructs: eco-labels, attitude, perceived behavioural control, subjective norms, willingness to pay higher prices and green product purchase intention. Further, we added demographic variables as independent variables in the model. Therefore, by incorporating the hypotheses discussed in the earlier subsections, the proposed conceptual framework for this study is illustrated in Figure 1.

3. Research methodology
3.1 Study scope
Electricity-saving electronic/electrical household appliances were selected as the product category in this study for two main reasons. Firstly, despite the proven effectiveness of energy-saving products in reducing greenhouse gas emissions (Sonnenberg et al., 2011), there is a lack of importance given to such products in research (Tangari and Smith, 2012). Secondly, the environment is a major social concern for Indian citizens (BUR, 2015). Particularly among durable product users (Tewari et al., 2022) – the rapid penetration of durable goods in Indian households would significantly increase the demand for electricity by 2030 (Act, E. C., 2001); the category of green electrical/electronic household appliances demands immediate attention.

3.2 Survey instrument and data collection
The research instrument covered items related to six constructs: eco-label, perceived behavioural control, attitude, subjective norms, willingness to pay a higher price and green product purchase intention. The questionnaire items were taken from previous studies and were modified for the present study. The items are measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items and their sources are provided in the Appendix. The sample included adult Indian consumers who were willing to purchase green products, particularly electronic/electrical household appliances. All respondents were assured that their information would only be used for academic/research purposes. The survey was conducted following the mall-intercept method in
Madhya Pradesh, located in central India. The study instrument began with a screening question to filter out respondents who were not interested in green products, particularly household electronic and electrical appliances. A total of 1,200 questionnaires were circulated, and 703 were received. Furthermore, 23 questionnaires were excluded because of incomplete information and missing values. A total of 680 questionnaires were used for the analysis, resulting in a response rate of 56.7%. Table 2 summarises the respondents’ profiles.

4. Results
Partial least squares path modelling (PLS-SEM) is most suitable for testing a complex model with formative constructs and a small sample size that does not confirm a normal distribution (Hair et al., 2020). PLS-SEM was applied to test the research hypotheses and model fitness using the Smart-PLS software, version 3.0.

Ex ante and ex post remedies were used to test the common method variance. While collecting the data, anonymity and confidentiality of the respondents were ensured to help elicit honest responses. The order of the questions was varied to avoid sequence bias. Harman’s single-factor test using principal axis factoring without rotation resulted in a factor solution, in which the first factor explained only 16% of the overall variance. Possible collinearity issues among the components were examined. The variance inflation factor values were less than two and well below the critical value of 3 (Hair et al., 2020).
4.1 Goodness of fit
The goodness of fit (GoF) was calculated to determine the overall model fitness for the prediction. Previous research confirmed that the GoF for a model with large effect sizes should be greater than or equal to 0.36 (Wetzels et al., 2009). GoF is the average endogenous construct AVE multiplied by the average R-squared. The GoF score for the research model was 0.477, showing that the model had a good fit.

4.2 Measurement model
The convergent validity of the model was analysed using factor loadings, composite reliability (CR) and average variance extracted (AVE). The factor loadings of all the items were greater than 0.5, as shown in Table 3. Similarly, for all six constructs, AVE scores of >0.50, and CR scores of >0.70 were statistically significant (Fornell and Larcker, 1981).

Discriminant validity, as an indicator to determine how the study constructs differ from each other (Hulland, 1999), was computed using AVE, following Fornell and Larcker (1981). The primary discriminant validity condition that the AVE of each construct should be higher than its variance shared with the other constructs was satisfied by all the six constructs (Table 4). The study also tested the discriminant validity using Heterotrait-Monotrait Ratio (HTMT). According to the research, to validate the discriminant power of the test, the HTMT ratio needs to be lower than 0.90. (Henseler et al., 2015). The findings shown in Table 5 provide further evidence that our research successfully demonstrated discriminant validity.

