

The Predictors and Consequences of Personal Norms in Context of Organic Food Among Pakistani Consumers

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Abstract

Purpose- Primary aim of existing research is to detect the influence of environmental beliefs (awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility) on personal norms and subsequent effect thereof on organic food purchase intentions with mediation outcome of personal norms and moderating role of willingness to pay.

Design/methodology/approach- The data was collected from individual Pakistani consumers with 430 effective questionnaires. Further the responses were analysed through SPSS, V-22, Smart PLS-3.

Findings- The results showed that awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility showed significant influence to personal norms towards organic food. Subsequently, personal norms significantly affected organic food purchase intentions. Furthermore, willingness to pay for organic food proved to be positively significant moderator amongst personal norms and organic food purchase intentions.

Implications of Research- Present study helps out organic food marketers to apprehend customer demand for organic food from moral perspective and suggests the basis for the future development of organic food.

Originality- Present study is important for policy makers as it points out the ways to create awareness; secondly it also provides the schema to promote organically produced foods to consumers through messages based on morality.

Keywords: Personal norms, organic foods, Pakistani consumer purchasing intentions, environmental beliefs and willingness to pay.

1. Introduction

Environmental degradation and resultant effects on humans and other species have sensitise consumers in their buying decisions (do Paçø et al., 2013). Now consumers are more informed and vigilant about their purchases (Furlow and Knott, 2009), hence, an inclination has been observed among consumers seeking environmentally friendly assortments (Jain and Kaur, 2006). This trend also has been observed in food selection food (Khare, 2015). Consumers are showing interest in buying organic food which is supposed to be more environmentally friendly and healthy as compared to its conventional counterpart (Ditlevsen et al., 2019). However, this inclination is more prominent in consumers belonging to developed nations (Asif et al., 2018). In developing countries, the concept of organic food is still in its initial phases; yet it is an important cluster for organic food due to the presence of huge population and increasing consumers' buying power (Basha and Lal, 2019). Similar case is Pakistan, where consumer preference for organic food is on rise (Al-Swidi et al., 2014). However, a recent empirical investigation of organic food purchase intentions among Pakistani consumers Asif et al. (2018) revealed that the consumers showed lower levels of support for such products and willingness to buy organic food were less influenced by promotional efforts. One possible explanation for this reluctance is the price, as organic food is higher priced compared to their counter parts (Sandhu et al., 2018). In view of discussed above findings demand for creating comprehensive understanding regarding factors influencing consumers' intentions to purchase organic food. This will enhance and enrich existing literature, further providing marketing implications in practical scenario helping out promotional campaign for eco-sustainable behaviour. Resultant knowledge would be of great importance particularly for

emerging economies laden with of environmental issues. Further, organic food buying behaviour research in emerging nations context, like Pakistan, has gained less attention from past research, compared to the developed counterparts (Asif et al., 2018).

Pakistan stands as an important market in the South Asia, population counted near to 200 million (Pakistan Bureau of Statistics, 2018). The rapid population growth and extensive use of pesticides for agriculture inputs have raised the environmental problems including water scarcity and contaminated underground water courses, air pollution, deforestation, barren lands, floods and shortage of natural resources in the last decade (World Bank, 2016). Therefore, the Government and social organizations are continuously in efforts improving environmental vigilance among individuals through policies, social and educational messages (Sandhu et al., 2018). Mostly, in past studies consumers' organic food buying behaviour have been analysed through rational decision-making models (Yadav and Pathak, 2016). However, Steg et al. (2014) argues that rationality is not the only case on which consumers buying decision is based, but there are personal moral motives that encourage consumers to make an altruistic decision. The activated personal norms enable a consumer to act pro-environmentally even at his or her personal cost (Shin et al., 2018). Furthermore, Stern et al. (1999) supports the argument that buying organic food is related to selfless and prosocial behaviour and rational actor models are unable to fully explain it. Norm Activation Theory; commonly known as (NAM); explains the selfless and environmentally friendly behaviour (Schwartz, 1977). Whereas, activation of personal moral norms is the heart of this theory, and consequently these intrinsic norms create behavioural intentions (Shin et al., 2018).

