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# What motivates Indian consumers' to buy organic food in an emerging market?

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Organic food

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emerging market

# Abstract

**Purpose** – Indian consumers are showing an increased demand for organic food products; however, little is known about their intention to buy organic foods. The purpose of this paper is to understand how fear towards conventional food products motivates an individual to buy organic food products and whether trust and perceived price as contextual factors are able to enhance the buying intention.

**Design/methodology/approach** – A total of 275 valid responses were collected using a self-administrated structured questionnaire, representative of Indian consumers. An ordinary least square regression analysis was used to analyse the effect of trust and perceived price in influencing the relationship between consumers' fear and intention to buy organic food products.

**Findings** – The moderating role of trust and perceived price in enhancing the direct relation between fear and intention was established. In addition, cluster analysis results revealed that married women with children are showing a greater interest in buying organic food products.

**Practical implications** – The findings of the study are of high importance to all stakeholders in organic food products, as selecting marketing practices which target consumers' concern is an indispensable part of finding a niche for organic food products.

**Originality/value** – The findings suggest that even though consumers are fearful towards conventional food products, they displayed negative intention to buy organic food products when their trust towards the third party is low, thus confirming the importance of trust as a buffering agent.

Keywords India, Organic foods, Trust, Fear, Perceived price, Buying intention, Kerala

Paper type Research paper

# 1. Introduction

The market for organic food products is growing across the globe. According to FiBL survey report 2018, the global retail sales of organic food products reached US\$80bn in 2016. The largest market for organic food products is in the USA ( $\notin$ 38.9bn), followed by Germany ( $\notin$ 9.5bn) and France ( $\notin$ 6.7bn). In contrast, the Indian domestic retail sale is confined to  $\notin$ 0.13bn (Willer and Lernoud, 2018). At the same time, it is reported that India's revenue from the organic market is expected to grow at a compound annual growth rate of around 25 per cent during the period 2016–2021. Even though India has the largest number of organic producers in the world, the total certified production is 1.70 million metric tons, out of this 4.58 lakh metric tons has been exported and domestic sale amounts to only 3.0 lakh metric tons (Yadav, 2013; APEDA, 2018).

India is a growing economy with a population of 1.3bn, out of which 300–350m belong to the middle class, and around 400m are poor (Banerjee, 2017). Food is still not sufficiently accessible by the majority of Indians, however food policies and regulations in India are underdeveloped and/or inefficient, creating an easy environment for outbreaks, fraud, adulteration and various food safety issues (Dandage *et al.*, 2017). Apart from this, the double standards of the Indian government when it comes to food safety and standards cause a high level of insecurity among Indian consumers. India complies with food safety standards when exporting only, while the products sold in the domestic market do not meet these standards (Jairath and Purohit, 2013; Food Service India Bureau, 2017). Therefore the motive factor for finding a substitute for conventional food products in India, compared to other western countries is out of necessity rather than out of desire.



Asia-Pacific Journal of Business Administration © Emerald Publishing Limited 1757-4323 DOI 10.1108/APJBA-11-2018-0208 In 2009, the National Centre for Disease Control reported that 51 per cent of food commodities in India were contaminated with pesticide residues (Sharma *et al.*, 2009). Furthermore, in 2014 the Council for Food Research and Development reported that 10 out of 44 vegetables found in Kerala contain organo chloro residue (Pillai, 2014), which is an endocrine disruptor – a chemical that has the capacity to increase birth defects, sexual abnormalities and reproductive failure (Jayaraj *et al.*, 2016). In 2017, the study conducted by Kerala Agricultural University found a high amount of insecticides and pesticides in vegetables and spices (John, 2017). Thus with the increasing news regarding contaminated food provided in the state of Kerala, the consumers demand organic food products increased drastically from 2012 till now. In 2012, the incident of organic shops being shut down due to non-takers for organic food products was even reported (TNN, 2012; Jayaram, 2017). This changing scenario can be seen not only in Kerala but also in other parts of India where consumer demand for organic food products has increased which provides the new and existing marketers with an opportunity to carve out an organic segment in the society (Mohanta, 2017).

Despite this threatful situation prevailing in India, not many studies were conducted (Nandi *et al.*, 2016) to understand how emotions generated by these incidents motivate individuals to convert to organic buying. In line with the previous studies (e.g. Chen, 2007; Michaelidou and Hassan, 2008; Kriwy and Mecking, 2012), Indian studies states that health consciousness as the major motive factor for buying organic food products, furthermore the focus of these studies were metro cities such as Delhi, Mumbai, Pune, Bangalore, Ahmedabad, etc. (Chakrabarti, 2010; Paul and Rana, 2012; Singh and Verma, 2017; Rana and Paul, 2017). Kerala, which has a high human development index (HDI-0.790) in India (*The Indian Express*, 2016), were not studied so far. In addition, there is a lack of studies exist which examine how Individual's emotions affect the buying intention of organic food products in India.

With all of these fear-inducing food situations prevalent in India, organic food products' domestic sale is confined to €0.13bn (Willer and Lernoud, 2018). This force the researcher to hypothesise that emotion alone does not sufficiently motivate the Indian consumer to buy organic food products. Various researchers have stated that price act as a barrier for consumers to buy organic food products (Chakrabarti, 2010; Al-Swidi et al., 2014; Sondhi, 2014); furthermore as the majority of consumers' falls within the middle-to poor income brackets, it is also essential that if they are going to spend the extra amount, they have trust in the organic products that they intend to buy. A study reported that Indian consumers trust is decreasing drastically, as around 40 per cent of the respondents had faced quality-related issues (PwC, 2015). Furthermore, certification is required only for those organic food products which are meant for exporting and not for the domestic purpose. Thus interested organic consumers have to trust the claims made by the producers and sellers as no cross verification of claims can be made (Businessline, 2018). Therefore this paper proposes that trust and perceived price can act as buffering factors, where its impact can effect the positive likelihood of an individual converting to buy organic food products. In this paper, we expect that the trust towards the third party claims and lower price increases the consumers organic buying intention.

Furthermore, the importance of identifying the category of consumers who will be interested to buy organic food product is very evident from the previous studies as it would help the government and other stakeholders of organic food products to develop strategies to target and position the organic products among the prospective consumers (Nandi *et al.*, 2016). Paul and Rana (2012) have stated a careful segmentation of market is very essential for framing strategies to convince the consumers effectively.

Thus, the objectives of this study are: first, to ascertain the effect of emotion especially consumer fear towards conventional food products while buying organic food products; second, to analyse the impact of trust and perceived price on the buying intention of consumers; and finally, to segment the type of consumers who will be interested in buying

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organic food products. To fulfil the objective of the study, we used techniques such as cluster analysis to segregate homogeneous consumers and profile their characteristics. Along with this, we also used the partial least square (PLS) technique to test the relationship between the variables.