4.3 Structural model
The proposed hypotheses were tested using a bootstrapping procedure with 5,000 iterations using PLS 3.0, as shown in Table 6.
Further, the chi-square test was used to check the significance of demographic variables, such as gender, age and education, in determining the purchase intention for green products. The results (Table 7) show that consumers’ gender, age and education fell short of being significant green product purchase intention indicators among consumer durables in India. Therefore, H13a, H14a and H15a were not supported.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Loadings</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>Average variance extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude (AT)</td>
<td>AT1</td>
<td>0.877</td>
<td>0.850</td>
<td>0.897</td>
<td>0.686</td>
</tr>
<tr>
<td></td>
<td>AT2</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT3</td>
<td>0.733</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT4</td>
<td>0.841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to pay higher price (WPHP)</td>
<td>WPHP1</td>
<td>0.781</td>
<td>0.911</td>
<td>0.927</td>
<td>0.589</td>
</tr>
<tr>
<td></td>
<td>WPHP2</td>
<td>0.830</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WPHP3</td>
<td>0.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WPHP4</td>
<td>0.798</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WPHP5</td>
<td>0.704</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>WPHP6</td>
<td>0.817</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>WPHP7</td>
<td>0.765</td>
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<tr>
<td></td>
<td>WPHP8</td>
<td>0.734</td>
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<td></td>
<td>WPHP9</td>
<td>0.604</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eco-label (EL)</td>
<td>EL1</td>
<td>0.787</td>
<td>0.911</td>
<td>0.934</td>
<td>0.738</td>
</tr>
<tr>
<td></td>
<td>EL2</td>
<td>0.888</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>EL3</td>
<td>0.861</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EL4</td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EL5</td>
<td>0.891</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived behaviour control (PBC)</td>
<td>PBC1</td>
<td>0.767</td>
<td>0.939</td>
<td>0.948</td>
<td>0.623</td>
</tr>
<tr>
<td></td>
<td>PBC2</td>
<td>0.820</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC3</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC4</td>
<td>0.655</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC5</td>
<td>0.745</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC6</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC7</td>
<td>0.821</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC8</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC9</td>
<td>0.773</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC10</td>
<td>0.823</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC11</td>
<td>0.841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green product purchase intention (GPPI)</td>
<td>GPPI1</td>
<td>0.766</td>
<td>0.913</td>
<td>0.932</td>
<td>0.697</td>
</tr>
<tr>
<td></td>
<td>GPPI2</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPPI3</td>
<td>0.770</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPPI4</td>
<td>0.881</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPPI5</td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPPI6</td>
<td>0.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective norms (SN)</td>
<td>SN1</td>
<td>0.782</td>
<td>0.858</td>
<td>0.889</td>
<td>0.504</td>
</tr>
<tr>
<td></td>
<td>SN2</td>
<td>0.771</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN3</td>
<td>0.802</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN4</td>
<td>0.518</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN5</td>
<td>0.738</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN6</td>
<td>0.682</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN7</td>
<td>0.659</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN8</td>
<td>0.687</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Created by author
The differences between the age groups were tested using Scheffe’s alpha test, as shown in Table 8. Scheffe’s alpha test was used because it provides comparisons between group means in the analysis of variance (Homack, 2001). The results showed no statistical differences among the different age groups in terms of their intention to purchase green products. Therefore, H14b was rejected.

An independent sample t-test was conducted to examine the relationship between gender and education on green product purchase intention, as shown in Table 9. For sex, H13b was rejected because $p = 0.880$ was greater than our chosen significance level of 0.05, with no significant difference in the means. It was concluded that there was no significant difference between males and females in their purchase intention for green products. In addition, H15b was rejected because for education; $p = 0.290$ indicated no significant difference between consumers who had undergone higher education and those who were less educated concerning their intention to purchase green products.

### 5. Findings

The analysis of the results show that all the proposed hypotheses are accepted (H1–H12) except H13a, H14a and H15a, H13b, H14b and H15b. The proposed interrelationship between eco-labels and individual customers’ perceived behavioural control is significant, as H1 is accepted ($t = 19.752; p = 0.000$). These results concur with those of previous studies (Nguyen and Le, 2020; Peschel et al., 2019; Testa et al., 2015).

