Social and environmental sustainability model on consumers’ altruism, green purchase intention, green brand loyalty and evangelism

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Abstract: Across the globe, the awareness for environmental degradation and its harmful effects is rapidly growing. The whole world has come together to work in the direction to protect the environment. Consumers are increasingly becoming cautious towards the impact of their consumption pattern on environment and organisations can attain a competitive edge by leveraging this cautiousness by offering them green products/brands. However, it is importance for the marketers to understand that how increasing levels of sustainability awareness impacts other factors which explain pro-environmental behaviour of customers. To fill the existing gap in the current literature in this regard, the current study aims to build a structural model which includes social and environmental sustainability awareness in measuring customer altruism, buying intention, loyalty and customer evangelism. The theoretical model extends the existing framework of the Theory of Planned Behaviour (TPB) and explores the decision-making framework regarding ethical behaviour. Through existing literature review and expert input, the indicators (variables) for each construct were recognised. After that, data was collected from 331 respondents through a structurally designed questionnaire; the hypothetical model was test using the Structural Equation Modelling (SEM) technique. The findings of the study indicate that sustainability awareness positively influence the consumer altruism which in turn enhances the consumer purchase intention, green brand loyalty and green brand evangelism and altruism can and can bridge value-action gap for green brands. Current analysis supports the view that there are significant positive associations among the identified constructs.

Keywords: Social sustainability, environment sustainability, altruism, customers’ buying intention, customer loyalty, brand evangelist, SEM

1. Introduction

Tremendous economic expansion has led to the overuse and depletion of natural resources, which in turn has attracted global attention on environmental concerns (Kumar et al., 2017; Chen, 2018). The environment is constantly being damaged due to various economic activities and consumption patterns (Haake and Seuring, 2009; Shao et al., 2017). As a result, consumers
are becoming more and more aware of their consumption pattern as a cause of environmental
damage and their inclination towards buying sustainable offerings has and grown, they are ready
to spend more on such products (Kumar et al., 2018). In fact, environment prevention has
become their key concern apart from satisfying their personal needs (De Moura et al., 2012).
Consumers’ purchase decisions are likely to get influenced by this increasing awareness and
inclination towards sustainable consumption (De Moura et al., 2012; Yadav et al., 2019).
Moreover, businesses are placing much more emphasis on sustainability due to stricter
environmental regulations and rising pressure from stakeholders to protect the environment
(Vermeir and Verbeke, 2008; Khan and Mohsin, 2017; Kumar et al., 2018; Yadav et al., 2018).
Paul et al. (2016) suggested motivating consumption of green products among customers to
move towards attaining sustainability. In order to promote such products, sellers need to
understand consumer preferences and decision-making process in the context of green products
(Cherrier et al., 2011). Peattie and Charter (2003) indicated that each customer have divergent
preferences towards different attributes of an eco-friendly product, and it is very challenging to
correlate attributes of green consumer with customers’ demographic characteristics. Moreover,
fluctuating preferences of environmentally cautious customer has made it difficult for marketers
to sell green products (Kilbourne and Pickett, 2008; Ha and Janda, 2012). Hence, consumer
environmental behaviour has been of significant interest among practitioners and academicians
(Cornelissen et al., 2008). Many studies investigated the link between customer purchasing
intention and green behaviour (Gadenne et al., 2011; Ha and Janda, 2012; Prakash and Pathak,
2017). Much of the existing literature in this area refers to the framework of theories of cognitive
behaviour to explore antecedents of consumers’ environmental behaviour. Consumers’
knowledge of environmental matters is positively correlated to pro-environmental behaviour
(Prakash and Pathak, 2017). However, environmentally cautious customers may or may not
exhibit the environment saving behaviour which leads to origination of value-action gap
(Gadenne et al., 2011; Prakash and Pathak, 2017; Kumar et al., 2018). Moreover, individuals are
different from one another; they grasp and respond to similar types of environment-related
information in highly diverse ways (Blake, 1999). Therefore, this gap cannot be bridged just by
providing information (Blake, 1999; Agyeman and Angus, 2003) and gets widened under the
assumption that values turn into action (Shove, 2010). Existence of ‘value-action gap’ points
towards non-existence of any direct association between consumers’ environmental belief and
their behaviour; and this is consistent with normative psychology theories of pro-environmental behaviour (Gadenne et al., 2011). Hence, there is a need to look for other factors that can explain the indirect link between consumer awareness about social and environmental awareness and pro environmental behaviour. Additionally, during times of growing competition, loyal customers put brands into a better position than their competitors. Brand evangelists not only communicate brand features as traditional marketing does, but also offer a unique personal recommendation of the brand to their colleagues, friends and families (Smilansky, 2009; Prakash and Pathak, 2017).

Despite this, brand evangelism for green brands has not been explored much until now. Moreover, Paul et al. (2016) indicate country of origin as significantly important to influence the level of concern for the environment among customers and current literature has dearth of studies that investigate green product purchase behaviour of Indian customers. In a more recent study Prakash et al. (2019) have also indicated the need to investigate the pro-environmental behaviour of customers in Indian setting. Therefore, the current work attempts to answer the following question:

**RQ.** How does sustainability (i.e. social and environment) awareness relate to customer’s altruism, attitudinal purchase intentions, green brand loyalty and green brand evangelism?

To achieve this goal, data is collected through a survey with SEM employed to determine the relationship among constructs. This work has significant theoretical and practical contributions in the context of an emerging economy, examining the Indian growing market as a case study.

Current work contributes to the current literature in the following ways:

- It adds to the restricted literature on sustainable consumption in the Indian context by analysing the impact of sustainability awareness (social and environmental) on Indian consumer altruism, purchase intention, brand loyalty and brand evangelism for green brands.
- Analysis of this study offers key insights to marketers for crafting marketing strategies of green brands to optimise the effect of variables taken in the study.