This study contributes to the existing literature in three ways: first, organic consumer studies were limited in the state of Kerala; understanding their motive factor is essential for other states and producers as Kerala is a consumer state. Second, the moderating role of trust in enhancing the relationship between fear and intention to buy organic food products has not been studied and finally, using the PLS technique to study this topic constitutes a new approach.

#### 2. Literature review and hypotheses development

#### 2.1 Effect of emotion on buying intention

Intention is considered the best prediction of performing behaviour (Fishbein and Ajzen, 1975). In the current context, we are referring to consumers intention to buy organic fruits and vegetables (OF&V).

Traditional consumer buying decision models consider emotion as interference to the rational nature of human; however from 1990s marketers understood the role of emotion in consumer decision making (Kotler *et al.*, 2010). Bagozzi *et al.* (1999) have stated that emotions are central to the consumers' actions. As food is related to an individual's cultural, personal and social attributes, analysing food-evoked emotions can help to understand product choice, consumption pattern, consumer behaviour (Jager *et al.*, 2014; Khuong and Tram, 2015; Samant *et al.*, 2017; Kaneko *et al.*, 2018), etc.

According to Ortony *et al.* (1988), emotion is "a valenced affective reaction to perceptions of situations". Various researchers have conceptualised emotions in a generalised way such as positive or negative (Richins, 1997), while there are others who studied one or several specific emotions such as fear, empathy and guilt (Verhoef, 2005), mood (Honkanen and Frewer, 2009), anger (Bougie *et al.*, 2003), pleasure, arousal and dominance (Mazaheri *et al.*, 2012), fear and anger (Su *et al.*, 2018), etc.

Emotions are generally evoked when uncertain circumstances are evolved, thereby creating a change of plan. When the circumstance is positive, positive emotions such as contentment, happiness, love and pride are generated, and individuals decide to stick to the current plan, and on the other hand, negative emotions such as anger, fear, sadness and shamefulness will be generated when an individual's set plan is failed or interrupted, thereby initiating alternative problem solving and planning process (Laros and Steenkamp, 2005). Thus these positive or negative emotions are stimulated by an individual in particular situations (Verhoef, 2005).

However, this approach of evaluating the influence of emotion in a generalised or structured dimension has been criticised by the appraisal theorist where they argued that each emotion has a distinct characteristic or appraisal and treating it in a generalised dimension would hinder its capability of interpretation (Laros and Steenkamp, 2005). Thus for the current study, a specific emotion, i.e. "fear" is taken into consideration.

"Fear is a negatively valenced emotion that is usually accompanied by heightened physiological arousal" (Gore *et al.*, 1998). Studies conducted in 1953 by Janis and Feshback and Morris and Swann (1996) showed that, even though a high-fear condition creates a higher amount of fear, potential for a change in behaviour was exhibited by those individuals who were provided with solutions to avoid or overcome negative outcomes. However, various researchers have proposed that fear has a greater effect on changing the attitude of an individual (Laros and Steenkamp, 2005; Verhoef, 2005; Scarpa and Thiene, 2011). Furthermore, there are studies that found, fear is a strong emotional state, which motivates an individual to perform a set of behaviours (Blanchette *et al.*, 2007; Jung *et al.*, 2014). Drivers reduction model propose that when an individual is confronted by danger, he

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will be fearful and will be motivated to protect himself and when fear is eliminated there is no longer a drive for action (Janis and Feshback, 1953). The protection motivation theories driving element is that fear arouses a cognitive process which induces a change in behaviour (Scarpa and Thiene, 2011). Thus from the theories, it is confirmed that fear can have a direct effect on consumers' behaviour or it can influence an individual in forming an attitude thereby leading to behaviour, however in an extreme condition it can bypass the cognitive process also.

However, the amount of fear invoked in a person can vary across countries (Myers, 2010). A similar concept was put forward by studies conducted among consumers in China and Canada (Laroche *et al.*, 2001) and among consumers in Malaysia and Australia (Cochrane and Quester, 2005), where the persuasive effect of fear differed among the respondents. Hence, understanding the concept of fear in the Indian context is vital. In addition, it is believed that negative feeling increases consumers to defer from making decision, however recent research found that negative emotion such as fear can reduce deferral thereby increasing readiness for action (Coleman *et al.*, 2017).

Various researchers have tried to understand the persuasive effect of fear in the food industry. Brewer and Prestat (2002) showed that 40 per cent of respondents were more fearful of pesticide residue in their food products than of illness caused by microbial origin. Furthermore, a study conducted on Dutch consumers revealed that respondents felt a high amount of fear for genetically modified products, followed by functional food. However, their variance of fear (low) was fairly homogenous towards organic and regular food products (Laros and Steenkamp, 2004). Verhoef (2005) has measured fear using Richins' scale, and indicated the importance of buying organic meat due to fear, whereas McEachern and Willock (2004) found that the factors that affect consumers' motivation to buy organic meat cannot be generalised for other organic products. Therefore, in the current study, researcher is taking OF&V into consideration as it was reported that high quantity of pesticides was found in conventional fruits and vegetables. Furthermore, there is limited research on how fear as an emotion influence buying intention of OF&V.

Thus, the literature has found that fear can play a vital role in individuals' decision to buy certain kinds of food. Hence, understanding this role in the Indian context constitutes a contribution to the academic literature and is also useful to stakeholders who are interested in developing an organic market in India. Following the literature review, the following hypothesis has been formulated:

H1. Consumers' fear towards conventional food products has a positive impact on their buying intention of OF&V.

#### 2.2 Trust

The availability of a large variety of food items in the market has created a heavy burden on individuals to choose the right food products, i.e. those that they consider safe for consumption (Almås, 1999). In addition, the shifting of food production locations from local to national and international sites means that it has lost its connection to the local community (Torjusen *et al.*, 2001). This has created a gap between producers and consumers. Hence, it is time to replace age-old marketing strategies such as mass production and market segmentation with "relationship marketing", where the relationships between customers and retailers are intensified (Nwakanma *et al.*, 2007). For this strategy to succeed, trust is a key ingredient, as the need for trust arises in a risky situation (Mayer *et al.*, 1995). However, in the academic context, there is a lack of clarity concerning the definition of trust, which creates difficulty when studying the concept (Mayer *et al.*, 1995).

Various theories have treated trust differently. Economists conceptualised trust as the probability that the agents involved in the transaction will perform a particular action, the

risk associated with acting on such a probabilistic process, and the contextual factors that can alter the benefit obtained from trusting behaviour (Gambetta, 2000).

Sociologists conceptualised trust in terms of an individual's relational characteristics at the individual, community, population, organisational and societal level (Cook *et al.*, 2006).

Personality theory characterised trust as a phenomenon that develops in an individual's early stages of life (Erikson, 1950). Based on these theories, trust can be defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer *et al.*, 1995).

