

## Behavioral reasoning perspectives on organic food purchase

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### ABSTRACT

Consumers' rising interest in organic food has drawn the attention of the academic community. The literature on the topic is growing, but it mostly focuses either on the acceptance of or resistance toward organic food. However, marketing scholars argue that the development of more in-depth insights into consumers' reasoning processes, and especially the roles of values and context-specific reasons are needed. The present study bridges this gap by utilizing the novel behavioral reasoning theory (BRT) framework. Cross-sectional data from 307 consumers and non-consumers from India were collected to investigate associations among attitudes, reasoning, value, and purchase intentions. This research studies the moderating role of food safety concerns and buying involvement. Additionally, the mediating role of reasons and attitudes is examined. The results suggest that value was positively associated with reasons (for and against), whereas attitude and reasons (for) resulted in favorable purchase intentions. Reasons (for and against) fully mediate the association between value and attitude. Furthermore, attitude partially mediates the association of reasons and purchase intentions. The moderation effect was not found for food safety concerns, but a limited effect among studied associations was observed for buying involvement. The findings raise significant implications for marketers and policymakers.

### 1. Introduction

Recent years have witnessed an increasing inclination among consumers to adopt food produced through organic methods, as it is seen as a healthy and environmentally sustainable alternative (Kushwah, Dhir, Sagar, & Gupta, 2019; Yadav, 2016). This is evident in the adoption of organic farming by over 175 countries (Willer, Schlatter, Trávníček, Kemper, & Lernoud, 2020). Also, global retail sales of over USD 97 billion have been estimated for organic food wherein developed countries, including United States (US), Germany, and France, have emerged as its largest consumers (Willer & Lernoud, 2019). Subsequently, scholarly research has focused on such developed countries to understand the nuances of consumer behavior pertaining to organic food (e.g., Hempel & Hamm, 2016). Comparatively, nations in emerging or developing stages of economic growth, such as India, have comparatively nascent markets for organic food (Basha & Lal, 2019) and have received relatively less attention from scholars (Kushwah, Dhir, &

Sagar, 2019b). Yet, India globally ranks ninth with respect to the total area being cultivated for organic food and is counted amongst the largest exporters of organic food across the globe (Willer & Lernoud, 2019).

Despite many measures perpetrated by the Indian government (Kushwah et al., 2019b), consumption of organic food in India's domestic market is relatively low and primarily relegated to metropolitan cities (Prakash, Singh, & Yadav, 2018). Extant research suggests that Indian consumers may show a higher predisposition to adopt and purchase organic food (Basha & Lal, 2019; Kushwah, Dhir, & Sagar, 2019a). Yet, there is a distinct gap (referred to as the "green gap") between attitude, use intention, and actual consumption (Kushwah et al., 2019b), which presents a significant challenge to organic food marketers in this region (Kushwah et al., 2019b). To address this challenge and elicit reasons for the apparent gap, there is an urgent need to probe interrelationships among consumers' attitudes, intentions, and behavioral patterns (Prakash et al., 2018).

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We argue that, for such an examination to yield contemporaneous knowledge, it is imperative to understand organic food purchases from two perspectives, namely reasons for purchasing (i.e., acceptance) and reasons against purchasing (i.e., resistance). The integration of these perspectives can lead to the development of greater insights into the behavioral reasoning behind a consumer's decisions (Ryan & Casidy, 2018). Prior literature includes several studies that have examined factors that promote the consumption of organic food (Kushwah, Dhir, & Sagar, 2019a, 2019b). By contrast, there is a critical gap in our knowledge of the reasons for resisting organic food purchases, and this should be explored further (Pham, Nguyen, Phan, & Nguyen, 2019; Wojciechowska-Solis & Soroka, 2017). Hence, we aim to address this gap by investigating consumers' behavioral reasoning processes related to organic food purchase and reducing the extant green gap by using the behavioral reasoning theory (BRT). The current study focuses on two primary research objectives. **RO1.** To ascertain if reasons (for and against) influence associations between health consciousness (as a value), attitude, and intention to purchase organic food. **RO2.** To study whether these associations are moderated by consumers' involvement with organic food and concerns about safely consuming food produced through conventional chemical-based farming practices. Data from 307 participants in the National Capital Region (NCR) of India was collected and analyzed to address these objectives.

## 2. Behavioral reasoning theory

Westaby (2005) proposed the behavioral reasoning theory (BRT) to elucidate interrelationships among reasons, beliefs, global motives, and behavioral intentions, as depicted in Fig. 1. BRT postulates that favorable factors may explain why an individual undertakes a particular behavior, but they cannot predict why the individual may resist said behavior. Westaby (2005) accordingly suggested the need to identify the unfavorable factors that cause individuals to resist adopting specific behaviors. These subjective factors referred to as “reasons for” and “reasons against,” are conceptually distinct, dependent on how consumers process inherent beliefs and values. Reasons have the ability to complementarily influence consumers’ attitudes, and their explication can lend insights into contextual or situational decision-making processes (Ryan & Casidy, 2018; Sahu, Padhy, & Dhir, 2020). Consequently, we argue that reasons may provide the missing links needed to explain the existing attitude–intention gap for organic food purchasing.

BRT differentiates between values and beliefs while positing the impact of these factors on reasons. Values and beliefs may be held for a long period of time and are deep-rooted, contrary to reasons which are specific to a particular decisional context (Westaby, 2005). These may affect global motives and impact consumers' reasoning process, and, consequently, their intended course of action (Ryan & Casidy, 2018;

Westaby, 2005). This effect has been suggested by prior studies that utilized BRT to study other contexts, such as the adoption of renewable energy (O'Driscoll, Claudy, & Peterson, 2013). Additionally, according to BRT, global motives collectively refer to three factors: subjective norms, attitudes, and perceived control (Westaby, 2005). They are described as “global motives,” due to their substantiated nature as fundamental influencers of consumers' behavioral intentions (Ajzen & Madden, 1986), across multiple domains and studies (Westaby, 2005). Thus, it is argued that coupled with the context-specific nature of reasons and beliefs, global motives and values can predict intentions beyond previously derived knowledge.

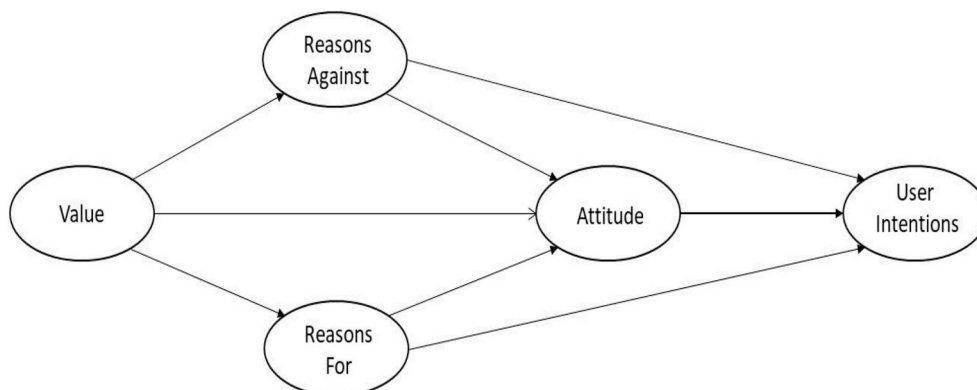
The novel perspective asserted by BRT has witnessed prior application across multiple contexts such as leadership decision-making (Westaby, Probst, & Lee, 2010), and alcohol consumption (Norman, Conner, & Stride, 2012), but only one study, by Ryan and Casidy (2018) previously applied BRT in context of organic food. Their findings pertained to organic cereals in the US market and found an insignificant effect of reasons against the associations between values and attitudes. They also determined the mediating influence of reasons (for and against) on associations between value and attitude to be contingent on moderating influence exerted by the reputation of the organic food brand (Ryan & Casidy, 2018). The present study extends these findings by explicating the mediating impact of reasons for and against organic food purchases in a dissimilar context (i.e., the emerging Indian economy).