The current study investigates the activation of consumers' personal norms and resultant purchase intentions towards organic food in Pakistan. Theoretically, personal norms are based on consumers' pro-environmental beliefs i.e. (awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility). Further, this study also attempts to investigate the moderating effect of willingness to pay between the relationship of personal norms and purchase intentions. The study concentrates on various rational and moral factors emerged in prevalent theories focusing on environmentally friendly behaviour. Findings of existing study will help marketers to develop an effective design of pro-environmental campaigns and programmes based on moral and rational perspective facilitating buying organic food in Pakistani context.

2. Literature Review and Hypotheses Development

2.1 Organic Food Purchase Intentions

Previously, it is proved that the higher level of consumer's purchase intention toward a product predicts highly that the consumer will buy that product (Beyzavi and Lotfizadeh, 2014; Schiffman and Wisenblit, 2015). Further, Schiffman and Wisenblit (2015) conceptualised purchase intention as transaction prone behaviour that a consumer encourages to perform after evaluating the product or a possibility to purchase, depending on the resultant consumer reaction towards the subjective product. Shah and Sayuti (2011) conceptualised purchase intention as an individual's capability to evaluate; either positive or negative; to a potential product buying situation. Organic food purchase intention refers to a consumer's tendency to buy an eco-friendly food which is considered environmentally friendly (Yadav and Pathak, 2016). Further, Misra and Singh (2016) conceptualised organic food purchase intention as an individual's willingness to prefer organic food in buying over to conventional alternatives due to its pro-environmental features. Organic food purchase intention is a complex phenomenon because it involves multiple cultural, social and personal characteristics so that it cannot be universally generalised (Peattie, 2001; Khare, 2015). The literature for organic food purchase intentions, speaks about a number of psychological and social factors that affect or create purchase intentions (Misra and Singh, 2016). Schwartz (1977) in his well-known Norm Activation Theory, commonly known as (NAM), endorses intent to behave as a proximal predictor of the behaviour, where intentions measure a person's inclination to perform an act.

2.2 Norm Activation Theory

Many studies in pro-environmental behaviour have tested and incorporated the NAM for the development of proposed conceptual frameworks (Shin et al., 2018). According to the NAM, behavioural intention is determined by personal norms and formerly personal norms are triggered by individual's environmental beliefs (Han et al., 2019). In the case of pro-environmental intentions, these beliefs and moral personal norms are tended to be supporting environmental safety and preservation. In NAM perspective behavioural intentions are based on the extent to which consumer is intrinsically and morally motivated to support an act which is prosocial and altruistic in nature. Moreover, these personal intrinsic sentiments are instigated by the beliefs as being aware of adverse consequences of a particular behaviour socially, and he or she aspires responsibility to avert those negative consequences (Schwartz, 1977). Furthermore, literature shows some other consumer belief as well that remains responsible to instigate

environmentally supported personal norms, i.e. injunctive social norms, environmental concern and environmental self-identity. Injunctive social norms reflect an individual's belief regarding right things to do based on commonly acceptable conducts in the society (Doran and Larsen, 2016). Environmental concern describes the extent to which an individual is concerned of environmental safety and degradation. Environmental self-identity denotes a consumer's belief of self as being a pro-environmental individual who buys or consumes organic food. Empirical evidences demonstrate that the NAM's components diligently explained behavioural intentions for organic food choices, environmentally friendly products, recycling and electricity saving (Lindenberg and Steg, 2013; Shin et al., 2018; Han et al., 2019).

In the acknowledgement of extensive applicability of NAM, Steg et al. (2014) argue that NAM primarily focuses on the sense of morality, hence, effectively explains eco-friendly behaviour and makes choices impeded by efforts, time and money. The further extension in NAM is supported by Stern et al. (1999) as this theory has support and depth to explain unobservable phenomenon. Previously; in the extension of NAM; numerous studies have incorporated factors such as environmental consciousness, knowledge and emotions to predict pro-environmental behaviour (Polonsky, 1994; Hartmann and Apaolaza-Ibañez, 2012; Onwezen, 2015; Dean et al., 2012). This incorporation has provided a comprehensive apprehension regarding various motives concerning pro-environmental consumption in the literature (Zhao et al., 2019). Therefore, the present study incorporates injunctive social norms, environmental self-identity and environmental concern in NAM model. Further, this study adds consumer's willingness to pay for eco-friendly food as a moderating variable among the relationship of consumers' personal moral norms and intentions to purchase organic food. Whereas, willingness to pay shows an individual's readiness to pay for organic food.