This paper is organized into six parts. Part 2 outlines the literature review along with the conceptual model development. Part 3 gives details about methods design process. Part 4 offers the data analysis and results. Part 5 explains the discussion and the conclusion is given in the last part.
2. Literature Review

2.1 Sustainability in Indian Context

Collaborative motivation is needed in the present day, where businesses and individuals co-create products to achieve sustainability in all aspects (Maniora, 2018). Although a business can become sustainable by its own practices and managerial decisions, it requires the support of end consumers who spread a positive word of mouth to help it flourish (Schaltegger et al., 2018). To have a holistic picture about customer needs from a sustainable perceptive, it is important to strategize a business model, because mismanagement of sustainable practices can drastically impact on financial conditions (Dhaliwal et al., 2012; Shibin et al., 2017; Maniora, 2018).

From an organisational perspective, social sustainability pertains to understanding the effects of an organisation’s activities on society (Young et al., 2010). The triple bottom line framework of sustainability that covers three dimensions of organisational performance. Businesses and organisations can be ethically, transparently and socially responsible (Broman and Robert, 2017).

An organisation’s ability to identify both social challenges and associated risks and mitigate their impact, determines its social sustainability (Testa et al., 2018).

Recent global warming scenarios have impacted on consumption patterns and activities of humans, with environmental degradation now becoming a major concern (Ozaki, 2011). Reportedly, India is the fastest growing nation where environmental issues and improvements are being considered as priorities, irrespective of it being an emerging country. Various initiatives have been taken up by firms in recent times to increase awareness and to ensure and encourage people to use green products. To support these initiatives and to keep a check on air pollution levels, the Indian government has introduced a green tax. A study conducted by Unilever indicates that 88% of Indians, out of those who chose sustainable and green products, felt good about consuming such products. Moreover, Indian consumers’ attitude to sustainable and green products is significantly positive, driving their purchase intention; however, policy makers’ intervention is required to make consumers more aware about green products (Jaiswal and Kant, 2018).

2.2 Sustainability and TPB
The literature clearly shows that various environmental problems get exaggerated by consumers’ buying behaviour and that consumers have become conscious of choosing products that protect the environment (Vermillion and Peart, 2010; de Medeiros and Ribeiro, 2017). TPB (Ajzen, 1991) has been used to explore the decision-making framework regarding ethical behaviour and has become one of the most widely utilized rational choice models (Chang, 1998; Ramayah et al., 2012). Consumers’ green purchase decisions also come under the umbrella of ethical behaviour (Kumar et al., 2017). TPB specifies a framework of relevant factors to explain the behaviour towards a specific issue. It permits the discovery of the influence of some other related variables that may also significantly describe that behaviour (Ajzen, 1991). This flexibility allows researchers to include additional variables and/or replace variables of the underlying theory with other variables of interest to seek further clarity in understanding the behaviour (Kumar et al., 2017). Our study extends the existing framework of TPB to examine the impact of social and ecological sustainability awareness on green brand evangelism through altruism, purchase intentions and green brand loyalty. The following section covers the hypothesis development.

2.3 Conceptual Framework Development
The conceptual hypothetical framework of this work is shown in Fig.1. The model considered six constructs, namely (1) social sustainability awareness, (2) environment sustainability awareness, (3) altruism, (4) customer attitudinal green purchase intention, (5) customer green brand loyalty and (6) customer green brand evangelism. The relationship among these constructs is explained as follows:

2.3.1 Social sustainability awareness, environment sustainability awareness and altruism
Literature on sustainability indicates that researchers have put less emphasis upon the social aspects of sustainability (Ahmadi et al., 2017; Kumar et al., 2017). There are several ways in which social sustainability has been defined by researchers; however, it is difficult to provide a common definition (McKenzie, 2005; Kumar et al., 2017; Stöckigt et al., 2018). There are various dimensions of social sustainability namely health, influence, competence, impartiality and meaning-making (Missimer et al., 2017). Social sustainability in general is referred as life-enhancing condition within communities, and a process within communities that can achieve that
condition (McKenzie, 2004). Environmental sustainability focuses on upholding or improving the integrity of Earth’s life supporting systems (Holdren et al., 1995). Since environmental sustainability seeks to improve human wellbeing by protecting the raw materials sources that are used to fulfil human needs, hence it is a pre-requisite for social sustainability (Goodland, 1995). Moreover, studies conducted by Florida (1996) Rothenberg et al. (2001), Marshall et al. (2005) and Johnson (2006) observed that both sustainability dimensions (social and Environmental) are associated with each other. Existing literature points that having the awareness or basic knowledge is critical for taking actions (Sanner, 1994; Radecki and Jaccard, 1999). Steg et al. (2014) have observed that relevant values play important role in activating the personal norms and feelings of having moral responsibility to save the environment. The customer’s altruism is a belief that shows concern for the happiness of other human beings (Schwartz, 1977). Hence, altruistic values are likely to play decisive role in customer’s efforts towards environment protection. Additionally, Nordlund and Garvill (2002) and Gifford and Nilsson (2014) have also indicated that altruistic values directly and indirectly influence consumers’ personal norms concerning society, as well as environmental protection when there is problem awareness (Steg et al., 2014). Therefore, we propose the following hypotheses:

**H1**: Awareness of social sustainability positively influences customer altruism.

**H2**: Awareness of environmental sustainability positively influences customer altruism.

### 2.3.2 Altruism and attitudinal green purchase intention

Altruism is about acting on others’ behalf without expecting any benefit (Schwartz, 1977). It is a significant predictor of environmental safeguarding (Nath et al., 2014; Yadav and Pathak, 2016). Consumers with higher levels of altruism are more cautious about ecological benefits of their behaviour than the consequences for their own selves (Steg et al., 2014). Therefore, this group of consumers are more conscious about the environment. In the wake of past research (Guéguen and Stefan, 2016; Yadav and Pathak; 2016), the findings show that altruism has a significant effect on customers’ green purchase intentions. Ajzen (1991) explored in his TPB model that the decision-making framework related to ethical behaviour, showing that customers’ consciousness of ethical behaviours and green purchase decisions also come under the umbrella of ethical behaviour. Therefore, we hypothesise that:

**H3**: Altruism positively impacts customers’ green purchase intention.
2.3.3  Altruism and green brand loyalty

The joy of giving (altruism) produces psychological well-being and moral satisfaction in individuals and it is of increasing attention in the specific framework of green brands (Yadav and Pathak; 2016; De Dominicis et al., 2017). Altruistic value is found to be positively related to customer perceived value (Papista and Krystallis, 2013) because customers are likely to feel good about their purchase of green brands (Pickett-Baker and Ozaki, 2008). Therefore, they feel motivated to use environmentally friendly products (Hartmann and Apaolaza-Ibáñez, 2006). In the current environment of rapidly growing competition and where customers have a wide range of choices, keeping loyal customers helps organisations to develop. Past research highlights the significance of considering the nature of the relationship between brands and consumers (Henrique and de Matos, 2015; Menidjel et al., 2017); certain characteristics of the entities involved are key factors that define the nature of the relationship. Customer characteristics moderate the association of satisfaction they derive and their behavioural outcomes (Menidjel et al., 2017). Moreover, a satisfied customer who implicitly trusts the brand may not establish a relationship with the brand because relationships are moderated by customer traits. This work attempts to investigate whether the environmentally friendly traits of brands and customers’ altruism guide the relationship formation between green brands and consumers, influencing green brand loyalty as a result. We anticipated a positive association between altruism and customers’ attitudinal loyalty to green brands. Hence, we propose the following hypothesis:

\[ H_4: \text{Altruism positively influences customer attitudinal loyalty to green brands.} \]

2.3.4  Altruism and green brand evangelism

A dis-satisfied customer reaches out to more people than does a satisfied customer in sharing his/her experience. Due to technological advancements, the capability of consumers to communicate has increased exponentially (Kumar et al., 2018). The wide availability of the internet, with expedient access through tablets and mobile phones, has transformed buying habits. A growing number of customers look for and provide information about brands with the convenience of being able to post comments on forums, websites, social networking sites, etc. There is also a rising concern in modern organisations about the influence of customers’ brand-directed behaviours on other customers, sales, and eventually, the valuation of firms (Becerra...
and Badrinarayanan, 2013). Both individual and brand-related factors influence brand-directed behavioural intentions, Badrinarayanan and Sierra (2018) indicated that in today’s consumer society, it is important to know the factors that impact the consumer’ altruistic values. In this study, we have anticipated that customers who are highly altruistic are likely to become evangelists for green brands because such brands help in ensuring social and environmental sustainability. Therefore, we propose:

\( H_5: \) Altruism has a positive impact on the brand evangelism for green brands.

2.3.5 Green purchase intention, green brand loyalty and green brand evangelism

Brand loyalty is defined as the extent of attachment a consumer has for a specific brand, it is considered as a significant outcome variable in existing literature (He et al., 2012; De Villiers, 2015). Akturan (2018) observed an important positive association between green brand equity and purchase intention of consumers. Loyalty has been studied as attitudinal loyalty (Kressmann et al., 2006) and behavioural loyalty by measuring the frequency of buying (Romaniuk and Nenycz-Thiel, 2013). For our study, attitudinal loyalty of green brands was considered. Attitudinal loyalty concentrates on consumers’ commitment to the brand. The loyalty factor depends on the type and intensity of customer buying intention (Wallin Andreassen et al., 1998). A positive buying intention is likely to make the customer loyal to the brand. It is important to note that consumer involvement with a product type has a positive impact on attitudinal loyalty toward a focal brand (Russell-Bennett et al., 2007). Therefore, we assume that purchase intention and brand loyalty are positively associated for eco-friendly products. Thus, we propose that:

\( H_6: \) Attitudinal purchase intention has a positive impact on green brand loyalty.

A strong emotional bond between a brand and a consumer leads to evangelism. The customer takes the lead in creation of this bond, not the brand. Although brands continuously try to bias customers via advertisements and/or other methods, it is the customer who chooses to hold the evangelist title (Riiivits-Arkonsuo et al., 2014). It is not mandatory for customers to purchase a specific brand to become evangelists. This signals a weak or insignificant relationship between consumer buying intention and product evangelists. However, Collins et al. (2015) indicate that evangelists, who have already been customers, have a stronger purchase intention to buy the product in future as compared to non-customer evangelists. Therefore, the buying process may or
may not contribute to a positive and emotional experience (Riorini et al., 2016). We assumed that customer attitudinal buying intentions have a positive influence on brand evangelism for environmentally friendly products. Thus, the based on the above discussion we propose: 

**H7**: Attitudinal purchase intention positively influences evangelism for green brands.

### 2.3.6 Green brand loyalty and green brand evangelism

Being eco-friendly adds value to a brand; consumers also prefer to buy green brands (Hartmann et al., 2005). Evangelism marketing aims to make buyers believe in the product or service so much that they are compelled to tell others about it. Trust plays a significant role in augmenting customer loyalty (Iglesias et al., 2010; Papista et al., 2018). Loyalty has a bigger dependency factor base than evangelism. Evangelism and loyalty both require an emotional attachment between the customer and product/brand. However, evangelism requires a much stronger bond. Therefore, we predict that a loyal customer is likely to turn into an evangelist and hypothesize the following:

**H8**: Green brand loyalty exerts a positive influence on green brand evangelism.

Based on the aforementioned hypotheses, we have developed the following conceptual framework.