Thus, from the literature two types of trust can be identified: trust as a rational choice, in which the individual behaviour of actors such as farmers and retailers has an influence on an individual's buying intention; and trust as a relational value in which relationship between individual and institutional bodies (certification bodies or labels) and organisational structures (non-governmental organisations) can motivate an individual's intention of buying organic food products. In this way, the inter-relationship between farmers, retailers and certification bodies plays a key role in the formation of attitudes towards organic food products (Dietz and Hartog, 2006; Pandey and Khare, 2017). It has often been noted that a lack of trust in certification bodies and organic labels (Kollmuss and Agyeman, 2002; Fotopoulos and Krystallis, 2002) was considered as a predictor for the purchase of organic food products. However, the study carried out by Hsu and Chen (2014) treated trust as a moderating variable in which individuals who have a tendency to trust others have a higher intention of buying organic food products than individuals who have low trust. Thus it is proposed that a high level of trust in certification bodies and organic labels will increase the buying intention. On the contrary, when trust is low even when consumers are fearful towards conventional food products, they will be sceptical of buying organic food items. Therefore, the introduction of trust as a moderating variable is expected to strengthen the direct relationship between fear and intention to buy organic food products. Thus, the following hypothesis is formulated:

*H2.* Trust moderates the relationship between consumers' fear towards conventional food products and their buying intention, i.e. trust will enhance the direct relationship between fear and intention to buy organic food products.

#### 2.3 Perceived price

According to Kotler and Armstrong (1996), price is defined as "the amount of money charged for a product or service or the sum of values consumers exchange for the benefits of having or using the product or service". Thus price is an important factor while availing a service or buying a product (Vanhuele and Dreze, 2002) and it does not confine only to project the face value of the product to the customer, but also acts as a signalling cue for the quality of the product thereby helping customers to differentiate one product from another, thus consumers subjectively evaluate the price of product which can influence the buying (Palma *et al.*, 2016).

A study carried in China found higher price not only as a cue for quality but also as a status signal (Thøgersen *et al.*, 2015). However, majority of previous studies found higher price of organic food products as a challenge among consumers while buying organic food products (Van Doorn and Verhoef, 2015; Joshi and Rahman, 2016; Rana and Paul, 2017; Pham *et al.*, 2019). It was also found that higher price can prevail over all the human concerns (fear, health, environmental, ethical, etc.), thereby acting as a hindrance in buying organic food products (Gleim *et al.*, 2013). Thus from the literature, it is found that the perception of price are different among consumers based on their ethnic background, therefore the study tries to understanding the impact of perceived price on buying intention. A majority of the Indians

APJBA fall within the middle-income bracket, the current study propose that even when consumers are fearful towards conventional food products, higher price can hinder the buying intention of organic products. Therefore the following hypothesis is proposed:

*H3.* Perceived price moderates the relationship between consumers' fear towards conventional food products and their buying intention, such that the relationship weakens (strengthens) with higher (lower) levels of perceived price.

### 3. Methods

#### 3.1 Data collection and samples

The survey was conducted in Ernakulam district, the industrial capital of Kerala. As the population was indefinite, it was decided to proceed with a non-probability sampling technique such as judgement sample. Data were collected through self-administered structured questionnaires. The target population consisted of individuals above 20 years old, who were interested in organic fruit and vegetable products. To correctly target the sample unit, the questionnaire was blocked with filter question (such as: what type of organic buyer are you? – regular, irregular, potential). In this way, only those respondents who had some knowledge of and interest in buying organic food products were taken into consideration. Samples were collected by intercepting the respondents at various places including exclusive organic shops, supermarkets and also at other convenience stores. The questionnaires were only filled out by respondents who showed a willingness to participate in the survey. As there was only 16 items, based on the recommendation of Hair *et al.* (2010), 160 sample units were sufficient, however, we have collected 275 valid responses for the current study.

# 3.2 Measures

The scales of four constructs used in this study are adapted from existing validated scales. Fear is measured using a six-item scale adapted from Scarpa and Thiene (2011), to assess the degree of threat that motivates individuals to buy organic food products. The moderating variables "trust" is measured with a four-item scale adapted from Krystallis and Chryssohoidis (2005) and perceived price is measured using a three-item scale adapted from Steptoe *et al.* (1995). Finally, the outcome variable "intention" is measured using a three-item scale adapted from Ajzen (2002). Ajzen's three-item scale is used by many previous researchers and found it capable enough to capture the intention of respondents (Chen, 2007; Arvola *et al.*, 2008; Pino *et al.*, 2012; Pandey and Khare, 2017). All these scales were measured using a seven-point Likert agreement scale.

# 4. Findings

# 4.1 Descriptive statistics

Of the 300 responses collected, 275 valid responses were used for this study, out of which 51 per cent of respondents were male and 49 per cent were female. Majority of respondents were married (66.5 per cent) and have children at home (52 per cent). Regular buyers comprise of 17.1 per cent and irregular and potential buyers amount to 56.7 and 26.2 per cent, respectively.

# 4.2 Why PLS?

Statistical tool packages such as IBM SPSS Statistics 20 and Warp PLS 5.0 were used for the analysis of this study. To test the hypotheses, PLS technique was used. PLS-SEM is an ordinary least square (OLS) regression-based technique that determines the causal relationship (existence of moderation/mediation) along with delivering the empirical

measures of relationships between the manifests (items) and constructs (measurement model), as well as between the constructs (structural model) as given by Fornell and Larker (1981). Unlike the covariance based-structural equation model (CB-SEM), a single goodness of fit condition is not available in PLS-SEM, rather it focusses on the disparity between the observed or approximated values of the dependent variables and the values predicted by the model in question (Johnston *et al.*, 2004).

The present study could have used simple regression analysis along with moderation regression analysis to test its hypotheses. PLS, however, have two advantages over these techniques: it is able to run all path coefficients at a time to analyse the direct, indirect and spurious relationships; and it estimates the individual indicators weightings/loadings in the context of the theoretical model rather than in isolation. In addition, while SEM is more focussed on "model analytics", PLS is more focussed on "data analytics". Therefore, this study does not use CB-SEM either, as it is not focussed on the model but on the predictability of the endogenous variable (Rodríguez-Entrena *et al.*, 2013). Further, to minimise residual variance, it uses a series of interdependent OLS regressions, without making assumptions with regard to scales of measurement, distribution or sample size (Steenkamp and Van Trijp, 1996). In PLS-SEM, model estimation consists of two parts: evaluation of the measurement model; and evaluation of the structural model.