---

**Table 4.** Discriminant validity of constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Attitude</th>
<th>Eco-labels</th>
<th>Willingness to pay a higher price</th>
<th>Perceived behaviour control</th>
<th>Purchase intention</th>
<th>Subjective norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eco-labels</td>
<td>0.537</td>
<td>0.859</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to pay higher price</td>
<td>0.572</td>
<td>0.517</td>
<td>0.767</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived behaviour control</td>
<td>0.543</td>
<td>0.584</td>
<td>0.661</td>
<td>0.789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green product purchase intention</td>
<td>0.320</td>
<td>0.508</td>
<td>0.493</td>
<td>0.542</td>
<td>0.835</td>
<td></td>
</tr>
<tr>
<td>Subjective norms</td>
<td>0.685</td>
<td>0.485</td>
<td>0.595</td>
<td>0.549</td>
<td>0.394</td>
<td>0.710</td>
</tr>
</tbody>
</table>

**Source:** Created by author

---

**Table 5.** Heterotrait-Monotrait Ratio (HTMT)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Attitude</th>
<th>Eco-labels</th>
<th>Environmental concern</th>
<th>Perceived behaviour control</th>
<th>Purchase intention</th>
<th>Willingness to pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.585</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eco-labels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental concern</td>
<td></td>
<td>0.622</td>
<td>0.564</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived behaviour control</td>
<td>0.581</td>
<td>0.623</td>
<td>0.710</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0.329</td>
<td>0.549</td>
<td>0.528</td>
<td>0.570</td>
<td></td>
<td>0.413</td>
</tr>
<tr>
<td>Willingness to pay</td>
<td>0.778</td>
<td>0.534</td>
<td>0.659</td>
<td>0.592</td>
<td>0.413</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Created by author
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Path coefficient (β)</th>
<th>t values</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Eco-labels → Perceived behaviour control</td>
<td>0.584</td>
<td>19.752</td>
<td>0.000</td>
</tr>
<tr>
<td>H2</td>
<td>Eco-labels → Attitude</td>
<td>0.537</td>
<td>17.573</td>
<td>0.000</td>
</tr>
<tr>
<td>H3</td>
<td>Eco-labels → Willingness to pay higher price</td>
<td>0.092</td>
<td>16.947</td>
<td>0.000</td>
</tr>
<tr>
<td>H4</td>
<td>Eco-labels → Subjective norms</td>
<td>0.485</td>
<td>12.484</td>
<td>0.000</td>
</tr>
<tr>
<td>H5</td>
<td>Eco-labels → Green product purchase intention</td>
<td>0.283</td>
<td>16.902</td>
<td>0.000</td>
</tr>
<tr>
<td>H6</td>
<td>Perceived behaviour control → Willingness to pay higher price</td>
<td>0.401</td>
<td>10.287</td>
<td>0.000</td>
</tr>
<tr>
<td>H7</td>
<td>Attitude → Willingness to pay higher price</td>
<td>0.147</td>
<td>3.850</td>
<td>0.000</td>
</tr>
<tr>
<td>H8</td>
<td>Subjective norms → Willingness to pay higher price</td>
<td>0.229</td>
<td>5.970</td>
<td>0.000</td>
</tr>
<tr>
<td>H9</td>
<td>Perceived behaviour control → Green product purchase intention</td>
<td>0.282</td>
<td>6.686</td>
<td>0.000</td>
</tr>
<tr>
<td>H10</td>
<td>Attitude → Green product purchase intention</td>
<td>−0.166</td>
<td>2.675</td>
<td>0.008</td>
</tr>
<tr>
<td>H11</td>
<td>Willingness to pay higher price → Green product purchase intention</td>
<td>0.196</td>
<td>3.688</td>
<td>0.000</td>
</tr>
<tr>
<td>H12</td>
<td>Subjective norms → Green product purchase intention</td>
<td>0.099</td>
<td>3.119</td>
<td>0.002</td>
</tr>
</tbody>
</table>