![Conceptual Framework](image)

**Fig.1**: Conceptual framework and hypothesis
3. **Research Design**

3.1 **Instruments and Questionnaire Designing**

This empirical work is to examine the hypothesised association. Sustainability awareness is increasing among customers; therefore, knowing the customers’ changing preferences is very important for the service providers (Jaiswal et al., 2018). Thus, we have conducted this study as follows. There are six constructs in the proposed model: (1) social sustainability awareness, (2) environmental sustainability awareness, (3) altruism, (4) customer attitudinal green purchase intention, (5) customer green brand loyalty and (6) green brand evangelism. The indicative variables against each of the identified constructs are listed in Table 1.

| Construct                  | Code: Indicators                                                                 | References                                           |
|----------------------------|----------------------------------------------------------------------------------|------------------------------------------------------|
| Social sustainability       | SS1: Trust in social practices                                                    | Nordin et al. (2010); Dempsey et al. (2011);        |
| awareness                  | SS2: Common meaning to society                                                    | Axelsson et al. (2013); Missimer et al. (2017);     |
|                            | SS3: Accessibility of products                                                    | Stöckigt et al. (2018); Yong et al. (2019)          |
|                            | SS4: Updating as per societal needs                                               |                                                     |
|                            | SS5: Safe and healthy                                                             |                                                     |
|                            | SS6: Involvement in developing communities                                         |                                                     |
|                            | SS7: Positive impact on community                                                 |                                                     |
| Environment sustainability  | ES1: Awareness of environmental changes                                           | Nordin et al. (2010); Dempsey et al. (2011);        |
| awareness                  | ES2: Inclination to environmentally ethical products                              | Axelsson et al. (2013); Hoek et al. (2017);          |
|                            | ES3: Growing pressure to save the environment                                     | Missimer et al. (2017); Boggia et al. (2018); Yong  |
|                            | ES4: Personal responsibility                                                      | et al. (2019)                                       |
|                            | ES5: Influencing others’ awareness                                                |                                                     |
|                            | ES6: Individual efforts                                                           |                                                     |
|                            | ES7: Societal influence                                                           |                                                     |
| Altruism                   | AT1: Environmental problems - family consumption behaviour                         | Cleveland et al. (2005); Nath et al. (2014); Guéguen|
|                            | AT2: Saves energy and helps to lower electricity/water bills                      | and Stefan (2016); Yadav and Pathak (2016)           |
|                            | AT3: Societal problems’ results and behaviour                                     |                                                     |
|                            | AT4: Willingness to help others                                                   |                                                     |
|                            | AT5: Pollution is always a concern for me                                          |                                                     |
|                            | AT6: Green consumption - save future generations                                  |                                                     |
|                            | AT7: Consumption of green products and feeling of pride                           |                                                     |
| Attitudinal green          | PI1: Price of the product                                                         | Liu et al. (2012); Prakash et al. (2017); Jaiswal   |
| purchasing intention      | PI2: Proud feeling                                                                | and Kant (2018)                                    |
|                            | PI3: Willingness to pay                                                           |                                                     |
|                            | PI4: Interest to buy                                                               |                                                     |
As per the above listed variables, a questionnaire was prepared to examine the influence of the identified factors on creating brand evangelism. The questionnaire looked into the demographic details and the initial response of respondents to green product use and ownership in its first part. In second consisted of questions about the constructs in Table 1. To observe these constructs, multiple items for each construct were included in the designed questionnaire (Malhotra and Dash, 2011). For each item in the second part of the questionnaire, responses were collected on a 5-point Likert scale, where 1 show ‘strongly disagree’ and 5 indicates ‘strongly agree’ (Hair et al., 2010). The sample questionnaire is shown in Annexure-I.

### 3.2 Sampling and Data Collection Procedures

The indicators for each construct were first identified from literature and field experts. For this, a pre-testing questionnaire was designed. A small survey of fifteen experts from industry and academia, who had ten years of experience in sustainability, green marketing and consumer prediction, was conducted to ascertain their perception and input. The main objectives of this survey were to get conceptual inputs, to remove any typing/language errors and to set the base criteria to collect data for the model. The evaluation of questionnaire has done by the respondents based on a five-point Likert scale (where 1 means ‘strongly disagree’ and 5 means ‘strongly agree’). After pre-testing some small amendments were made. Data was collected by online survey, the participant who fulfil the below-mentioned criteria were eligible to fulfil the questionnaire. After pre-testing and discussion with these experts, the minimum criteria for selecting participants for data collection was established; they...
must have been regular, active buyers of green products
must have consumed green products for a minimum of at least 3-4 years
must have been educated to at least graduate level

After setting the criteria for selection, the final questionnaire was designed and used for data collection. 340 responses were collected by our research team by using online platforms i.e. email, Facebook, LinkedIn, WhatsApp etc. Nine response data were removed for the data sheet. We observed that they were not filled properly i.e. five responses out of nine were found EXTRME missing values and four responses filled only one value for variables. Thus, the data of 331 participants was finalised for analysis. As per previous studies, the same size is good enough for the analysis (Luthra et al., 2016; Prakash et al., 2019; Yong et al., 2019). Table 2 shows the summary of respondents.