## 3. Theoretical framework and hypotheses

The present study proposes a research framework based on BRT that consists of three independent variables: values, reasons for, and reasons against, and two dependent variables, attitude and purchase intentions. Unlike Ryan and Casidy (2018), we examine reasons as second-order factors that emerge from distinct components that can cumulatively act as reasons for and against organic food purchase. Thus, components of usage and risk barriers are examined as first-order measures for reasons against. Similarly, reasons for are measured through components (first-order measures) of nutritional content, naturalness as well as ecological and animal welfare. Additionally, the hypothesized framework investigates whether or not food safety concerns and buying involvement moderates the associations among the studied variables (see Fig. 2).

### 3.1. Attitude and behavioral intentions

Attitude has been defined as consumers' favorable or unfavorable predilection toward a particular behavior (Smith & Paladino, 2010). In comparison, behavioral or user intentions may be described as consumers' subjective probability of associating themselves with an action



Source: Adapted from Claudy & Peterson (2014)

Fig. 1. Graphical representation of Behavioral Reasoning Theory Source Adapted from Claudy and Peterson (2014).

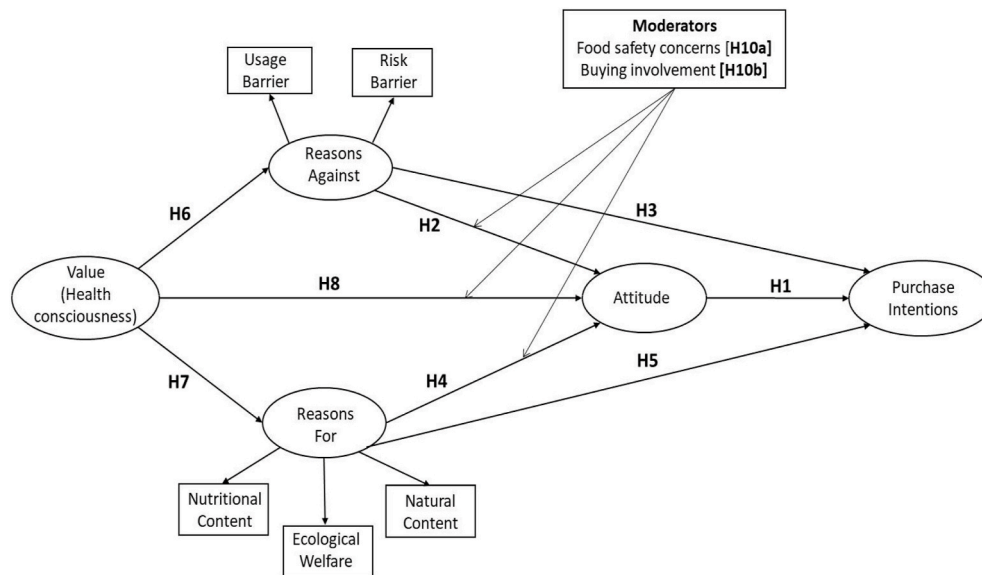


Fig. 2. Hypothesized research model.

(Fishbein & Ajzen, 1975). Prior studies on organic food have posited favorable attitudes that are associated with increased purchase intentions (Ashraf, Joarder, & Ratan, 2019; Yadav & Pathak, 2016). Research has further indicated that attitudes may also enact an indirect effect on intentions to purchase organic food items (Michaelidou & Hassan, 2008; Smith & Paladino, 2010). For instance, Ashraf et al. (2019) found attitude to fully mediate the effect of trustworthiness on organic food purchase behavior.

With respect to developed economies, prior research has suggested many factors that are associated with increased purchase intention for organic food items. Such factors include health consciousness (Pham et al., 2019), beliefs (Kareklas, Carlson, & Muehling, 2014), and perceived quality (Konuk, 2018), among others. However, limited attention has been directed toward examining consumers' purchase intentions in the context of emerging nations like India (Basha & Lal, 2019). The rising predilection of consumers in developing countries for choosing organic foods makes it imperative for marketers to understand factors enacting a favorable influence on attitudes and intentions. Consequently, we hypothesize that.

**H1.** Favorable attitudes toward purchasing organic foods are associated with increased purchase intentions.

### 3.2. Reasons against

The main premise of the BRT theory is the consideration of underlying reasoning process for observed behavior and context, which grants equivocal consideration to reasons for, as well as against, participating in a specific behavior (Westaby, 2005). For instance, Ryan and Casidy (2018) found reasons against were associated with lessened favorability of individuals' attitudes towards organic food. Extant literature suggests the prevalence of a lesser-established stream of research that has focused on barriers or resistance to consumers' purchases of organic food, especially in context of emerging economies like India (Kushwah et al., 2019b). However, scholars have proposed some common reasons and barriers to explain lower purchase rates for organic food (Kushwah et al., 2019b; Wojciechowska-Solis & Soroka, 2017). Recently, Kushwah et al. (2019) used the innovation resistance theory (IRT) for classifying reasons for resisting organic food purchases proposed by prior research into two broader categories, namely, functional (usage, value, and risk) and psychological barriers (tradition and image). We argue that although there is some knowledge about possible

reasons against organic food purchases, it currently lacks a coherent picture and substantiation in terms of contextual specificity. Based on prior literature, the present study focuses on determining significant reasons against organic food purchase, i.e., usage and risk barriers, indicated in recent studies in the specific context of India.

#### 3.2.1. Usage barriers

Usage barriers occur when a new product forces consumers to change their current usage patterns, i.e., habits and routines practices (Ram & Sheth, 1989). Henryks, Cooksey, and Wright (2014) suggest habits can create a potentially impeding influence on consumers' intent to purchase food items produced organically. Subsequently, we argue that usage barriers may be more evident in this context due to consumers' resistance toward adopting relatively unfamiliar products, such as organic foods. Furthermore, promulgating consumers' change of habits may be amplified by other usage barriers, such as the lower availability (Pham et al., 2019), lack of pertinent information (Chiu, Ortiz, Chih, Pang, & Huang, 2019), and difficulty in purchasing (Wojciechowska-Solis & Soroka, 2017). Thus, prior studies indicate the need to study usage barriers as a reason against consumers' attitudes and intent to purchase organic food items.