**Source:** Created by author

### Table 7.
Chi-square test showing correlations between variables

<table>
<thead>
<tr>
<th>Items</th>
<th>Pearson chi-square</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green product purchase intention</td>
<td>Gender</td>
<td>12.666</td>
<td>17</td>
<td>0.758</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>49.312</td>
<td>51</td>
<td>0.541</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>14.416</td>
<td>17</td>
<td>0.637</td>
</tr>
</tbody>
</table>

**Source:** Created by author

### Table 8.
Post hoc tests of age

<table>
<thead>
<tr>
<th>Age(I)</th>
<th>Age(J)</th>
<th>Mean difference (I-J)</th>
<th>Std. error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–29</td>
<td>30–39</td>
<td>−0.077</td>
<td>0.064</td>
<td>0.690</td>
</tr>
<tr>
<td></td>
<td>40–49</td>
<td>0.051</td>
<td>0.081</td>
<td>0.941</td>
</tr>
<tr>
<td></td>
<td>50 and above</td>
<td>−0.034</td>
<td>0.096</td>
<td>0.988</td>
</tr>
<tr>
<td>30–39</td>
<td>20–29</td>
<td>0.077</td>
<td>0.064</td>
<td>0.690</td>
</tr>
<tr>
<td></td>
<td>40–49</td>
<td>0.129</td>
<td>0.075</td>
<td>0.400</td>
</tr>
<tr>
<td></td>
<td>50 and above</td>
<td>0.043</td>
<td>0.091</td>
<td>0.973</td>
</tr>
<tr>
<td>40–49</td>
<td>20–29</td>
<td>−0.051</td>
<td>0.081</td>
<td>0.941</td>
</tr>
<tr>
<td></td>
<td>30–39</td>
<td>−0.129</td>
<td>0.075</td>
<td>0.400</td>
</tr>
<tr>
<td></td>
<td>50 and above</td>
<td>−0.085</td>
<td>0.104</td>
<td>0.878</td>
</tr>
<tr>
<td>50 and above</td>
<td>20–29</td>
<td>0.034</td>
<td>0.096</td>
<td>0.988</td>
</tr>
<tr>
<td></td>
<td>30–39</td>
<td>−0.043</td>
<td>0.091</td>
<td>0.973</td>
</tr>
<tr>
<td></td>
<td>40–49</td>
<td>0.085</td>
<td>0.104</td>
<td>0.878</td>
</tr>
</tbody>
</table>

**Source:** Created by author
Levene’s test for equality of variances

<table>
<thead>
<tr>
<th></th>
<th>equality of variances</th>
<th></th>
<th>t-test for equality of means</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Green product purchase intention (Gender)</td>
<td>Equal variances assumed</td>
<td>0.023</td>
<td>0.880</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-0.918</td>
<td>606.934</td>
</tr>
<tr>
<td>Green product purchase intention (Education)</td>
<td>Equal variances assumed</td>
<td>1.121</td>
<td>0.290</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-0.063</td>
<td>593.991</td>
</tr>
</tbody>
</table>

Source: Created by author
As $H2$ is well accepted ($t = 17.573; p = 0.000$), previous studies’ findings support the proposed association between eco-labels and customer attitudes (Nguyen and Le, 2020).

$H3$ proposes a significant association between eco-labels and customers’ willingness to pay a higher price. This hypothesis is well accepted ($t = 16.947; p = 0.000$) and supported by previous studies (Tully and Winer, 2014; Lee et al., 2019).

$H4$ proposes a significant association between eco-labels and customers’ subjective norms. This hypothesis was supported ($t = 12.484, p = 0.000$). Previous studies support these results well (Song et al., 2018; Kennedy and Horne, 2019; Tran and Paparoidamis, 2020).