Of the participants, 65.86% are male and 34.14% are female. We set graduation qualification as the minimum criterion for selection in the hope that participants could understand the research topic well and complete the questionnaire appropriately. Out of 331, 56.50 % are graduates, 32.63 % have masters’ degrees and 10.88% have other qualifications. The current consumption patterns indicate that 27.19% of the respondents preferred using green products to normal products. However, another 26% indicated their preference for using green products in the near future. To examine the non-bias between early and late responses, a t-test has been employed (Podsakoff, 2003; Hair et al., 2010; Luthra and Mangla, 2018). No significant difference at \( p > 0.05 \) was observed.

| Characteristics of respondents | Total | Percentage |
|-------------------------------|-------|------------|
| **Gender**                    |       |            |
| Male                          | 218   | 65.86      |
| Female                        | 113   | 34.14      |
| **Education**                 |       |            |
| Graduation                    | 187   | 56.50      |
| Masters                       | 108   | 32.63      |
| Others                        | 36    | 10.88      |
| **Age (years)**               |       |            |
| 21 – 25                       | 64    | 19.34      |
| 26 – 30                       | 112   | 33.84      |
| 31 – 35                       | 101   | 30.51      |
| 41 – 45                       | 34    | 10.27      |
| > 45                          | 20    | 6.04       |
| **Occupation**                |       |            |
| Private sector                | 123   | 37.16      |
| Public sector                 | 93    | 28.10      |
### Data Analysis and Results

For analysing data, a systemic process was followed. For reliability and validity, along with Cronbach alpha, exploratory factors analysis was used to check each indicator loading of a construct and communality values. CFA was then used to confirm each indicator of the construct. The SEM was employed to examine the model. The details are provided below.

#### 4.1 Reliability Analysis

The internal reliability of the constructs for our research was examined using Cronbach alpha. The Cronbach alpha value of constructs can be considered to be reliable only if they are > 0.5 (Hair et al., 2010, Malhotra and Dash, 2011). Table 3 shows that all the constructs used in this work have a Cronbach alpha value > 0.5. Hence, all constructs are confirmed to be reliable.

#### Table 3. Reliability analysis

| Construct                        | Code | Loading | Communalities | Cronbach alpha |
|----------------------------------|------|---------|---------------|----------------|
| Social Sustainability Awareness  | SS1  | 0.884   | 0.782         |                |
|                                  | SS2  | 0.622   | 0.387         |                |
|                                  | SS3  | 0.757   | 0.573         |                |
|                                  | SS4  | 0.737   | 0.544         |                |
|                                  | SS5  | 0.673   | 0.453         |                |
|                                  | SS6  | 0.855   | 0.731         | 0.884          |
|                                  | SS7  | 0.839   | 0.703         |                |
| Environment Sustainability Awareness | ES1 | 0.824   | 0.679         | 0.842          |
|                                  | ES2  | 0.595   | 0.354         |                |
|                                  | ES3  | 0.613   | 0.375         |                |
|                                  | ES4  | 0.737   | 0.543         |                |
|                                  | ES5  | 0.808   | 0.653         |                |
|                                  | ES6  | 0.832   | 0.689         |                |
|                                  | ES7  | 0.586   | 0.343         |                |
| Altruism                         | AT1  | 0.642   | 0.413         |                |
|                                  | AT2  | 0.624   | 0.389         |                |
### 4.2 Measurement of the Model

#### 4.2.1 Construct and indicator reliability

Confirmatory Factor Analysis (CFA) was employed to estimate the model. Initial, CFA findings showed that model was not adequate model fit as per the recommended values by Bagozzi and Yi (1988) but after removing low standardized factor loadings as mentioned below Table 4 which in turn improved the model fit ($\chi^2 = 820.143$, $\chi^2/df = 2.412$, GFI = 0.911, CFI = 0.941, NFI = 0.904, IFI = 0.942, TLI = 0.919, RMSEA = 0.052). The loadings of factors/constructs and variables give indicator reliability. A recommended loading of 0.7 is considered acceptable for testing purposes (Hair et al., 2010); however, even a loading $\geq$ 0.5 can be considered as acceptable (Tenenhaus et al., 2005). Table 4 shows that the loading of the identified variables is $> 0.5$. Hence, variables and factors/constructs are confirmed to be reliable.

| Attitudinal Green Purchasing Intention | PI1   | 0.688 | 0.446 |
|---------------------------------------|-------|-------|-------|
|                                       | PI2   | 0.738 | 0.545 |
|                                       | PI3   | 0.711 | 0.504 |
|                                       | PI4   | 0.672 | 0.452 |
|                                       | PI5   | 0.676 | 0.457 |
|                                       | PI6   | 0.624 | 0.389 |
|                                       | PI7   | 0.590 | 0.348 |
| Green Brand Loyalty                   | BL1   | 0.736 | 0.542 |
|                                       | BL2   | 0.713 | 0.508 |
|                                       | BL3   | 0.714 | 0.509 |
|                                       | BL4   | 0.529 | 0.280 |
| Green Brand Evangelism                | BE1   | 0.814 | 0.662 |
|                                       | BE2   | 0.806 | 0.650 |
|                                       | BE3   | 0.869 | 0.755 |
|                                       | BE4   | 0.884 | 0.782 |
|                                       | BE5   | 0.784 | 0.615 |
4.2.1.1 Convergent validity

The convergent validity has been assessed by using Composite Reliability (CR); Average Variance Extracted (AVE) and convergent validity can be assessed (Fornell and Larcker, 1981). The variables that measure > 0.5 are known to be convergent and valid. Table 4 indicates that all the factors/constructs have a composite reliability > 0.5 and an AVE also > 0.5 (Petljak et al., 2018). It shows the convergent validity of the proposed model.