#### 3.2.2. Risk barriers

The risk barrier arises due to consumers' perceptions of underlying threats or dangers from adopting a new product or innovation (Kushwah et al., 2019b). Prior studies have lent credence to consumer skepticism of the authenticity of organic food products (Watanabe, Alfinito, Curvelo, & Hamza, 2020), quality, and certification (Wojciechowska-Solis & Soroka, 2017). Subsequently, risks associated with organic food purchases are posited to be an essential reason against their purchase and consumption (Kushwah et al., 2019b). Such risks may relate to consumers' doubts regarding financial, social, and trust-related issues (Chen, Lobo, & Rajendran, 2014). For example, a consumer may fear that paying a higher price for food that is labeled as organically produced, may not be perceived as significantly different from buying conventional alternatives (Torres-Ruiz, Vega-Zamora, & Parras-Rosa, 2018). Thus, in concurrence with preceding discussion and prior literature on BRT (Westaby, 2005), it is expected that the reasons against would be associated with lessened favorability of consumers' attitudes towards organic food and reduced purchase intentions.

**H2.** Reasons against purchasing organic foods are associated with a less favorable attitude toward organic food

**H3.** Reasons against purchasing organic foods are associated with reduced purchase intentions toward organic food.

### 3.3. Reasons for

Previous literature has focused on multiple reasons that promote and motivate consumers' to buy organic food, including the perception of healthiness (Thøgersen, de Barcellos, Perin, & Zhou, 2015) and taste (Wojciechowska-Solis & Soroka, 2017), among others. However, prior studies focusing on exploring the relative importance of such reasons have emphasized the significance of naturalness (Janssen, 2018) as well as ecological and animal welfare (Shin, Im, Jung, & Severt, 2019). Thus, based on prior literature, this study considers these three factors, i.e., nutritional content, ecological and animal welfare, and naturalness, that result in increased purchase intentions for organic food items.

#### 3.3.1. Nutritional content

Nutritional content refers to the ingredients or components of a food product that can directly influence an individual's health (Stephoe, Pollard, & Wardle, 1995). Prior research has indicated that nutritional content is a critical reason for consumers' rising preference for consuming organic food (Escobar-López, Espinoza-Ortega, Vizcarra-Bordi, & Thomé-Ortiz, 2017). This is especially true for consumers' conscious of individual, or familial health, and prefer to purchase food items produced through organic means without chemical interventions (Pham et al., 2019). Additionally, research posits that consumers' perceptions of organic food's nutritional value due to its natural content, can potentially increase their intentions to purchase (Lee & Yun, 2015) and create a favorable attitude (Liang, 2016).

#### 3.3.2. Ecological and animal welfare

Ecological welfare has been studied extensively in an organic food context and refers to consumers' concern regarding the welfare of their environment and animals. Organic food is considered an ecologically conscious product since it is seen as having a minimal possible adverse effect on the well-being of animals and the environment (Lea & Worsley, 2005). This may be attributed to the chemical-free production of food through organic means, which preserves the health of soil and animals, especially when compared to conventional alternatives (Makatouni, 2002). Ecological welfare is considered to be a credence attribute which is expected to provide emotional and congenial gratification to consumers due to the ecological conscientiousness inherent to food produced through organic methods (Lee & Yun, 2015). Many studies have found ecological welfare to be a significant reason that consumers cite for consuming organic food (Teng & Lu, 2016).

#### 3.3.3. Naturalness

Naturalness, or the natural content in food products, pertains to an absence of artificial ingredients, such as chemical fertilizers, insecticides, pesticides, genetically modified organisms, or similar characteristics (Chan & Lau, 2001). Organic food encompasses natural content and is sometimes referred to as "natural," "pure," "local," or "fresh food" (Chan & Lau, 2001). Previous literature has examined and found natural content to have a favorable influence on consumers' food purchase decisions. For instance, Janssen (2018) found naturalness to be a significant determinant for German consumers' decisions to engage in organic food purchases.

Prior research suggests that reasons for adopting a particular behavior are associated with favorable consumer attitudes and increased intentions to adopt. For instance, Ryan and Casidy (2018) found that reasons for consuming organically produced food were linked with encouraging attitude and increasing individuals' intentions to consume organic food. Similarly, previous studies that have utilized BRT have found similar associations to exist in other contexts, such as the use of bicycles in urban environments (Claudy & Peterson, 2014) and the

adoption of renewable energy systems (O'Driscoll et al., 2013), among others. In the context of the present study, we anticipate similar relationships:

**H4.** Reasons for purchasing organic food is associated with a favorable attitude towards purchasing organic foods

**H5.** Reasons for purchasing organic food is associated with increased purchase intentions toward organic food.

### 3.4. Value

Extant studies suggest that consumers' personal values, beliefs, and norms have the potential to influence consumers' reasons (for and against) and attitudes toward a particular behavior (Kareklas et al., 2014; Westaby, 2005). For instance, Ryan and Casidy (2018) found that values were associated with favorable attitudes and reasons for purchasing organic food items, subject to the reputation and esteem of the brand label. According to the values framework, an individual's value orientation is classified into four broad categories (Schwartz, 2006). One of these four values refers to conservation, which reflects an individual's degree of concern for the self or others. The current study employs the value of conservation (i.e., concern for self). We argue that incrementing knowledge about health-related issues arising from the consumption of chemically-produced products may have amplified consumers' concern for self-preservation by amplifying their health consciousness (Çabuk, Tanrikulu, & Gelibolu, 2014). This could cause consumers' increased drive to purchase products manufactured through organic methods. For instance, Aertsens, Verbeke, Mondelaers, and van Huylenbroeck (2009) conceptualized health as a measure of security value, which acts as one of the strongest motivators for consuming organic food.

In terms of organically produced food items, consumers with health consciousness have been previously found to have a favorable attitude (Pham et al., 2019), and the increased intention to purchase (Prakash et al., 2018). Despite apparent connotations for the positive effect of health consciousness on consumers' favorable behavior toward organic food, prior research seems to indicate contextually inconsistent findings for this association. For instance, Konuk (2018) found that health consciousness augmented pregnant women's willingness to purchase organic food items and pay premium prices for such products in Turkey. By contrast, a study by Basha and Lal (2019) found health consciousness to be insignificant in creating favorable intentions for organic food purchases in the Indian context. This suggests a need for further investigation of this contextual dimension.

Despite the lack of validated a priori associations, we argue that health consciousness consumers may be motivated toward more detailed scrutiny of information, certification, and quality claims of available products in the market. A similar proposition was made by Gineikiene, Kiudyte, and Degutis (2017) in their study, which examined consumers' skepticism in the context of functional food, which refers to food items claiming to have beneficial post-consumption effects on well-being. Such skepticism may be increased for consumers in emerging economies (Nuttavuthisit & Thøgersen, 2017), which may be constrained by lack of general information regarding production and certification processes (Chiu et al., 2019; Wojciechowska-Solis & Soroka, 2017). Thus, despite increased health consciousness, consumers driven by the value of self-conservation through the preservation of health, may be more predisposed to showcase stronger reasons against purchasing organic food items.

Based on the preceding discussion, we hypothesize that health consciousness, as a measure of consumer value, will be associated with favorable attitudes and stronger reasons against and reasons for purchasing organic food.