$H5$ proposed a significant association between eco-labels and customers’ intention to purchase green products. This hypothesis is well-accepted ($t = 16.902, p = 0.000$). Previous studies support these results well (Lee et al., 2019; Waris and Ahmed, 2020).

$H6$ proposes a significant association between perceived behavioural control and willingness to pay a higher price. This hypothesis was supported ($t = 10.287, p = 0.000$). Previous studies support these results (Hsu et al., 2017; Yadav and Pathak, 2017; Moser, 2016).

$H7$ proposed a significant association between attitude and willingness to pay a higher price. This hypothesis was supported ($t = 3.85, p = 0.000$). These results are supported by those of previous studies (Chekima et al., 2016; Prakash and Pathak, 2017).

$H8$ proposed a significant association between subjective norms and willingness to pay a higher price. This hypothesis was supported ($t = 5.970, p = 0.000$). These results are supported by those of previous studies (Kang et al., 2012; Chekima et al., 2016).

$H9$ proposes a significant association between perceived behavioural control and green product purchase intention. This hypothesis is well accepted ($t = 6.686; p = 0.000$), and the results are consistent with those of previous studies (Ko and Jin, 2017; Nimri et al., 2020).

$H10$ proposed a significant link between attitude and green product purchase intention. This hypothesis was supported ($t = 2.675, p = 0.008$). Previous studies support these results (Ko and Jin, 2017; Ghose and Chandra, 2020; Nguyen and Le, 2020).

$H11$ proposes a significant association between willingness to pay a higher price and green product purchase intention. This hypothesis is well accepted ($t = 3.688, p = 0.000$). Previous studies support these results well (Namkung and Jang, 2017).

$H12$ proposed a significant association between subjective norms and green product purchase intentions. This hypothesis was supported ($t = 3.119, p = 0.002$). These results are consistent with those of previous studies (Ko and Jin, 2017; Jordan et al., 2017).

Furthermore, all three hypotheses related to demographic variables, $H13a$, $H14a$ and $H15a$, were rejected. The chi-square test results found no significant differences among the demographic variables of gender, age, education and purchase intention for green products. These results contradict existing studies, where gender, age and education significantly influenced consumers’ intention to purchase green products (Namkung and Jang, 2017; Chekima et al., 2016). The study also revealed no significant differences between different age groups in terms of the intention to purchase green products, as shown by Scheffe’s post hoc test results. Therefore, $H14b$ was rejected. Furthermore, an independent sample $t$-test for gender and education showed no significant difference in predicting the intention to purchase green products. Hence, $H13b$ and $H15b$ were rejected. Thus, this study provides new insights into the role of demographic variables in influencing purchase intentions for green products.

6. Discussion
The findings of the study show how eco-labels associate with TPB factors in determining the consumer purchase intention for eco-labelled green electronics/electricals products in emerging
markets. Previous studies support the current findings with a few exceptions. Positive and significant association between eco-labels and PBC explains why the eco-labelling of products eliminates information gaps between buyers and sellers, demonstrates the product’s environmental message and convinces users about the honesty of the products, which can positively reinforce the perceived behavioural control of the customer. These labels serve as essential sources of information that help in making better purchase decisions.