4.2.1 Evaluation of measurement model. Initially, assessment of the reflective measurement model includes internal consistency reliability, indicator reliability, convergent validity and finally discriminant validity. The age-old criterion for evaluating reliability of the scale is Cronbach's  $\alpha$ , which assumes that all indicators have equal outer loading. PLS-SEM, however, prioritises indicators as per individual reliability. Therefore, PLS takes into account the value of "composite reliability" to evaluate the inter-item consistency. The composite reliability score varies between 0 and 1, with higher values indicating a higher level of reliability. The general acceptable level in social science research is above 0.70.

Convergent validity measures the extent to which items correlate with other items of the same construct. To establish convergent validity, outer loadings of the items and average variance extracted (AVE) are taken into consideration. An outer loading of 0.7 is essential, which indicates that 50 per cent of the indicator's variance has been explained by the respective latent variable. An AVE is defined as the total mean value of the squared loadings of the items associated with the construct. An AVE-value of 0.50 or above is required to confirm the convergent validity of the scale. A value less than 0.50 indicates that more error remains in the indicators than the variance explained by the construct (Fornell and Larker, 1981). Table I summarises the reliability and convergent validity of the scale.

Discriminant validity addresses to what extent a construct is distinct from other constructs conceptually, i.e. the uniqueness of each construct is analysed. Fornell-Larcker's (1981) approach is used to assess the discriminant validity. It compares the square root of the AVE-values with the latent variables correlations. In this approach, variance shared by the constructs should be less than the AVE-value in order to establish the distinctiveness of each construct. In Table II, diagonal values represent the square root of the AVE-values that are greater than its highest correlation with any other constructs.

In this manner, adequate results were obtained to confirm the relationship between the indicators and the constructs (measurement model). For assessing common method bias, we followed Podsakoff *et al.* (2003). Unrotated exploratory factor analysis indicated three factors, explaining 53 per cent of total variance, thus rejecting the probability of single general factor thereby suggesting that method bias was not present to an extent in which it can interfere with the study results.

4.2.2 Evaluation of the structural model. As we have confirmed the constructs' reliability and validity, we further test the hypotheses. In order to test H1, which states that "Consumers' fear toward conventional food products has a positive impact on their buying

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	Item name				Loadings	loadings	CR	AVE	
	<i>Fear</i> I fear that conv pesticide residu	entional food pr	oducts availabl	e in market contain	0.833	0.693	0.942	0.729	
	I fear that agric cause diseases	ultural products	on of ordinary	food could cause	0.827	0.683			
	lifestyle disease	s such as cancer	; asthma, obesi	ty, etc., in the long rur	n 0.885	0.783			
	I fear that cons	umption of ordin	hary food reduc	es longevity	0.856	0.732			
	agricultural pra I avoid/ reduced	ctices the consumptio	n of fruits/vege	tables/other food items	0.867	0.751			
	due to the fear	of pesticide resi	due in food pro	ducts	0.855	0.731			
	<i>Trust</i> Organic food la	hel/logo gives n	ne a feeling of t	rust	0.894	0 799	0.931	0 771	
	I have confiden I have trust in t	ce on the merch the food certifica	ants who sell o ation bodies wh	ertified products en they claim the	0.839	0.703	0.501	0.771	
	products as org	anic			0.882	0.777			
	I generally have	e a trustworthy	impression of c	rganic food claims	0.897	0.804			
	Perceived price Organic food is Buying organic	too expensive f	or me rth the money		0.841 0.845	0.707 0.0714	0.924	0.721	
	Substitute prod	ucts at lesser co	ISL		0.001	0.741			
Table I. Summary of reflective	Intention I intent/continue to purchase organic products in future I expect to purchase organic food products in future I will purchase organic products in future				0.754 0.891 0.879	0.568 0.793 0.772	0.881	0.712	
measurement model	Notes: CR, con	nposite reliabilit							
	Variables	Mean	SD	1	2	3		4	
<b>Table II.</b>	1. Fear 2. Trust 3. PP* 4. Intention	4.99 4.44 4.53 5.13	1.11 1.38 0.681 1.12	(0.85) 0.53** 0.42* 0.62**	(0.87) 0.34* 0.56**	(0.85) -0.01 <sup>ns</sup>		(0.84)	
for checking discriminant validity	<b>Notes:</b> *Perceived Price; $n = 275$ . Values in the parentheses represent the square root of the AVE value. * $p < 0.05$ ; ** $p < 0.01$								

intention of organic fruits and vegetables", a regression analysis was performed that revealed that 36 per cent of explained variance for the consumers' intention to purchase organic food products is explained by the consumers' fear towards conventional food products. Thus it is confirmed that consumers who are fearful have a higher chance of buying organic food products. This is in line with studies that found that due to fear towards conventional food products, consumers are trying alternatives that are labelled "quality", "organic", "fair trade" or "local" (Ilbery and Maye, 2005; Verhoef, 2005).

Further, to test H2 and H3 which checks the interaction effect of trust and perceived price, a full model with direct effect and moderation effect was performed. In this way, with the introduction of trust as a moderating variable, the model's explainability has increased to 47 per cent and when the perceived price was introduced the combined effect increased to 51 per cent which clearly explains the effect of trust (b = 0.25, p < 0.001) and perceived price (b = -0.14, p < 0.001) on buying intention.

Furthermore, to analyse the effect of trust on the buying intention of consumers at different levels, an independent sample *T* test was performed, by splitting the whole sample with lower (scale score lower than 5 median score) and higher (> 5) levels of trust. The result confirms that there is a significant difference between the scores of high levels of trust (M = 5.5, SD = 0.67) and those of the low levels of trust [(M = 4.6, SD = 1.3); t(273) = 6.76, p < 0.0001] on the buying intention of organic food consumers. The following graph clearly represents this disparity: consumers' fear towards conventional products leads them to buy organic food products when consumers' trust is high as the steepness of the slope increases when the trust is high. In contrast, even though consumers' fear towards conventional food products is high, their intention to buy organic food products is low, when the trust towards the third party is low as the slope curved downward when trust decreased (Figure 1).

Similarly, the effects of perceived price at different levels were tested by splitting the whole sample with lower (median score lower than 4.6) and higher (> 4.6) levels of perceived price. The results confirms that there exist a significant difference between high levels of perceived price (M = 5.1, SD = 1.2) and lower levels of perceived price [(M = 5.2, SD = 1.1); t(273) = 2.18, p < 0.0001] on the buying intention of organic food products. This disparity is represented in Figure 2 where it is established that lower price of organic food products can increase the buying intention as the slope was increasing whereas when the price is high the slope curved downward indicating a negative relation in buying even though consumers are fearful towards conventional food products.

#### 4.3 Segmenting the market

To segment the consumers based on their intention to buy organic food products, a two-step cluster analysis was performed, as both the categorical and continuous variables can be handled simultaneously. This analysis combines connectivity-based clustering (hierarchical) and centroid-based clustering (*K*-means) for clustering the data. Instead of



Figure 1. Interaction effect of trust on buying intention



Euclidean distance, log-likelihood distance is used for distance measures as it can handle mixed-type attributes (Chiu *et al.*, 2001).