**H6.** Value towards organic food purchase is associated with increased reasons against purchasing organic food

**H7.** Value towards organic food purchase is associated with increased reasons for purchasing organic food.

**H8.** Value towards organic food purchase is an association with favorable attitudes toward organic food purchase

### 3.5. The mediating role of reasons

Aschemann-witzel and Aagaard (2014) suggest the imperative need to study the roles of mediating and moderating factors, such as reasons and attitudes to reduce the attitude-intention gap. We argue that since attitude and reasons are contextually specific, the examination of their mediating role can provide insights into mechanisms that drive consumers' decision-making in a particular situation. Findings of prior studies on organic food, provide support to the supposition of the significant mediational influence of attitude on intentions to purchase (e.g., Çabuk et al., 2014). We postulate that examination of the mediating role of reasons may provide an additional explanation for consumers' actions. This could be attributed to the fact that reasons may provide justifications for a particular behavior (Westaby, 2005), and may stimulate a particular behavior without a consumer's complete cognitive processing of motives (Westaby et al., 2010). Ryan and Casidy (2018) found reasons for significantly mediate the association between values and attitudes. The present study further advances extant understanding of the potential mediating influence of reasons (for and against), as well as attitude and hypothesizes the following.

**H9a.** Reasons significantly mediate the association between values and attitude

**H9b.** Attitude significantly mediates the association between reasons and purchase intentions

### 3.6. Moderating variables

Food safety concerns (FSC) has seen limited focus as a possible indirect influence on purchase intentions and consumption (Azzurra, Massimiliano, & Angela, 2019). FSC has been previously identified as a determinant for increasing consumers' interest in organic food (Teng & Lu, 2016) and may be argued as a possible moderator for purchase intentions. Additionally, the degree of consumer involvement with organic food or buying involvement (BINV) may also affect its purchase intentions (Lee & Hwang, 2016). This may be attributed to the differential behavioral patterns of buyers and non-buyers of organic food arising from variances in their perceived barriers (Kushwah et al., 2019b) and, possibly, individual reasons. Therefore, this study proposes to add to the current body of knowledge by exploring whether FSC and BINV moderate any of the proposed interrelationships.

#### 3.6.1. Role of food safety concerns (FSC)

Food safety concerns (FSC) represent consumers' degree of concern and awareness of the quality of food, artificial ingredients, adulteration, and pesticide residues that could directly affect their physical health (Teng & Lu, 2016). Due to various food scandals, consumers' FSC has increased (Teng & Lu, 2016) and induced growing demand for organic food due to its perceived positioning as a safer alternative to conventional food (Hwang, 2016). In fact, Chen et al. (2014) argue that safety-conscious consumers place extreme importance on certification and nutritional value of organic food. Multiple studies have found higher FSC is associated with favorable attitude (Pham et al., 2019) and increased purchase intentions (Hwang, 2016), and stronger buying involvement (Teng & Lu, 2016). Based on prior research, we can infer that consumers' intentions could vary based on their knowledge and participation in FSC related issues wherein consumers with higher FSC would show a higher propensity to purchase food items produced through organic means. Thus, it is likely that FSC may have a positive

moderating influence on possible associations among value, reasons (both for and against), and attitudes. It is thus hypothesized:

**H10a.** FSC will positively moderate the association between values, reasons for and against, and attitude, such that the association is stronger for consumers with higher FSC.

#### 3.6.2. The moderating role of buying an involvement (BINV)

Lee and Hwang (2016) argue that significant differences exist in the behavioral patterns, consumption values and purchase intentions (Kushwah et al., 2019b) of organic food buyers and non-buyers. These may be attributed due to differences in their values systems. For example, buyers and non-buyers of organic food may exhibit dissimilar levels of effort in pursuance of a healthy lifestyle (Eisinger-watzl, Wittig, Heuer, & Hoffmann, 2015; Kushwah et al., 2019a). Olson (2017) also suggests that consumers skeptical of organic food rarely express concerns about the possible adverse effects of consuming conventionally grown food, which may affect consumer beliefs and attitudes. This suggests that BINV for organic food would be different for buyers and non-buyers, which is in line with prior research (Kushwah et al., 2019b). We argue that BINV would, thus, have a moderating influence on consumers' reasons for, reasons against, and attitudes toward organic food, as follows:

**H10b.** BINV positively moderates the association between values, reasons for and against, and attitude, such that the association is stronger for the consumer with higher BINV

## 4. Method

### 4.1. Study variables

An extensive literature review and qualitative and pilot studies were conducted to outline the survey instrument of the current study. Like prior research on BRT, purchase intentions and attitudes were assessed using multi-item scales. The scales utilized in this study were based on extant research and further adapted for the present context (Claudy, Garcia, & O'Driscoll, 2015). A five-point Likert scale was used to measure study constructs (1- "strongly disagree" and 5- "strongly agree"). The measure of BINV was intended to differentiate buyers from non-buyers and was assessed by asking study participants, "do you buy organic food?". FSC was measured using three items drawn from Michaelidou and Hassan (2008) namely, "I'm very concerned about the amount of artificial additives and preservatives in food," "Nowadays most foods contain residues from chemical sprays and fertilizers" and "The quality and safety of food nowadays concern me."

Similar to the extant literature on BRT (O'Driscoll et al., 2013), the current study aims to ascertain context-specific reasons (both for and against) that affect organic food purchase behaviors. For this purpose, a qualitative study was conducted at various locations in India's national capital territory of Delhi. Semi-structured interviews were completed until reaching the saturation point of 24. These 24 respondents consisted of balanced gender representation, with varied ages and qualifications. Respondents were asked to elucidate their reasons for, and against, consuming organic food during these interviews. The qualitative data were analyzed, and, similar to previous studies, the three most frequently cited reasons were identified. The reasons for buying organic food represent both altruistic (ecological welfare), and egoistic (nutritional content and natural content) reasoning, indicating the consumers' preferences for organic food are not only due to self-centered reasons, but also include concern for the planet. These reasons have been assessed using existing scales from the literature, as detailed in Table 1. Similarly, consumers' reasons against consuming organic food were ascertained wherein most prominent reasons pertain to consumers' habits and mistrust. Two constructs from an existing study by Kushwah et al. (2019b) were used to represent these identified barriers.