The study findings prove eco-labels and attitude relationship significance. This indicates that environmental information in the form of eco-labels on a product fosters a customer’s positive attitude. In response to the marketer’s concern about the effectiveness of eco-labels, it is highlighted that seals of the ecological friendliness of a product can significantly influence consumers’ perceptions and overall attitudes towards the product. This study also proved that consumers are ready to pay higher price for eco-labelled products because eco-labels serve as a symbolic certification of a product’s high quality. The consumption of green products appears to be an emerging domain for evaluating people’s social status, because it is reflected as a status symbol for consumers in modern consumption-led societies (Kennedy and Horne, 2019). This establishes the positive link between eco-labels and subjective norms. The symbolic value of eco-labels as a reliability seal influences value-driven consumer purchase decisions. From a marketing perspective, when marketers define eco-friendly benefits as a key attribute of eco-labels, consumers perceive products to be more environmentally friendly and subsequently decide to purchase them. This shows the positive association between eco-labels and green product purchase intention. The study establish that consumers’ perceived control over consumption choices influences their intention to purchase green products, with less sensitivity to the higher prices of environmentally friendly products. The study also proves that the intention to purchase green products depends on an individual consumer’s attitude. Consumers with a deeper concern for the environment are willing to pay higher prices for environmentally friendly products (Prakash and Pathak, 2017). The study highlighted that green products are considered a status symbol in modern societies, consumers are open to paying a higher price (Chekima et al., 2016) for the esteem value associated with green products to confirm the norms of acceptable social behaviour. Consumers’ sense of control often rules green product purchase intentions when exercising their consumption choices. If consumers perceive that using green products gives them better control over their consumption, they will use green products. The study determine that a favourable attitude is a strong indicator of the individual behaviour to be performed. Individual concerns about the environment and incentives by companies determine consumers’ willingness to pay higher prices by the consumers (Bezawada and Pauwels, 2013). Social pressure induces individuals to adopt green products. The feelings of social acceptance encourage consumers to behave in accordance with social norms. This is proved in our study as well as supported by the existing studies on the purchase of energy efficient appliances (Bhutto et al., 2020; Aslam et al., 2021)

The study examined whether demographic variables have any role in green product purchase intention among the emerging economy consumers and the findings indicate that they are insignificant. The reason could be that the young generation is highly ambitious, and they are more conscious towards the environment irrespective of their gender, age and education.

7. Conclusion
This study objectively explored the effect of eco-labels on green product purchase intention for consumer durables. Attitude, subjective norms, PBC, willingness to pay higher price are
the prevalent factors driving the overall purchase intention of consumers. Hence, this answers the first research question.

The study re-establishes the importance of eco-labels as they serve the critical purposes of eliminating information gaps between buyers and sellers, demonstrating the product’s environmental message, and convincing users about the honesty of the products. It also shows that eco-labels as a symbolic certification of the product’s high quality influences a consumer’s readiness to pay a higher price for the products. In response to the marketer’s concern on the effectiveness of eco-labels, the study highlighted that seals of ecological friendliness of a product can significantly influence consumers’ perceptions and overall attitude towards the product.

The eco-label fills information gaps to stimulate product purchasing behaviour, overcoming the possible price sensitivity of consumers. Values, beliefs and ethics are key attributes of consumer motivations for eco-friendly behaviour. It is reinstated that the symbolic value of eco-labels as seal of reliability influences purchase decisions for value-driven consumers. Values, beliefs and ethics are the key attributes of consumer motivations towards eco-friendly behaviour. Also, the eco-label fills the information gaps to stimulate product purchasing behaviour overcoming possible price sensitivity of the consumers. From the marketing perspective, when marketers define eco-friendly benefits as a key attribute of eco-labels, consumers perceive such products as more environmentally friendly and subsequently decide to purchase such products. In accordance with earlier studies on green consumption, the findings indicate that consumers with a deeper concern for the environment are willing to pay higher prices for such eco-labelled environmentally friendly consumer durables as they also serve the additional purpose of lending a certain social status to its users (Kennedy and Horne, 2019). Hence, this answers the second research question. Furthermore, Consumers’ sense of control often rules the green product purchase intention in exercising consumption choices. If the consumers perceive that using green products would give them better control of their consumption, they will use green products. The feeling of social acceptance encourages consumers to behave as per social norms. Also, the social pressures induce the adoption of green products among individuals.

This study provides new insight into the role of demographic variables in influencing purchase intention for green products. The earlier studies had tested the role of demographic variables in purchase intention for eco-labelled agricultural produce (Paul and Rana, 2012; Galati et al., 2021). The need for category-specific research is reinstated by the findings of this study. Moreover, the study establishes the role of demographics in influencing green product purchase intention that depend on the types of products. Hence, this answers the third research question. Therefore, we can claim that our study extends the existing literature in eco-labels and green products purchase behaviour.