The cluster analysis was performed on socio-demographic variables and also to segment the consumers based on their trust, fear, perceived price and intention to buy. Four segment solutions were obtained by this analysis, consisting of 27.3, 24.4, 32 and 16.4 per cent, respectively, in each cluster. The base for clustering was gender, marital status and the presence of children at home.

Cluster 1 consists of 27.3 per cent of respondents of the total sample. Participants in this group have a high level of trust (M = 5.03) towards organic food products and their perception towards price is comparatively low (M = 4.46) at the same time, their fear towards conventional food products (M = 5.38) is also high which in turn makes their buying intention (M = 5.40) positive. Consumers in this segment are married women with children, and their average age is 36 years.

Cluster 2 consists of 24.4 per cent of respondents and contains participants that have a moderate trust (M = 4.95) towards organic food products and their concern for price is comparatively low (M = 4.48). However, their fear towards conventional food products (M = 5.22) is high, thereby increasing their intention to buy organic food (M = 5.38). Consumers in this segment are married men with children and their average age is 38 years.

Cluster 3 represents the largest group consisting of 32 per cent of respondents. Participants in this group have a low level of trust (M = 4.78) and their fear (M = 4.10) and intention to buy (M = 4.33) is also low, however, their concern towards price is high compared to cluster 1 and 2 (M = 4.67). The consumers in this segment are unmarried men with an average age group of 28 years.

Cluster 4 is the smallest group recognised in this study. Consumers in this segment are not positive towards buying organic food products (M=5.07) and they have less fear (M=4.83) and trust (M=4.89) towards organic food products, and their concern towards

price is high (M = 4.57). Respondents in this segment consist of an equal number of married men and women without children, with an average age group of 30 years (Table III).

Cluster analysis results reveal that 51.7 per cent of consumers that have the intention to buy organic food products are married with children at home. The presence of children at home in influencing the purchase of organic food products is in line with previous studies. Hielmar (2011) conducted a qualitative study in Denmark, in which he found that the presence of children at home motivates parents to buy organic products. Furthermore, the importance of children for buying organic food products was found in other studies from USA (James et al., 2009), Poland (Biemans, 2009) and the UK (Padel and Foster, 2005). Thus, married women with children at home are more fearful towards conventional food products. thereby making this segment the potential buyers of organic food products.

#### 5. Discussion and conclusion

This study contributes to the literature by understanding how fear towards conventional food products motivates an individual to buy organic food products and whether trust and perceived price as contextual factors can enhance the buying intention. In the previous studies conducted by Furst et al. (1996) on the consumption of food items, and by Kollmuss and Agyeman (2002) on pro-environmental behaviour, fear has been treated as a part of emotion. An exclusive study on the impact of fear on the buying intention of organic food products is limited where fear is measured as a construct. Furthermore, reviews on the impact of trust as a moderating variable are also limited. Therefore, to summarise, this study has brought insights to the fore that are relevant to the growth of market for organic food products in India, especially fruits and vegetables.

Fear towards conventional food products is an important factor that motivates an individual to buy organic food products. This is in line with the previous research, which found emotion such as fear plays an important role in buying food products (Laros and Steenkamp, 2004; Verhoef, 2005). However, in the current study, a large amount of respondents does not buy organic food products regularly (82.9 per cent), which clearly show that consumers' fear towards conventional food products have not been converted into organic buying. Lack of trust on the claims made by retailers, certifying agencies and labels/logos along with this high price may consider as a barrier for conversion (Pandey et al., 2015).

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Total	
Gender						
Male	0	66	54	21	141	
Female	75	0	38	21	134	
Marital status						
Married	75	66	0	42	183	
Single	0	0	92	0	92	
Children at hor	ne					
Yes	75	66	0	0	141	
No	0	0	92	42	134	
Age						
20-30	29	20	84	23	156	
31-40	26	22	4	11	63	Table III
41-50	13	16	4	3	36	Socio-demographi
51-60	7	8	0	õ	15	profile of th
61-70	0	0	Ő	5	5	respondent

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Finally, the notion that young married women with children buy more organic food (Dimitri and Dettmann, 2012; Sondhi, 2014) is supported in the current study as well. Therefore, stakeholders should target these groups.

#### 6. Managerial implications

The Indian domestic market holds great potential for stakeholders in organic food products. However, understanding consumers' concerns are of utmost importance. A high level of fear certainly exists among consumers with regards to conventional food products, which motivates consumers' to have a positive intention to buy organic food products. This information is very vital for stakeholders who are trying to promote OF&V as Indian consumers are looking for an alternative. It is very evident that there exists a negative emotion towards conventional food products, therefore producers and sellers would try to exploit this negative emotion by further propagating negative messages about conventional food products, however the research states that these kinds of negative emotional appeals would only aggravate the emotional state of individual, thereby backfiring the stakeholder's intention (Achar *et al.*, 2016). Thus a person who is already feeling fearful towards the conventional food products would process the information defensively. Therefore, OF&V should be projected as a solution to their fear rather than trying to take advantage of the situation.

Furthermore, various researchers have found that emotion (positive and negative) alone cannot explain subsequent decisions taken by the individual (DeSteno et al., 2000; Tiedens and Linton, 2001). The current study also supports this notion by stating that even though consumers' fear towards conventional food products can increase the likelihood of consumers' intention to buy organic food products, this direct relation can weaken when the trust towards third parties is low and when the price of organic food products are high. Thus, along with bringing out organic food products as a substitute for pesticide-filled food products, marketers have to focus on certification and labelling and create trust in the minds of consumers so that they feel that the products that they are buying are genuine. In order to develop trust, the relationship between farmers and buyers needs to be re-established, either by opening a farm outlet or by creating an advertising campaign that projects the farming process. Developing an organic brand will constitute an added advantage. Along with that, creating awareness about the benefit of buying organic food products can position the organic product in the mind of the consumer that extra amount paid for the healthy and eco-friendly product is worth (Paul and Rana, 2012; Daunfeldt and Rudholm. 2014).

Furthermore, as a long-term strategy, marketers need to turn their attention to married women with young children, as studies have proven that habits developed by children in their early stages of life will continue into their adulthood.

#### 7. Limitation and future research

Although this study contributes to the existing knowledge of organic consumer research, a few limitations must be observed. The respondent selection is biased towards a particular geographical location; therefore generalisations that include all population in India need to be further validated. Furthermore focus of the study was given to the emotional aspect in buying OF&V; there are other rational and logical factors which can influence the buying of organic food products which need further probing to expand our knowledge in this area. Analysing the behavioural intention without taking consideration of actual buying is a limitation which would be a direction for future research. Finally, the study examines the buying intention of OF&V, therefore generalising it to other organic products need to be further validated.