| Construct                           | Code | Estimates | CR  | AVE  |
|-------------------------------------|------|-----------|-----|------|
| Social Sustainability Awareness (SS)| SS1  | 0.883     |     |      |
|                                     | SS2  | 0.850     |     |      |
|                                     | SS3  | 0.902     |     |      |
|                                     | SS4  | 0.867     |     |      |
|                                     | SS5  | 0.818     |     |      |
|                                     | SS7  | 0.731     |     |      |
| Environment Sustainability Awareness (ES)| ES1  | 0.736     |     |      |
|                                     | ES2  | 0.859     |     |      |
|                                     | ES3  | 0.865     |     |      |
|                                     | ES4  | 0.853     |     |      |
|                                     | ES6  | 0.780     |     |      |
|                                     | ES7  | 0.797     |     |      |
| Altruism (AT)                       | AT2  | 0.888     |     |      |
|                                     | AT3  | 0.931     |     |      |
|                                     | AT4  | 0.779     |     |      |
|                                     | AT5  | 0.746     |     |      |
|                                     | AT7  | 0.734     |     |      |
| Attitudinal Green Purchasing Intention (PI)| PI1  | 0.850     |     |      |
|                                     | PI2  | 0.811     |     |      |
|                                     | PI3  | 0.774     |     |      |
|                                     | PI4  | 0.727     |     |      |
|                                     | PI5  | 0.809     |     |      |
|                                     | PI6  | 0.746     |     |      |
|                                     | PI7  | 0.707     |     |      |
| Green Brand Loyalty (BL)            | BL2  | 0.704     |     |      |
|                                     | BL3  | 0.857     |     |      |
|                                     | BL4  | 0.722     |     |      |
| Green Brand Evangelism (BE)         | BE1  | 0.878     |     |      |
|                                     | BE2  | 0.725     |     |      |
|                                     | BE3  | 0.759     |     |      |
|                                     | BE4  | 0.782     |     |      |
*Items deleted because of low estimate value (< 0.50) are SS6: Involvement in developing communities; ES5: Influencing others’ awareness; AT1=Environmental problems - family consumption behaviour; AT6: Green consumption - save future generations; BL1: Repeat buyers and BE5: Great enthusiasm

4.2.1.2 Discriminant validity

Factors/constructs are bound to differ from one another. Discriminant validity indicates the degree of differences between the factors/constructs. If the square root of the AVE exceeds the correlation value among the reflective constructs, then the model is said to satisfy all the constraints of discriminant validity (Petljak et al., 2018). Further, it is considered to be reliable and valid because the factors/constructs have a strong correlation with their own variables rather than with other constructs’ variables as mentioned in Table 5.

Table 5. Correlation between latent variables

|     | BE   | SS   | ES   | AT   | PI   | BL   |
|-----|------|------|------|------|------|------|
| BE  | 0.788* | -    | -    | -    | -    | -    |
| SS  | 0.629 | -    | -    | -    | -    | -    |
| ES  | 0.250 | 0.823* | -    | -    | -    | -    |
| AT  | 0.104 | 0.345 | 0.788 | 0.819* | -    | -    |
| PI  | 0.052 | 0.310 | 0.171 | 0.303 | 0.777* | -    |
| BL  | 0.332 | 0.014 | 0.002 | 0.302 | 0.603 | 0.764* |

* Square root of AVE

4.3 Structural Model

After model confirmation through CFA, SEM was used to evaluate the relationship between latent variables. The goodness of-fit statistics showed that the proposed model satisfactorily fit ($\chi^2 = 742.521$, $\chi^2/df = 1.861$, GFI = 0.920, CFI = 0.931, NFI = 0.912, IFI = 0.932, TLI = 0.917, RMSEA = 0.031) (Bagozzi and Yi (1988). The value of RMSEA (0.031) also meets the suggested criteria 0.08 given by Browne and Cudeck (1992). Coefficient of determination, i.e. $R^2$, and goodness of fit were assessed for the identified conceptual model by using partial least square analysis. $R^2$ and goodness of fit should be > 0.1 for a structural model to be valid (Hair et al., 2010). Table 6 gives the hypothesis, the standard path and the standard path coefficient, all of which describe the significance level of the paths.
Table 6. Results of partial least squares analysis

| Hypothesis | Path                                      | Estimate | Critical Ratio (t-value) | p-value | Results  |
|------------|-------------------------------------------|----------|--------------------------|---------|----------|
| H₁         | Social sustainability awareness -> altruism| 0.385**  | 4.862                    | 0.000   | Supported|
| H₂         | Environmental sustainability awareness -> altruism | 0.263**  | 2.371                    | 0.000   | Supported|
| H₃         | Altruism -> attitudinal green purchasing intention | 0.413*   | 3.631                    | 0.021   | Supported|
| H₄         | Altruism -> green brand loyalty            | 0.612**  | 6.322                    | 0.000   | Supported|
| H₅         | Altruism -> green brand evangelism         | 0.231*   | 3.972                    | 0.012   | Supported|
| H₆         | Attitudinal green purchasing intention -> green brand loyalty | 0.425**  | 9.236                    | 0.000   | Supported|
| H₇         | Attitudinal green purchasing intention -> green brand evangelism | 0.521*   | 2.432                    | 0.032   | Supported|
| H₈         | Green brand loyalty -> green brand evangelism | 0.702*   | 7.212                    | 0.024   | Supported|

**p < 0.001; *p < 0.05

Table 6 illustrates that the entire hypothesis holds true and is valid. Hypotheses H₁, H₂, H₄, H₆ are supported at the significance level of p < 0.001 and H₃, H₅, H₇, and H₈ are supported at the significance level of p < 0.05.

The cascading effect indicates that creation of product/brand evangelism is true. This will help an organisation in marketing communication activities. These results indicate that an awareness of social sustainability and environment sustainability positively influences altruism, which in turn positively influences a customer’s buying intention, customer loyalty and brand evangelism for green brands. Structural model results are also shown in Fig. 2.
5. Discussion of Findings