**Table 1**  
Measurement of study variables.

Study Measures (References)	Measurement Items	Study	
		CFA	SEM
<b>Nutritional Content (NUT)</b> Step toe et al. (1995)	NUT1: Organic food contains a lot of vitamins and minerals.	.84	.84
	NUT2: Organic food is nutritious.	.86	.86
<b>Ecological welfare (ECW)</b> (Lindeman & Väänänen, 2000)	ECW1: Organic food is packaged in an environmentally friendly way.	.80	.80
	ECW2: Organic food is produced in a way that animals' rights have been respected.	.81	.81
<b>Natural content (NC)</b> Step toe et al. (1995)	NC1: Organic food contains no additives.	.84	.84
	NC2: Organic food contains no artificial ingredients.	.82	.82
<b>Risk Barrier (RB)</b> Kushwah et al. (2019b)	RB1: I fear that organic food available in the market is not organic.	.76	.75
	RB2: I fear that organic food labeling is not authentic.	.74	.74
	RB3: I fear that organic food retailers are not trustworthy.	.76	.77
<b>Usage Barrier (UB)</b> (Kushwah et al. (2019b);	UB1: In my opinion, it is not easy to find information on organic food products.	.81	.81
	UB2: In my opinion, it is not easy to find outlets for organic food products.	.75	.75
	UB3: Organic food is not conveniently available.	.83	.83
<b>Value (VAL)</b> (Gould, 1988)	VAL1: I reflect on my health a lot.	.82	.82
	VAL2: I'm alert to changes in my health.	.80	.80
	VAL3: I'm usually aware of my health.	.76	.76
	VAL4: I take responsibility for the state of my health.	.78	.78
<b>Attitude (ATT)</b> Armitage and Conner (1999)	ATT1: Consuming organic food is good.	.89	.88
	ATT2: Consuming organic food is satisfying.	.82	.82
<b>Purchase Intentions (PI)</b> Shaharudin, Pani, Mansor, and Elias (2010)	PI1: I am happy to buy organic foods.	.80	.80
	PI2: I would buy organic food products.	.78	.78

These include usage and risk barriers. Further, following the study by O'Driscoll et al. (2013), we used second-order constructs to measure individual reasons for and against consumers' intentions to purchase.

#### 4.2. Data collection

Cross-sectional data was collected from the national capital region of India, wherein specific shopping malls were targeted based on the availability of retail stores that stocked organic food products. Seven shopping malls were identified as home to four exclusive brand outlets (EBOs) and seven multi-brand outlets (MBOs). These were approached for permission to conduct this study on store premises. Two EBOs and six MBOs allowed us to conduct the store-intercept survey on their premises. Subsequently, data were collected from these stores over three months, from January–March 2019. Both pen-and-pencil and online questionnaires (tablet/mobile phone) were used to record participants' responses.

Participants were located by approaching shoppers in the store aisles that feature organic food, which was informed of the study's purpose and were invited to answer the survey. Five hundred sixty-eight shoppers were approached, of whom 367 consented to participate, resulting in a response rate of 64.6%. The high response rate may be attributed to shoppers' interest in an academic study on organic food and to their own inclination toward its purchase. The screening of the filled responses resulted in 307 valid responses (after the deletion of missing values or incomplete responses). Study participants included shoppers available in stores during the afternoon (between noon and 2 p.m.) and evening (5–7 pm). To ensure that participants represented a representative sample of the malls' foot traffic, shoppers were approached both during weekends and on weekdays.

#### 4.3. Participant profiles

The participants' demographic profile shows that the sample was predominantly male (60.6%), and 57.7% of the participants had previously bought organic food. The presence of a higher number of males in the sample was noted as one limitation of the study. With regard to educational background, participants' primarily reported having a bachelor's degree (45.6%), whereas 39.7% had a master's degree, 10.3% had completed higher secondary education (i.e., 12 years of schooling), 2.3% had a doctoral degree, and 2.3% had completed high school or a primary certification. According to scholars, highly educated

individuals present a deep interest in organic food consumption, and thus such a sample can gather more accurate responses and present a comprehensive evaluation of this phenomenon (Kushwah, Dhir, & Sagar, 2019a, 2019b). The participants were mainly employed in the private sector (43.3%) and as entrepreneurs (23.5%). Other participants indicated managing households (6.5%) or holding a public service position (9.4%), whereas 17.3% were engaged in other occupations.

#### 4.4. Data analysis

The data were analyzed using SPSS 25 and AMOS 25 statistical software. The analyses were directed to discern the association of reasons (both for and against) with consumers' values, attitudes, and organic food purchase intentions. The framework for this research was established using prior studies, and its validity was tested for the current context via confirmatory factor analysis (CFA). The different forms of construct validity and reliability were examined using the measurement model. To determine whether significant associations existed among the study's variables, including proposed mediating and moderating effects of reasons (both for and against) and FSC, structural equation modeling (SEM) was used. Descriptive statistics of the respondents' profiles were presented to provide a broad context for the findings.

### 5. Results

#### 5.1. Measurement model

CFA was conducted with the intention of establishing the validity and reliability of the measurement model (Kline, 2015). The CFA model returned good model fit ( $\chi^2/df = 1.59$ ,  $CFI = 0.97$ ,  $TLI = 0.97$ ,  $RMSEA = 0.04$ ). The values of factor loadings for the study items were greater than 0.70 (see Table 1). The values of composite reliability (CR) and average variance extracted (AVE) for different study constructs were greater than 0.70 and 0.50, respectively (see Table 2). This suggests that the study constructs satisfy the recommended threshold values, which provide sufficient evidence for the establishment of convergent validity. Similarly, the study variables possess sufficient discriminant validity, since the value of the correlation between any two pairs of study constructs was less than the square root of the AVE for each of those constructs (Fornell & Larcker, 1981) (see Table 2).

**Table 2**  
Means, standard deviations, and validity and reliability of study variables.

	Mean	SD	CR	AVE	MSV	ASV	RF	VAL	ATT	RA	PI
RF	3.68	.84	.89	.75	.62	.45	.86				
VAL	3.73	.88	.87	.62	.62	.32	.78	.79			
ATT	3.72	.91	.84	.73	.59	.38	.75	.52	.85		
RA	3.40	.82	.77	.63	.13	.10	.22	.35	.33	.79	
PI	3.71	.90	.76	.62	.59	.38	.75	.51	.77	.36	.79

Note. SD = Standard deviation, AVE = Average variance explained, MSV = Maximum shared variance, ASV = Average shared variance, RF = Reasons for, RA = Reasons against, VAL = Values, ATT = Attitude, PI = Purchase intentions.

5.2. Structural model

SEM returned good model fit ( $X^2/df = 1.59$ ,  $CFI = 0.97$ ,  $TLI = 0.97$ ,  $RMSEA = 0.04$ ). The research model explained 60.4% variance in users' reasons for purchasing organic food, 11.4% in users' reasons against organic food purchase intentions, 62% in users' attitudes, and 65% in purchase intentions toward organic food (see Fig. 3). The following hypotheses are supported: H1 ( $\beta = 0.48^{***}$ ), H4 ( $\beta = 0.90^{***}$ ), H5 ( $\beta = 0.35^{***}$ ), H6 ( $\beta = 0.34^{***}$ ) and H7 ( $\beta = 0.78^{***}$ ) (Table 3). The study hypotheses H2 ( $\beta = 0.20^{**}$ ), H3 ( $\beta = 0.10$ ), and H8 ( $\beta = -0.25^*$ ) are not supported.

5.3. Mediation analysis

The mediation analysis was performed using Model 4 in the process macro in SPSS (see Tables 4 and 5). It involved investigating the mediating association of (i) reasons for purchase and (ii) reasons against the purchase of organic food between consumers' values and attitudes. The analysis shows that reasons for and reasons against fully mediate the association of user value and attitude, due to the absence of any direct effect between them (see Tables 4 and 5). By contrast, users' attitudes were found to partially mediate the association of reasons for and reasons against purchase intentions (see Tables 4 and 5).