#### References

- Achar, C., So, J., Agrawal, N. and Duhachek, A. (2016), "What we feel and why we buy: the influence of emotions on consumer decision-making", *Current Opinion in Psychology*, Vol. 10, pp. 166-170.
- Ajzen, I. (2002), "Icek Ajzen", available at: www.people.umass.edu/aizen/pdf/tpb.measurement.pdf (accessed 10 October 2016).
- Almås, R. (1999), "Food trust, ethics and safety in risk society", Sociological Research Online, Vol. 4 No. 3, pp. 1-9.
- Al-Swidi, A., Huque, S.M., Hafeez, M.H. and Shariff, M.N. (2014), "The role of subjective norms in theory of planned behavior in the context of organic food consumption", *British Food Journal*, Vol. 116 No. 10, pp. 1561-1580.
- APEDA (2018), "Agricultural and processed food products export development authority", Organic products, available at: apeda.gov.in/apedawebsite/organic/Organic\_Products.htm (accessed 25 May 2018).
- Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lahteenmaki, L. and Shepherd, R. (2008), "Predicting intentions to purchase organic food: the role of affective and moral attitudes in the theory of planned behaviour", *Appetite*, Vol. 50 Nos 2-3, pp. 443-454.
- Bagozzi, R.P., Gopinath, M. and Nyer, P.U. (1999), "The role of emotions in marketing", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 184-206.
- Banerjee, N. (2017), "The freepress journal", 18 April, available at: www.freepressjournal.in/analysis/nantoobanerjee-india-2022-population-and-economy-off-the-track/1053790 (accessed 2 January 2018).
- Biemans, S.Z. (2009), "Factors underlying consumption of organic food in the opinion of polish consumers", Agronomy Research, Vol. 7 No. 2, pp. 768-774.
- Blanchette, I., Richards, A., Melnyk, L. and Lavda, A. (2007), "Reasoning about emotional contents following shocking terrorist attacks: a tale of three cities", *Journal of Experimental Psychology: Applied*, Vol. 13 No. 1, pp. 47-56.
- Bougie, R., Pieters, R. and Zeelenberg, M. (2003), "Angry customers don't come back, they get back: the experience and behavioral implications of anger and dissatisfaction in services", *Journal of the Academy of Marketing Science*, Vol. 31 No. 4, pp. 377-393.
- Brewer, M. and Prestat, C. (2002), "Consumer attitude toward food safety issues", Journal of Food Safety, Vol. 22 No. 2, pp. 67-83.
- Businessline (2018), "The Hindu", 21 March, *Business Line*, available at: www.thehindubusinessline. com/economy/agri-business/organic-market-may-touch-12000-crore-by-2020/article23314105. ece (accessed 4 August 2018).
- Chakrabarti, S. (2010), "Factors influencing organic food purchase in India expert survey insights", British Food Journal, Vol. 112 No. 8, pp. 902-915.
- Chen, M.-F. (2007), "Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: moderating effects of food-related personality traits", *Food Quality and Preference*, Vol. 18 No. 7, pp. 1008-1021.
- Chiu, T., Fang, D., Chen, J., Wang, Y. and Jeris, C. (2001), "A robust and scalable clustering algorithm for mixed type attributes in large database environment", 7th ACM SIGKDD International Conference in Knowledge Discovery and Data Mining: Association for Computing Machinery, San-Francisco, CA, pp. 263-268.
- Cochrane, L. and Quester, P. (2005), "Fear in advertising", Journal of International Consumer Marketing, Vol. 17 Nos 2-3, pp. 7-32.
- Coleman, N.V., Williams, P., Morales, A.C. and White, A.E. (2017), "Attention, attitudes, and action: when and why incidental fear increases consumer choice", *Journal of Consumer Research*, Vol. 44 No. 2, pp. 283-312.
- Cook, K.S., Hardin, R. and Levi, M. (2006), "Trust", in Reinhard, B. and Zaheer, A. (Eds), *Handbook of Trust Research*, Edward Elgar, Northampton, MA.
- Dandage, K., Badia-Melis, R. and Ruiz-García, L. (2017), "Indian perspective in food traceability: a review", Food Control, Vol. 71, pp. 217-227.

- Daunfeldt, S.-O. and Rudholm, N. (2014), "Does shelf-labeling of organic foods increase sales? Results from a natural experiment", *Journal of Retailing and Consumer Services*, Vol. 21 No. 5, pp. 804-811.
  - DeSteno, D., Petty, R.E., Wegener, D.T. and Rucker, D.D. (2000), "Beyond valence in the perception of likelihood: the role of emotion specificity", *Journal of Personality and Social Psychology*, Vol. 78 No. 3, pp. 397-416.
  - Dietz, G. and Hartog, D.N. (2006), "Measuring trust inside organisations", *Personnel Review*, Vol. 35 No. 5, pp. 557-588.
  - Dimitri, C. and Dettmann, R.L. (2012), "Organic food consumers: what do we really know about them?", British Food Journal, Vol. 114 No. 8, pp. 1157-1183.
  - Erikson, E. (1950), Childhood and Society, Norton, New York, NY.
  - Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory* and Research, Addison-Wesley, Reading, MA.
  - Food Service India Bureau (2017), "Food service India", 17 March, available at: www.indiaretailing.com/20 17/03/17/food/food-service/raising-trust-in-food-quality-and-safety/ (accessed 5 January 2018).
  - Fornell, C. and Larker, D. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
  - Fotopoulos, C. and Krystallis, A. (2002), "Organic product avoidance. Reasons for rejection and potential buyers' identification in a countrywide survey", *British Food Journal*, Vol. 104 Nos 3-5, pp. 233-260.
  - Furst, T., Connors, M., Bisogni, C.A., Sobal, J. and Falk, L.W. (1996), "Food choice: a conceptual model of the process", *Appetite*, Vol. 26 No. 3, pp. 247-265.
  - Gambetta, D. (2000), "Can we trust?", in Gambetta, D. (Ed.), *Trust: Making and Breaking Cooperative Relations, Electronic Edition*, Chapter 13, Department of Sociology, University of Oxford, Oxford, pp. 213-237.
  - Gleim, M.R., Smith, J.S., Andrews, D. and Cronin, J.J. Jr (2013), "Against the green: a multi-method examination of the barriers to green consumption", *Journal of Retailing*, Vol. 89 No. 1, pp. 44-61.
  - Gore, P., Madhavan, S., Curry, D. and McClurg, G. (1998), "Persuasive messages", Marketing Health Services, Vol. 18 No. 4, pp. 32-43.
  - Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, 7th ed., Pearson Prentice Hall.
  - Hjelmar, U. (2011), "Consumers' purchase of organic food products: a matter of convenience and reflexive practices", *Appetite*, Vol. 56 No. 2, pp. 336-344.
  - Honkanen, P. and Frewer, L. (2009), "Russian consumers' motives for food choice", Appetite, Vol. 52 No. 2, pp. 363-371.
  - Hsu, C.-L. and Chen, M.-C. (2014), "Explaining consumer attitudes and purchase intentions toward organic food: contributions from regulatory fit and consumer characteristics", *Food Quality and Preference*, Vol. 35, pp. 6-13.
  - Ilbery, B. and Maye, D. (2005), "Food supply chains and specialist livestock products in the Scottish–English borders", *Land Use Policy*, Vol. 22 No. 4, pp. 331-344.
  - Jager, G., Schlich, P., Tijssen, I., Yao, J., Visalli, M., Graaf, C.D. and Stieger, M. (2014), "Temporal dominance of emotions: measuring dynamics of food-related emotions during consumption", *Food Quality and Preference*, Vol. 37, pp. 87-99.
  - Jairath, M. and Purohit, P. (2013), "Food safety regulatory compliance in India: a challenge to enhance agri-business", *Indian Journal of Agricultural Economics*, Vol. 68 No. 3, pp. 431-448.
  - James, J.S., Rickard, B.J. and Rossman, W.J. (2009), "Product differentiation and market segmentation in applesauce: using a choice experiment to assess the value of organic, local, and nutrition attributes", Agricultural and Resource Economics Review, Vol. 38 No. 3, pp. 357-370.
  - Janis, I.L. and Feshback, S. (1953), "Effects of fear-arousing communications", The Journal of Abnormal and Social Psychology, Vol. 48 No. 1, pp. 78-92.