8. Implications
The results of this study provide theoretical as well as managerial value for the literature on eco-friendly electrical and electronic appliances in Indian homes.

8.1 Theoretical implications
From a theoretical standpoint, the study provides empirically tested measurement instruments on eco-labels, extended TPB constructs and green product purchase intention, which could be effectively used for future research in this domain. Empirical validation of the constructs was also highlighted in due course. Among several theoretical implications of the study, the most relevant ones areas are as follows:

Firstly, the findings provide fascinating insights into the factors that affect consumers’ levels of interest in eco-labelled products, which researchers have largely ignored. This...
study adds to the increasing body of work in this field by showing that across cultural settings, consumers’ interest in electrical and electronic eco-labels is influenced in distinct ways by socio-demographic variables.

Secondly, the highly significant relationship between eco-labels and willingness to pay higher prices further accentuates the need for best marketing practices. From the value-orientation perspective, consumers’ willingness to pay a higher price for a product depends on their interpretation of whether the high price is justifiable. The present research re-establishes that consumers support higher prices for green products, especially when the marketer’s claims is genuine and free from greenwashing intentions (Lee et al., 2018). Under such circumstances, eco-labels play an essential role in convincing consumers about the green claims of the product. Specific to the electrical appliances category, where the use of differential pricing for eco-labelled products is prevalent, the validation of consumers’ willingness to pay a higher price promotes the use of eco-labelling as a sustainable marketing practice. Therefore, the credibility of eco-labelled products is a strong driver of consumer-perceived value that support immediate purchase decisions and support favourable long-term brand associations (De Chiara, 2016).

Thirdly, in the context of an emerging market, the study findings validate the effectiveness of eco-labels in achieving short- and long-term marketer objectives. The credible green attributes of electrical appliances can act as a competitive advantage that motivates consumers’ intent to purchase across the demographics of Indian consumers driven by their instincts of social and ecological conformance. It is highlighted that at the marketer’s end, continuous focus on the active fulfilment of the customer’s priorities based on their socio-environmental concerns will remain essential to remain competitive in the consumer durables market in emerging India. Thus, the present study contributes to the literature on green product purchase intention with consumers’ self-reported behavioural insights into the positive effects of eco-labels in inducing behavioural commitment and long-term trust in branded electrical/electronic appliances.

8.2 Managerial implications
From a managerial standpoint, this study provides critical insights for firms that manufacture household electrical or electronic appliances. This gives them the ability to develop marketing tactics that can be more successful and make customers more accountable. From this vantage point, it would be acceptable for these stakeholders to adopt the notion of sustainability in all aspects of the marketing mix and use a green marketing strategy. To encourage more sustainable behaviour, the deployment of product eco-labels is inadequate; rather, effectively expressing the company’s commitment to lowering the environmental and social impact on this industry may be necessary. It is the responsibility of marketing managers inside companies to organise educational efforts that encourage consumers to make proactive purchases of electrical and electronic home equipment.

9. Limitations and future research directions
This study is a pioneering attempt to understand the effects of eco-labels on India’s fast-penetrating category of electronic appliances. However, this exploratory study had a few limitations. Firstly, the data collected were limited to a single state in India, which limits the generalisability of our findings. In the future, researchers should consider a larger sample size with broader geographical coverage and comprehensive selection of observed and measured variables for better generalisability. Furthermore, the interrelationships between the observed variables can be considered and examined in future studies. Secondly, the study selected a specific category of products (i.e. electric appliances) where eco-labelled products may be considered for their long-term cost savings potential. Such products not
only save electricity from an environmental point of view, but may also be considered a better option that gives consumers the benefit of saving electricity costs in the long run. However, these findings have not adequately captured the interplay of values derived from the long-term monetary savings and environmental friendliness of electrical products. Future studies examining possible interaction effects can provide more insight into the potential of eco-labelling. Concurrently, the applicability of the model and its constructs can be tested for other product categories. Thirdly, as most (approximately 70%) of the respondents in this study were under 40 years of age, the study’s findings may inherently reflect the growing awareness of the younger generation regarding environmental issues and emissions of greenhouse gases from electric appliances. Therefore, future studies that consider a more equitable sample distribution across various age groups may be helpful for understanding the drivers of consumption in this category as a whole. Finally, studies that specifically address the role of consumers’ ethnicity, culture and beliefs about green product purchase intention and product origin will greatly benefit marketers serving global markets.