The results show that awareness of social sustainability has significant positive influence on altruism and supports hypothesis H₁ (β = 0.385, t = 4.862, p < 0.001). In previous studies, altruism has been examined in the context of social attributes and is observed to be an important predictor for understanding consumers’ consciousness about their social aspect (Nath et al., 2014). Missimer et al. (2017) suggested that social sustainability not only ensures that consumers have good health, but also improves their self-value within their social groups. Consumers’ awareness of environmental sustainability is also increasing as is evident from their commitment to protecting the environment (Missimer et al., 2017; Boggia et al., 2018). Table 6 demonstrates that awareness of environmental sustainability also influence altruism, positively and supports hypothesis H₂ (β = 0.263, t = 2.371, p < 0.001). However, this is to notice here that awareness for social sustainability impacts altruism more strongly than awareness for environmental sustainability. For hypothesis H₃ (β = 0.413, t = 3.631, p < 0.05), the results show that altruism positively influence customers’ green purchase intention, supporting the hypothesis. In literature, altruism has been examined in the context of social and environmental attributes and plays a significant role as a predictor of consumers’ consciousness towards social and environmental
sustainability (Yadav and Pathak, 2016) and feel motivated to use environmentally friendly products (Hartmann and Apaolaza-Ibáñez, 2006). Current analysis demonstrates that altruism positively influences customer loyalty and brand evangelism for green brands, supporting hypotheses H₄ (β = 0.612, t = 2.322, p < 0.001) and H₅ (β = 0.231, t = 3.972, p < 0.05). This finding is in line with the observation of Collins et al. (2015) and Riorini et al., (2016). Similarly, purchase intention also found to have a positive impact on customer loyalty and brand evangelism for green brands, supporting hypotheses H₆ (β = 0.425, t = 9.236, p < 0.001) and H₇ (β = 0.521, t = 2.432, p < 0.05). This study analysis supports the findings of Collins et al. (2015) that evangelists have a stronger purchase intention toward the product in comparison to non-customer evangelists. A customer may or may not become brand evangelist because it is not certain that buying process will have a positive and emotional experience for the customer (Riorini et al., 2016). But producers can create a strong emotional bonding with a particular brand, possibly leading to evangelism (Riivits-Arkonsuo et al., 2014). As per the current analysis, effect of altruism on green band loyalty is strongest and its minimum on green brand evangelism. However, altruism influences brand evangelism remarkably via green brand loyalty. Lastly, results of the current work also support hypothesis H₈ (β = 0.702, t = 7.122, p < 0.05) that green brand loyalty has a positive impact on green brand evangelism. This finding converges with the current literature (Becerra and Badrinarayanan, 2013).

5.1 Theoretical and Managerial Implications

5.1.1 Implication for theory

Customers’ decision-making is significantly based on the information absorbed by them. In addition, they can comparatively absorb more information and are greater influenced through recommendations of trusted individuals or sources rather than by researching on their own. Be it a new product development or existing product marketing, altruism and brand evangelism play an important role in co-creating products. In this regard, our research work provides a significant implication in theory. In current literature, there is no discussion available related to social and environment sustainability awareness of customers in the setting of altruism and green purchasing intention.
In this work, a theoretical model has been developed where social and environment sustainability awareness of customers are related to altruism and green purchasing intention; this shows how these most important constructs influence the loyalty of consumers and make them brand evangelists. Literature has suggested that various environmental problems are exaggerated by consumers’ buying behaviour and that consumers have become conscious of choosing products that protect the environment (de Medeiros and Ribeiro, 2017). Therefore, our theoretical model extends the existing framework of the TPB (Ajzen, 1991) and explores the decision-making framework regarding ethical behaviour (Sidique et al., 2010). The current work bridges the value-action gap by extending the framework beyond purchase intention by including green brand loyalty and green brand evangelism.

5.1.2 Implication for practice

In today’s competitive environment, organisations want to satisfy and retain their customers (Sidique et al., 2010; Kumar et al., 2017). Therefore, it is important to understand customer’s pro-environmental purchase behaviour in order to not only meet their changing taste, preference and needs but also to attain the sustainable operations at organisational level (Kumar et al., 2017; Kumar et al., 2018; Wang et al., 2018). In this study, we have developed a theoretical model to understand the consumer buying behaviour relating to green products by investigating the association among sustainability awareness (environment and social), altruism, buying intention, loyalty and evangelism for green brands. The findings suggest that sustainability awareness positively influence customers’ altruism; Customer’s altruism impacts purchase intention, loyalty and evangelism for green brands, positively; purchase intention has a positive effect on loyalty and evangelism for green brands; and loyalty impacts green brand evangelism in a positive manner. Current analysis offers important insights for decision makers at various levels. For instance, government may focus more and more on spreading awareness among people about sustainability (social and environmental) issues in order to guide their purchase behaviour to align with environmental protection concerns. Similarly, marketers should also consider this finding while designing advertisements. They may highlight those features of their products which solve sustainability issues (social and environmental). Merico hair oil advertisements highlight that when customers buy their product, they contribute towards solving a social sustainability issue (education to poor children). Similarly, HUL is also spreading the awareness
that resources are not equally accessible for all and those who have the access must use them in the most appropriate manner. This way, by making the customer aware about sustainability issues (social and environmental) and by aligning the purchase of their offering with solution of the raised issues, marketers may motivate the customers to buy their green products/brands. Based on our current analyses, altruism is an important variable that bridges that value-action gap. As suggested by the results of the current study, we recommend marketers to adopt appropriate marketing communication strategies that augment the altruism in their target customers as altruism has a strong and favourable impact on actual purchase (customer loyalty) of green products/brands. Altruism is not only driving customers to buy green products/brands but also contributes towards making them evangelist for green products/brands. Therefore, by triggering altruism among potential customers, marketers may succeed in acquiring them, making existing customers buy frequently and convincing other potential customers to buy green products/brands offered by the company. This way, markets can optimise the marketing expenditure and attain a competitive advantage.