5.4. Moderation analysis

The moderation analysis was conducted using Model 1 on process macro SPSS. The analysis intended to examine the moderating impact of FSC and BINV on the association of users' attitudes with their values and their reasons for and against adopting organic food. As seen in Table 6, the FSC does not moderate either of these associations.

**Table 3**  
Hypotheses testing results.

Hypothesis	Path	Study		Supported (Yes/No)
		$\beta$	Significance	
H1	ATT → PI	.48	< 0.001	Yes
H2	RA → ATT	.20	< 0.01	No
H3	RA → PI	.10	n.s	No
H4	RF → ATT	.90	< 0.001	Yes
H5	RF → PI	.35	< 0.001	Yes
H6	VAL → RA	.34	< 0.001	Yes
H7	VAL → RF	.78	< 0.001	Yes
H8	VAL → ATT	-.25	< 0.05	No

Note. RF = Reasons for, RA = Reasons against, VAL = Values (health consciousness), ATT = Attitude, PI = Purchase intentions.

**Table 4**  
Mediation analysis results.

VAL → RF & RA → ATT						
	$\beta$	se	t	p	LLCI	ULCI
VAL → RF	.63	.04	15.16	.00	.5451	.7077
VAL → RA	.25	.05	4.93	.00	.1527	.3554
VAL → ATT	.03	.06	.41	.68	-.0969	.1478
RF → ATT	.63	.06	9.88	.00	.5034	.7537
RA → ATT	.16	.05	3.15	.00	.0601	.2610
Total effect of VAL → ATT	.46	.05	8.64	.00	.3551	.5648

RF → ATT → PI						
	$\beta$	se	t	p	LLCI	ULCI
RF → ATT	.67	.05	13.82	.00	.5779	.7697
RF → PI	.36	.05	7.35	.00	.2608	.4904
ATT → PI	.40	.05	7.35	.00	.2894	.5008
Total effect of RF → PI	.64	.05	12.95	.00	.5443	.7394

RA → ATT → PI						
	$\beta$	se	t	p	LLCI	ULCI
RA → ATT	.28	.06	4.58	.00	.1606	.4026
RA → PI	.12	.05	2.31	.02	.0175	.2186
ATT → PI	.58	.05	12.66	.00	.4922	.6734
Total effect of RA → PI	.28	.06	4.63	.00	.1622	.4022

Similarly, BINV had no moderating influence on the association of users' value with their attitude. However, BINV was found to positively moderate the association of users' attitudes with reasons for and

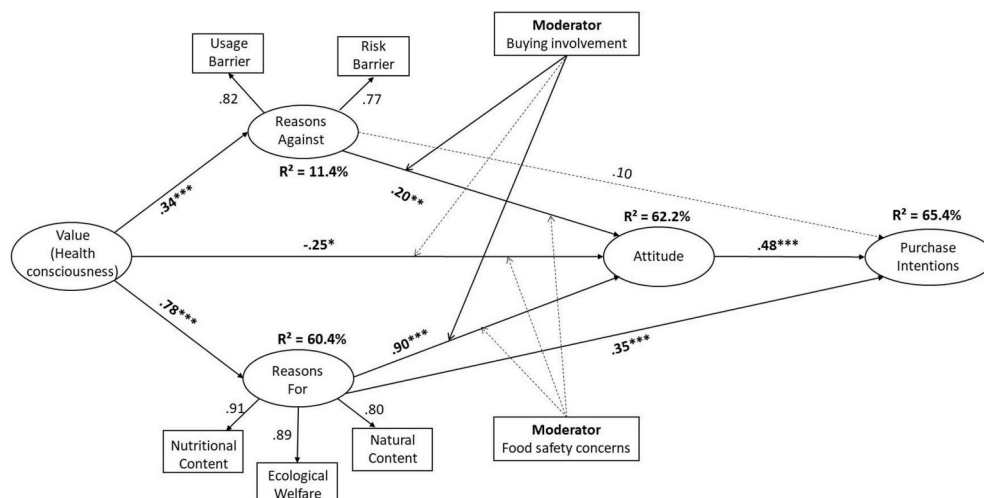


Fig. 3. Results of SEM

**Table 5**  
Indirect effect between value and attitude.

	Effect	se	LLCI	ULCI
VAL → RF → ATT	.39	.06	.2816	.5214
VAL → RA → ATT	.04	.02	.0123	.0858
RF → ATT → PI	.27	.06	.1788	.4239
RA → ATT → PI	.16	.05	.0721	.2625

Note. RF = Reasons for, RA = Reasons against, VAL = Values (health consciousness), ATT = Attitude, PI = Purchase intentions.

**Table 6**  
Moderation analysis.

FSC						
	β	t	p	LLCI	ULCI	Moderation
VAL → ATT	-.04	-.91	.36	-.1229	.0453	No
RF → ATT	.03	.74	.46	-.0512	.1123	No
RA → ATT	-.05	-1.05	.30	-.1470	.0450	No
BINV						
	β	t	p	LLCI	ULCI	Moderation
VAL → ATT	.12	1.07	.28	-.0972	.3311	No
RF → ATT	.19	1.82	.07	-.0153	.3905	Yes
RA → ATT	-.61	-4.78	.00	-.8553	-.3567	Yes

Note. RF = Reasons for, RA = Reasons against, VAL = Values (health consciousness), ATT = Attitude, PI = Purchase intentions, FSC = Food safety concerns, BINV = Buying involvement.

negatively moderate the relation with reasons against. Buyers and non-buyers of organic food were found to be significantly different from each other in terms of the association of reasons for and against with their attitudes (see Figs. 4 and 5).

In summary, results confirm the critical influence that health consciousness as a value, attitudes, and reasons can exert in inducing favorable inclinations among consumers to purchase organic food items.

Reasons (for and against) also fully mediate the association between values and attitude, which suggests that reasons may exert a dual influence on organic food behavior as a direct antecedent, as well as an indirect influencer. Additionally, attitude partially mediates the association between reasons and purchase intentions, while BINV moderates the association between attitudes and reasons. This suggests the complexity of inter-relationships between personal and contextual factors governing consumers' purchase of organic food items. Thus, this framework provides insights into the extant attitude-intention gap by examining direct antecedents, i.e., values, reasons for, attitudes, and indirect influencers, i.e., reasons (for and against), attitude and BINV; for intentions to purchase food items produced organically.

## 6. Discussion

This study aimed to explain the extent of the attitude–intention gap for organic food purchases by incorporating reasons into consumers' decision-making process, an aspect that has previously seen only limited consideration in academic contexts. With respect to the effect of attitudes on purchase intentions (H1), our findings align with prior research. Although, prior studies utilized other theories such as the theory of planned behavior (TPB), the theory of reasoned action (TRA), rather than BRT, to determine the significant impact of consumer attitudes on behavioral, i.e., purchase intentions (Ashraf et al., 2019; Pham et al., 2019). The findings thus validate the potential of BRT to explicate organic food purchase behavior and focus attention on the critical role played by reasons in this behavioral process.