- Jayaraj, R., Megha, P. and Sreedev, P. (2016), "Organochlorine pesticides, their toxic effects on living organisms, and their fate in the environment", *Interdisciplinary Toxicology*, Vol. 9 Nos 3-4, pp. 90-100.
- Jayaram, D. (2017), "The *Times of India*", 13 November, available at: https://timesofindia.indiatimes. com/city/kochi/kerala-organic-farming-zero-pesticide-farming-not-a-pipe-dream/articleshow/ 61616169.cms (accessed 22 July 2018).
- John, H. (2017), "Food safety", 9 May, *The News Minute*, available at: www.thenewsminute.com/ article/kerala-beware-study-finds-high-levels-banned-pesticides-spices-and-condiments-61776 (accessed 23 March 2018).
- Johnston, D.A., McCutcheon, D.M., Stuart, F.I. and Kerwood, H. (2004), "Effects of supplier trust on performance of cooperative supplier relationships", *Journal of Operations Management*, Vol. 22 No. 1, pp. 23-38.
- Joshi, Y. and Rahman, Z. (2016), "Factors affecting green purchase behaviour and future research directions", *International Strategic Management Review*, Vol. 3 Nos 1-2, pp. 128-143.
- Jung, N., Wranke, C., Hamburger, K. and Knauff, M. (2014), "How emotions affect logical reasoning: evidence from experiments with mood-manipulated participants, spider phobics, and people with exam anxiety", *Frontiers in Psychology*, No. 570, pp. 1-12.
- Kaneko, D., Toet, A., Brouwer, A.-M., Kallen, V. and Van Erp, J.B. (2018), "Methods for evaluating emotions evoked by food experiences: a literature review", *Frontiers in Psychology*, Vol. 9 No. 911, pp. 1-20.
- Khuong, M.N. and Tram, V.N. (2015), "The effects of emotional marketing on consumer product perception, brand awareness, and purchase decision – a study in Ho Chi Minh City, Vietnam", *Journal of Economics, Business, and Management*, Vol. 3 No. 5, pp. 524-530.
- Kollmuss, A. and Agyeman, J. (2002), "Mind the Gap: Why do people act environmentally, and what are the barriers to pro-environmental behavior?", *Environmental Education Research*, Vol. 8 No. 3, pp. 239-260.
- Kotler, P. and Armstrong, G. (1996), Principles of Marketing, 7th ed., Prentice Hall International.
- Kotler, P., Kartajaya, H. and Setiawan, I. (2010), Marketing 3.0: From Products to Customers to the Human Spirit, John Wiley & Son, Hoboken, NJ.
- Kriwy, P. and Mecking, R.-a. (2012), "Health and environmental consciousness, costs of behaviour, and the purchase of organic food", *International Journal of Consumer Studies*, Vol. 36 No. 1, pp. 30-37.
- Krystallis, A. and Chryssohoidis, G. (2005), "Consumers' willingness to pay for organic food: factors that affect it and variation per organic product type", *British Food Journal*, Vol. 107 No. 5, pp. 320-343.
- Laroche, M., Toffoli, R., Zhang, Q. and Pons, F. (2001), "A cross-cultural study of the persuasive effect of fear appeal messages in cigarette advertising: China and Canada", *International Journal of Advertising: The Review of Marketing Communications*, Vol. 20 No. 3, pp. 297-317.
- Laros, F.J. and Steenkamp, J.B. (2004), "Importance of fear in the case of genetically modified food", *Psychology & Marketing*, Vol. 21 No. 11, pp. 889-908.
- Laros, F.M. and Steenkamp, J. (2005), "Emotions in consumer behavior: a hierarchical approach", *Journal of Business Research*, Vol. 58 No. 10, pp. 1437-1445.
- McEachern, M.G. and Willock, J. (2004), "Producers and consumers of organic meat: a focus on attitudes and motivations", *British Food Journal*, Vol. 106 No. 7, pp. 534-552.
- Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995), "An integrative model of organizational trust", Academy of Management Review, Vol. 20 No. 3, pp. 709-734.
- Mazaheri, E., Richard, M.-O. and Laroche, M. (2012), "The role of emotions in online consumer behavior: a comparison of search, experience, and credence services", *Journal of Services Marketing*, Vol. 26 No. 7, pp. 535-555.
- Michaelidou, N. and Hassan, L.M. (2008), "The role of health consciousness, food safety concern, and ethical identity on attitudes and intentions towards organic food", *International Journal of Consumer Studies*, Vol. 32 No. 2, pp. 163-170.