References
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Further reading


Appendix. Scale items for questionnaire

Attitude (AT) (Ajzen, 2002; Kim and Han, 2010; Milfont, and Duckitt, 2010; Arvola et al., 2008; Chen and Chai, 2010; Tanner and Kast, 2003)

- I think that purchasing green product is wise and interesting.
- I think that purchasing environmental friendly product is a good idea.
- I think that purchasing electricity saving and environmental friendly appliance is important.
- I think that purchasing environmental friendly household appliance is beneficial.

Willingness to pay higher price (WPHP) (Chen, 2014; Wang et al., 2014; Lin and Huang, 2012; Laroche et al., 2001; D’Souza et al., 2007)

- Environment friendly products are good products for the price.
- I would be willing to spend extra to buy fewer environmentally harmful products
- Environment friendly products are reasonably priced
- Environment friendly products offer value for money.
- I would purchase eco-friendly products over conventional substitutes if they are offered at discount rate
- I would purchase eco-friendly products over conventional substitutes if they are offered with other promotional incentives.
- I am willing to buy environment friendly products at a higher price for their environmental benefits.
- I am willing to pay more money to buy environment-friendly products.
- I am not much interested to purchase green products because of higher price.

Eco-label (EL) (Rashid, 2009; Taufique et al., 2017)

- Eco-labels persuade people to buy green products.
- Eco-labels tell me which brands have the eco-friendly features I am looking for.
- Eco-label is a valuable source of information about environment friendly products
- I prefer to check the eco-labels and certifications on eco-friendly products before purchase
- I would prefer to gain substantial information about the makes and models of eco-friendly products before purchase.
Perceived behaviour control (PBC) (Abrahamse and Steg, 2011; Tonglet et al., 2004; Milfont and Duckitt, 2010)
- I believe I have the ability to purchase green products.
- If it were entirely up to me, I am confident that I will purchase green products.
- I see myself as capable of purchasing green products in future.
- I have resources, time and willingness to purchase green products.
- Green products are generally available in the shops where I usually do my shopping.
- There are likely to be plenty of opportunities for me to purchase green products.
- I find it easy to be friendly with the environment.
- I find it difficult to preserve resources and recycle.
- I am confident that I can protect the environment.
- I can control my involvement in environmental preservation initiatives.
- I am fully capable of protecting the environment.

Green product purchase intention (GPPI) (Milfont and Duckitt, 2010; Mostafa, 2006; Chan, 2001)
- I will consider buying products because they are less polluting in coming times.
- I will consider switching to environmental friendly brands for ecological reasons.
- I plan to spend more on environmental friendly product rather than conventional product.
- I expect to purchase product in the future because of its positive environmental contribution.
- I definitely want to purchase green products in near future
- I am willing to purchase green products for my household use.

Subjective norms (SN) (Ajzen, 2002; Arvola et al., 2008; Abrahamse and Steg, 2011; Milfont and Duckitt, 2010)
- My family thinks that I should buy green products rather than non-green products.
- Most people I value would buy energy saving products rather than non-energy saving products.
- People I value (such as my teacher) think you should buy energy saving appliances.
- My close friends, whose opinions regarding products are important to me, think that I should buy energy saving products for home.
- I would describe myself as environmentally responsible consumer.
- Buying the green product would help me to be more socially acceptable.
- Buying the green product would make a good impression on other people.
- Buying the green product would improve the way that I am.

References (Appendix)


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