The differential effect of reasons as determined by the results (H2-H5) supports the contention that, in the context of the cognitive process of reasoning, reasons against are not merely a logical opposite of reasons for, but rather a separate and distinct dimension (Claudy et al., 2015). This difference is further supported by the evident strength of the effect (i.e., β values) that reasons for have on attitudes and purchase intentions, in comparison to reasons against, which is in accordance with prior studies on BRT albeit in different contexts (Claudy et al., 2015; Sivanthu, 2018). The study adds value to the extant literature by determining that reasons against can increase the favorability of consumer's attitudes to purchase organic food. These findings suggest that

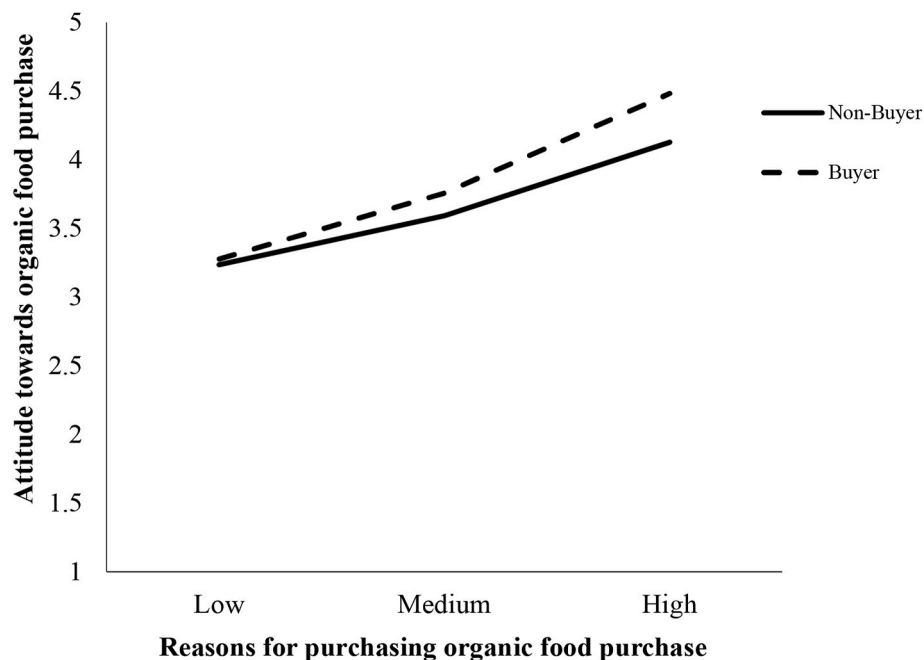


Fig. 4. The moderating influence of buying involvement on the association between attitude and reasons for purchasing organic food.



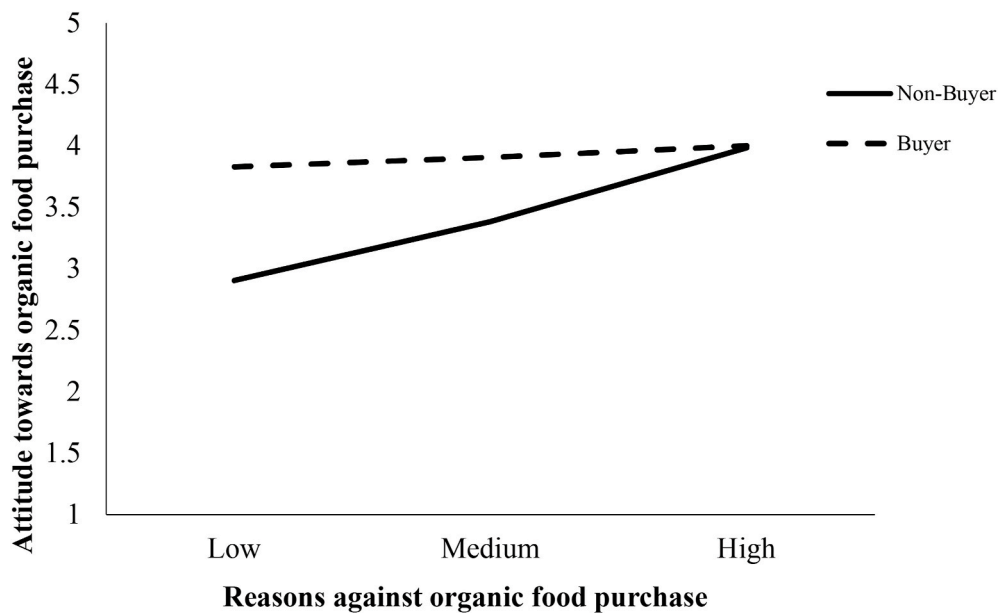


Fig. 5. The moderating influence of buying involvement on the association between attitude and reasons against purchasing organic food.

usage and risk-related barriers faced by an Indian consumer can inculcate a favorable attitude towards organically produced food items.

Contrary to expectations, reasons against did not influence purchase intentions (H3), which suggests that for Indian consumers, reasons against may only have an indirect impact on purchase intentions. Findings further indicate that reasons for can potentially inculcate a favorable attitude (supported by H4) among health-conscious consumers and stimulate their decision to purchase organic food (supported by H5). These findings are lending credence to our supposition that reasons incorporate an essential dimension of the process undertaken by consumers during organic food purchase behavior (Ryan & Casidy, 2018) in the context of the Indian market. The findings primarily support prior researches that indicated the significance of naturalness (Lee & Yun, 2015), nutritional value (Zhang et al., 2018), and ecological welfare (Lee & Yun, 2015). However, prior studies contented the direct significance of the effect exhibited by these variables on consumers. Contrastingly, our study suggests that they also have a significant effect, cumulatively, as reasons for purchasing organic food among consumers' conscious of health-related benefits arising from its consumption. Another point of interest in these findings pertains to the significance of naturalness, which is contrary to prior research (Lee & Yun, 2015) and indicates the context-specific influence of this variable on Indian consumers' purchase behavior.

The findings confirm that value, i.e., health consciousness, can increase consumers' perceived importance of reasons for (supported by H7). This aligns with prior studies that posit health consciousness enacts significant influence as a stimulus for increased purchase of organic food (Wojciechowska-Solis & Soroka, 2017). It supports the contention that values act as precursors to an individual's reasoning processes wherein reasons are derived from intimate/personal context (Vakola, 2016).

Value was also found to increase consumers' processing of reasons' against consideration of organic food items as a viable option for purchase (H6). This finding supports our contention that health-conscious consumers assume a more careful evaluation of perceived barriers such as information, prices, and availability prior to developing favorable or unfavorable attitudes to buying organic food items. Additionally, values shared a negative association with attitudes and are contrary to prior

findings (Ryan & Casidy, 2018). This is an interesting finding that we attributed to the context-specificity of the Indian marketplace. In addition to the significant association found for value and reasons against, this finding also hints at Indian consumers' skepticism about available organic food items in the market as well as mistrust regards to their authenticity and certification (Basha & Lal, 2019). It could also be attributed to image barriers associated with organic food purchase (Kushwah et al., 2019) and should be further explored in the context of India. It is the contention of the present study that policymakers and marketers alike; should adopt marketing strategies focused on enhancing perceived values to be derived from organic food in order to promote their purchase. Promotional offers should be regularly communicated to consumers to increase their interest and buying involvement with this product category. Such strategies would be beneficial for nascent markets such as India, wherein the current focus of organic food marketers rests on increasing product adoption levels.