6. Conclusion

This study started out with an idea to measure the impact of social and environmental sustainability awareness of customers on altruism, green purchase intention and how customer awareness impacts on their green brand loyalty and evangelism. Therefore, in this research, antecedent variables were social and environmental sustainability awareness and the consequent variable was product/brand evangelism. After studying current literature and gathering experts’ inputs, measuring variables for each construct were identified. A pre-testing questionnaire was drawn up to collect opinions from field experts. Based on their input, some amendments were made and a final questionnaire was designed for data collection. We collected the data of 331 respondents through a structurally designed questionnaire. The results from the data analysis revealed that all eight hypotheses constructed through the conceptual framework based on our literature review were supported by partial least square analysis. Social and environmental sustainability awareness was found to have a positive impact on customer altruism. The impact of altruism on customer buying intention, customer loyalty and product/brand evangelism is also positive, where the constructs are mediating variables.
Lastly, the impact of customer loyalty in creating product/brand evangelism was studied. The findings can help the marketers to understand customers’ consciousness about social and environment factors, which in future will help them to make better marketing plans and strategies according to their needs. The study findings suggest that organisational strategies and activities as per customers’ consciousness play a very important role; therefore, the developed framework can help managers adopt the most feasible and profitable activities that are environmentally friendly and economically practical.

6.1 Unique Contributions

- The study established a theoretical model where social and environment sustainability awareness constructs linked with customers’ altruism and attitudinal purchase intentions, green brand loyalty and green brand evangelism; in existing literature, there is a scarcity of studies in this area.

- With the help of new contrasts i.e. social and environment sustainability awareness constructs linked with of customers’ altruism, the theoretical model of the study extends the existing framework of the TPB and explores the decision-making framework under the umbrella of ethical behaviour.

- The current work bridges the value-action gap by extending the framework beyond purchase intention by including green brand loyalty and green brand evangelism.

- This is a unique study in team findings and is valuable for both customers and marketers. Opportunities for marketers and organisations can be identified by tracing gaps in their existing models and improving on them. The responsive attitude of any organisation towards society, the environment and their customer base can be critical; these are linked and organisations need to take heed of this. To gain a better position in the competitive market, gaps in the conceptual framework need to be filled.

Some limitations were encountered in this work. The data collected was limited, so the effect of many variables could not be considered. Future work should thus take account of demographic variables to understand the differences. This study is conducted from the consumer’s point of view; however, it must be tested from the marketer’s point of view as well. Additionally, as social media becomes the new tradition for advertising, how sustainability and the use of
sustainable and green products can be promoted using social media through these products/brand evangelists must be studied.

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Annexure-I

SURVEY QUESTIONNAIRE

Dear Respondent,

Greetings !!

I request you to fill up the attached questionnaire

SECTION A: Basic Information of Respondent

Please select/fill in the appropriate box

1. Name: (Optional) __________________________________________

2. Gender: □ Male      □ Female

3. Education □ Graduation      □ Masters  □ Others

4. Age:  □ 21-25  □ 26-30  □ 31-35  □ 36-40  □ 41-45   □ Above 45

5. Select your occupation: □ Private sector     □ Public sector    □ None

6. Experience with respect to green product (You can choose more than one):
   ○ I prefer using green products
   ○ I am yet to learn about green products
   ○ I would like to recommend others to buy green products
   ○ I always try to buy new green products
   ○ I would like to use green products in the coming days

7. Email ID (optional):________________________________________

8. Contact No. (optional):_____________________________________

SECTION B: Rating of Variables

Please rate your answers to the following questions in the scale of 1-5, where:

1-Strongly Disagree   2-Disagree   3- Can’t Say   4-Agree   5- Strongly Agree

Answer the following questions based on your current purchases i.e. products you use.

| S. No. | Variables                                                                 | Please tick the appropriate option |
|--------|--------------------------------------------------------------------------|-----------------------------------|
| 1      | I am aware that organisations must be careful about implementation of social practices | 1  2  3  4  5                      |
|   | Statement                                                                 | 1 | 2 | 3 | 4 | 5 |
|---|--------------------------------------------------------------------------|---|---|---|---|---|
| 2 | I am aware that similar products do not provide a common meaning to the society | 1 | 2 | 3 | 4 | 5 |
| 3 | I am aware that everyone does not have equal access to various products and services | 1 | 2 | 3 | 4 | 5 |
| 4 | I am aware that products are not updated as per societal needs             | 1 | 2 | 3 | 4 | 5 |
| 5 | I am aware that products have impacts on my safety and health             | 1 | 2 | 3 | 4 | 5 |
| 6 | I am aware that some products help the developing communities             | 1 | 2 | 3 | 4 | 5 |
| 7 | I am aware that some products have an operational impact on certain communities in a positive way | 1 | 2 | 3 | 4 | 5 |
| 8 | I am aware of the environmental changes the world is going through        | 1 | 2 | 3 | 4 | 5 |
| 9 | I am aware of environmentally ethical products                            | 1 | 2 | 3 | 4 | 5 |
|10 | I am aware about the growing pressure to change the way of living to combat the deterioration of the environment | 1 | 2 | 3 | 4 | 5 |
|11 | I am aware about the personal responsibility towards environmental changes | 1 | 2 | 3 | 4 | 5 |
|12 | I am aware that individuals can influence the overall environmental awareness levels | 1 | 2 | 3 | 4 | 5 |
|13 | I am aware of that individual are making efforts to deal with environmental changes | 1 | 2 | 3 | 4 | 5 |
|14 | I am aware that societal influence can increase individuals' environmental awareness | 1 | 2 | 3 | 4 | 5 |
|15 | I am aware of environmental problems and always try to buy the product which is not harmful for my family's consumption | 1 | 2 | 3 | 4 | 5 |
|16 | I believe eco-friendly products save energy and help to lower electricity/water bills | 1 | 2 | 3 | 4 | 5 |
|17 | I am conscious about society's problems and changing behaviour            | 1 | 2 | 3 | 4 | 5 |
|18 | If needed, I am ready to show my willingness to help others               | 1 | 2 | 3 | 4 | 5 |
|19 | Pollution is always a concern for me                                      | 1 | 2 | 3 | 4 | 5 |
|20 | I believe in green consumption - save future generations                  | 1 | 2 | 3 | 4 | 5 |