- Mohanta, N. (2017), "Franchise India holdings Ltd", 21 July, Franchise India Wellness, available at: www.franchiseindia.com/wellness/The-Rising-Demand-of-Organic-Food-Market.9712 (accessed 22 June 2018).
  - Morris, K.A. and Swann, W.B. (1996), "Denial and the AIDS crisis: On whishing away the threat of AIDS", in Oskamp, S. and Thompson, S. (Eds), Safer Sex in the '90s: Understanding and Preventing HIV Risk Behavior, Sage, Los Angeles, CA, pp. 57-79.
  - Myers, D.G. (2010), Psychology, 9th ed., Worth Publishers.
  - Nandi, R., Bokelmann, W., Gowdru, N.V. and Dias, G. (2016), "Consumer motives and purchase preferences for organic food products: empirical evidence from a consumer survey in Bangalore, South India", *Journal of International Food and Agribusiness Marketing*, Vol. 28 No. 1, pp. 74-99.
  - Nwakanma, H., Jackson, A.S. and Burkhalter, J.N. (2007), "Relationship marketing: an important tool for success in the marketplace", *Journal of Business & Economics Research*, Vol. 5 No. 2, pp. 55-64.
  - Ortony, A., Clore, G.L. and Collins, A. (1988), *The Cognitive Structure of Emotions*, Cambridge University Press, Cambridge.
  - Padel, S. and Foster, C. (2005), "Exploring the gap between attitudes and behaviour, understanding why consumers buy or do not buy organic food", *British Food Journal*, Vol. 107 No. 8, pp. 606-625.
  - Palma, D., Ortúzar, J.D., Rizzi, L.I., Guevara, C.A., Casaubon, G. and Ma, H. (2016), "Modelling choice when price is a cue for quality a case study with Chinese wine consumers", *The Journal of Choice Modelling*, Vol. 19, pp. 24-39.
  - Pandey, S. and Khare, A. (2017), "The role of retailer trust and word of mouth in buying organic foods in an emerging market", *Journal of Food Products Marketing*, Vol. 23 No. 8, pp. 1-13.
  - Pandey, S., Khare, A. and Bhardwaj, P. (2015), "Antecedents to local store loyalty: influence of culture, cosmopolitanism and price", *International Journal of Retail & Distribution Management*, Vol. 43 No. 1, pp. 5-25.
  - Paul, J. and Rana, J. (2012), "Consumer behavior and purchase intention for organic food", Journal of Consumer Marketing, Vol. 29 No. 6, pp. 412-422.
  - Pham, T.H., Nguyen, T.N., Phan, T.T. and Nguyen, N.T. (2019), "Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy", *Journal of Strategic Marketing*, Vol. 27 No. 6, pp. 1-17.
  - Pillai, R. (2014), "High pesticide content found in vegetables across Kerala", *The Hindu*, 12 January, p. 28.
  - Pino, G., Peluso, A.M. and Guido, G. (2012), "Determinants of regular and occasional consumers" intentions to buy organic food", *The Journal of Consumer Affairs*, Vol. 46 No. 1, pp. 157-169.
  - Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
  - PwC (2015), "Winning consumer trust", available at: www.pwc.in/assets/pdfs/publications/2015/ winning-consumer-trust.pdf (accessed 8 January 2018).
  - Rana, J. and Paul, J. (2017), "Consumer behavior and purchase intention for organic food: a review and research agenda", *Journal of Retailing and Consumer Services*, Vol. 38 No. 5, pp. 157-165.
  - Richins, M.L. (1997), "Measuring emotions in the consumption experience", Journal of Consumer Research, Vol. 24 No. 2, pp. 127-146.
  - Rodríguez-Entrena, M., Salazar-Ordóñez, M. and Sayadi, S. (2013), "Applying partial least squares to model genetically modified food purchase intentions in southern Spain consumers", *Food Policy*, Vol. 40 No. C, pp. 45-53.
  - Samant, S.S., Chapko, M.J. and Seo, H.-S. (2017), "Predicting consumer liking and preference based on emotional responses and sensory perception: a study with basic taste solutions", *Food Research International*, Vol. 100 No. 1, pp. 325-334.

- Scarpa, R. and Thiene, M. (2011), "Organic food choices and protection motivation theory: addressing the psychological sources of heterogeneity", *Food Quality and Preference*, Vol. 22 No. 6, pp. 532-541.
- Sharma, A., Krishnan, S., Chattopadhya, D., Aggarwal, R. and Bahl, A. (2009), "Food-borne diseases", in Srivastava, R.K. (Ed.), *CD Alert*, Vol. 13, National Centre for Disease Control, GoI, New Delhi, pp. 1-12.
- Singh, A. and Verma, P. (2017), "Factors influencing Indian consumers' actual buying behaviour towards organic", *Journal of Cleaner Production*, Vol. 167, pp. 473-483.
- Sondhi, N. (2014), "Assessing the organic potential of urban Indian consumers", British Food Journal, Vol. 116 No. 12, pp. 1864-1878.
- Steenkamp, J.-B.E. and Van Trijp, H.C. (1996), "Quality guidance: a consumer-based approach to food quality improvement using partial least squares", *European Review of Agricultural Economics*, Vol. 23 No. 2, pp. 195-215.
- Steptoe, A., Pollard, T. and Wardle, J. (1995), "Development of a measure of the motives underlying the selection of food: the food choice questionnaire", *Appetite*, Vol. 25 No. 3, pp. 267-284.
- Su, L., Wan, L.C. and Wyer, R.S. (2018), "The contrasting influences of incidental anger and fear on responses to a service failure", *Psychology & Marketing*, Vol. 35 No. 9, pp. 666-675.
- *The Indian Express* (2016), "Wordpress.com", 1 November, available at: Indianexpress.com (accessed 23 July 2018).
- Thøgersen, J., Barcellos, M.D., Perin, M.G. and Zhou, Y. (2015), "Consumer buying motives and attitudes towards organic food in two emerging markets: China and Brazil", *International Marketing Review*, Vol. 32 Nos 3-4, pp. 389-413.
- Tiedens, L.Z. and Linton, S. (2001), "Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing", *Journal of Personality and Social Psychology*, Vol. 81 No. 6, pp. 973-988.
- TNN (2012), "The Times of India", 12 October, available at: https://timesofindia.indiatimes.com/city/kochi/ Not-many-takers-in-Kerala-for-organic-food/articleshow/16830194.cms (accessed 22 July 2018).
- Torjusen, H., Lieblein, G., Wandel, M. and Francis, C. (2001), "Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway", *Food Quality and Preference*, Vol. 12 No. 3, pp. 207-216.
- Van Doorn, J. and Verhoef, P.C. (2015), "Drivers of and barriers to organic purchase behavior", *Journal of Retailing*, Vol. 91 No. 3, pp. 436-450.
- Vanhuele, M. and Dreze, X. (2002), "Measuring the price knowledge shoppers bring to the store", *Journal of Marketing*, Vol. 66 No. 4, pp. 72-85.
- Verhoef, P.C. (2005), "Explaining purchases of organic meat by Dutch consumers", European Review of Agricultural Economics, Vol. 32 No. 2, pp. 245-267.
- Willer, H. and Lernoud, J. (2018), "The world of organic agriculture. statistics and emerging trends 2018", in Willer, H. and Lernoud, J. (Eds), Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn, pp. 25-33.
- Yadav, A.K. (2013), "Organic policy and developments in India", International Conference on Two-pronged Strategy for Organic Movement- for Sustainability and For Markets, Bangalore, 14-16 November.

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