The study also examined the mediating role of reasons (for and against) as well as attitudes on intentions to purchase organic food (H9). Reasons were found to enact influence as complete mediators, which lends support to prior findings pertaining to BRT that consumers' reasoning processes affect consumer value and attitudes (Claudy & Peterson, 2014; Ryan & Casidy, 2018; Westaby, 2005; Westaby et al., 2010). Thus, it is posited that the incorporation of reasons into frameworks studying organic food is imperatively required to gain a holistic perspective of this phenomenon. Study results also indicate that attitude partially mediates the association between reasons and purchase intentions and are consistent with prior research on the mediating influence of attitudes (Westaby et al., 2010; Çabuk et al., 2014) on intentions to buy organic food items (Michaelidou & Hassan, 2008; Smith & Paladino, 2010).

Contrary to expectations, FSC was not found to exert a moderating influence on any of the hypothesized relationships (H10a). Although food safety has emerged as a viable concern for consumers, its effect may appear as an antecedent as noted by prior studies (Michaelidou & Hassan, 2008). BINV was found to positively moderate the associations of reasons for and attitude, and negatively moderate the association between reasons against and attitude. Additionally, BINV has no influence on the association between value and attitude. Thus, it can be

argued that significant differences exist between consumers who exhibit higher engagement with organic food and frequently purchase it, vis a vis consumers who have never or rarely purchased organic food (Lee & Hwang, 2016). Since consumers with differing levels of BINV are motivated by the pursuit of distinct value ideologies (Eisinger-watzl et al., 2015), their behaviors could translate into differing levels of attitudes and reasons, as this study found. A consumer's level of involvement has the potential to develop their interest in future-based benefits (Gad Mohsen & Dacko, 2013). Since pursuance of a healthier lifestyle and the concept of health in itself incorporate a temporal perspective (Gad Mohsen & Dacko, 2013), scholarly investigations into organic food promotion could potentially benefit from the inclusion of involvement as a predominant contextual antecedent.

### 6.1. Study implications

The results raise several implications for academicians, policymakers as well as marketers interested in understanding behavioral patterns related to purchasing of organic food items. First, prior studies focused on emerging economies have mainly paid attention to identifying the antecedents of organic food buying behavior (Basha & Lal, 2019; Yadav, 2016), decision-making styles (Prakash et al., 2018) and purchase barriers (Kushwah et al., 2019b). This study extends scholarly knowledge by identifying the significance of health consciousness as a value that critically influences consumers' attitudes through their reasoning process. This indicates that amplified emphasis on health-related benefits of consumption, its certification, and production process may address potential skepticism about the available items in the market and further inculcate increased intentions to consume organically produced food items.

Secondly, it extends the geographic scope of prior academic investigations into organic food behavior, especially in context of India's nascent organic market. Through the application of the BRT framework, the study contributed to expansion of prior theoretical grounding applied to study the Indian consumers. It adds to our knowledge by identifying the concurrent effect of context-specific factors that affect Indian consumers' choice to adopt or resist purchasing organic food. During the literature review, only one other study was found that applied BRT to understand organic food related behavioral processes, but it was limited to examining the developed economy of USA (Ryan & Casidy, 2018).

The third significant contribution of this study is its exploration of the apparent potential of reasons for explaining the extent of the attitude–intention gap for organic food purchases. This explanatory power may be attributed to the development of the context-specific understanding for purchase intentions which could provide an explanation for inconsistencies reported in previous studies on organic food. Context provides a definitive background for understanding purchase intentions for and accounts for the consumer differences exhibited in terms of this phenomenon across different geographically and culturally diverse regions. Thus, it is imperative for academicians to account for contextual factors in frameworks directed toward organic food purchase. Such factors would assist in the identification of differential value orientations and reasons for consuming organic foods which may, in future, allow scholars to potentially develop a set of universal reasons, values and motives for its consumption.

Finally, the study results imply the need for policymakers to consider and incorporate geographically, i.e. locally, specific reasons while attempting for strategic promotion of organic food in various geographic regions. This would inculcate stronger consumer value orientations and reasons for adopting organic food and possibly result in higher translation of favorable attitudes into actual purchases. Further, addressing reasons against purchasing organic food items may further allow policymakers and scholars to lessen extant attitude-intention gap

by tackling the specific factors that cause consumers in distinct local regions to resist organic food. While prior research has resulted in identification of several factors associated with organic food that seem to be universally applicable, the study findings suggest that consumers' behavioral patterns may be definitively driven by consumers' encompassing context. Thus, we argue that the concept of a “glocal” orientation must be adopted to encourage the purchase and consumption of organically produced food items at a greater level to address any evident cross-cultural or geographic differences in consumers' behavioral profiles. To achieve this objective, strategies must be developed for addressing global concerns, such as sustainable consumption, while also accounting for context-driven reasons that can motivate or demotivate consumers from purchasing organic food. Furthermore, such strategies must incorporate specific consumer values in local contexts, as these can refute reasons against and augment reasons for organic food purchase.

### 7. Conclusion, limitations, and future work

This study used the BRT framework to understand whether the attitude–intention gap associated with purchase of organic food can be explained by incorporating the examination of values and reasons in consumers' decision-making processes. The theoretical framework was tested in the context of 307 Indian consumers. The associations among the constructs were examined in conjunction with BINV and FSC as moderators. Furthermore the mediating role of reasons (both for and against) and attitude were examined. Organic food has been given increasing importance by academicians, marketers, and consumers in recent years (Assocham & EY, 2018) due to concerns about food safety, quality, and health. This study incorporates consumers' concerns for organic food through the dimensions of values, reasons for, and reasons against organic food purchases in a singular framework, an approach that has not been previously examined, especially with respect to emerging economies like India.

The study is limited to the geographic region of India, especially national capital region of India i.e., Delhi region. Further research may be directed toward other regions to gain a comprehensive understanding of consumers' reasons for and against purchasing organic food. Also, similar research in neighboring countries which share cultural, and to some extent geographical similarities, with the Indian sub-continent could allow scholars to develop a regionally-grounded profile of organic consumers. This could extend current theoretical scope of knowledge. Consequently, the study should be extended to cover other non-metropolitan regions in India, along with other countries such as Bhutan, Pakistan, Bangladesh and perhaps even China.

The sample used for this study comprises mainly male respondents, which suggests the need for female-oriented studies, so as to understand if reasons and values adopted for this study hold similar levels of importance for females. Scholars may consider conducting similar studies with different socio-economic segments of female consumers, such as senior, younger, working professional, home-makers etc., to understand the facilitators and barriers for their purchase of organic food items. This could assist scholars in developing targeted strategies to induce further demand for such food items among different segments of a consumer market.

Future studies could focus on understanding how reasons (for and against) account for organic food purchase intentions in areas that are less urbanized or more rural. Such focus should be especially directed at identifying more context-specific reasons against that may directly influence intentions to purchase organic food items in urban vis. a vis. rural areas. Similar studies could provide deeper insights into cultural and societal differences affecting the purchase of organic food and create a more holistic and comprehensive knowledge of the importance of context for its promulgation.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.appet.2020.104786>.

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