2.3 Personal Norms

Personal norms are an individual's conceptualisation of moral correctness or incorrectness of particular conduct and the conformance to which arouse the feelings of pride, while noncompliance provokes the feelings of guilt and shame (Onwezen, 2015). These are intrinsic values that evaluate a certain action if it is right or wrong (Bamberg and Möser, 2007). Personal norms are operationalised in past literature as ethical beliefs, personal norms and moral obligation (Sparks and Shepherd, 2002; Shin et al., 2018). Intentions and personal norms are distinct constructs from each other (Schwartz, 1977; Stern et al., 1999).

In their research about environmentally friendly travel modes Nordlund and Garvill (2003) found personal norms as positive and significant predictor of traveller's intention to use eco-friendly mode of transportation. Furthermore, in recent research, the adopters of vehicles sourced by alternative fuel were found scoring high for personal norms in the comparison of non-adopters (He and Zhan, 2018). However, Dolnicar and Grün (2009) found a weak relationship between moral obligation and various environmental protection intentions among tourists on vacations.

Hence, based on above stated literature review, following hypothesis has been formulated:

H1: Consumers' personal norms towards organic food are positively related to their organic food purchase intentions

2.4 Awareness of Consequences

Awareness of Consequences is an individual's belief and understanding about particular circumstances that pose a threat to other individuals or objects to whom an individual value (Schwartz, 1977). Several studies proved the assertion that awareness of consequences predict the pro-environmental personal norms (Gleim and Lawson, 2014; Han and Hwang, 2015; Joanes, 2019; Li and Wu, 2019, Shimoda et al., 2019). In the case of organic food most of the studies in the past have operationalized this construct to measure consumers' awareness of consequences as unidimensional construct i.e. environment-related consequences (Stern et al., 1999, Shin et al., 2018), however, Magnusson et al. (2003) reported its significance as multidimensional construct such as awareness of environment and social health related consequences. These two dimensions of awareness of consequences are important in the context of organic food. The results found multidimensional awareness of consequences as a significant predictor of personal norms as altruistic behaviour for organic food is triggered by an individual's perception of consequences for both environmental and social health (Magnusson et al., 2003). Following the recommendation by Magnusson et al. (2003) this study incorporates awareness of consequences as a 2nd order construct with two dimensions; environment and social health-related consequences.

H2: Consumer's awareness of consequences is positively related to their personal norms towards organic food

2.5 Injunctive Social Norms

Injunctive social norms are the social norms which refer to an individual's belief and define what the people should

do in a given circumstance to get conformance with the optimistic anticipations of significant others (Jacobson et al., 2015). Similarly, injunctive social norms represent certain beliefs and guidelines to which people adhere to avoid sanctions. Instead of self-driven personal benefits, these injunctive social norms are based on avoidance of perceived punishment and sanctions related to norm violation (Hornsey et al., 2003), hence, an individual gets motivated by a desire to fulfil his responsibility, abide regulation and avoid any disapproval (Cialdini and Trost, 1998; Doran and Larsen, 2016).

According to Schwartz (1977) and Stern et al. (1999), personal norms are internalised social norms. Whereas, Doran and Larsen (2016) asserted that injunctive social norms instigate the sense of moral obligation that resultantly activate personal norms. Further, the personal norms are intrinsically activated by one's self-expectation concerning morally adequate action (Han et al., 2017), and at parallel, conforming to group-based standards or others' expectation, instigate personal norms (Smith et al., 2012; Cestac et al., 2014). Hence, Personal norm activation is subject to intrinsic and social normative extrinsically based personal motives. Many studies have postulated the positive link of injunctive social norms and consumers personal moral obligation to choose eco-friendly travelling mode (Doran and Larsen, 2016), selection of green hotels (Han et al., 2015) and practising grass-cycling (White and Simpson, 2013). However, the interaction between injunctive social norm, personal norms and purchase intention relationship is yet to be tested in an organic food context. Hence, this study proposes following hypothesis:

H3: Consumers' injunctive social norms are positively related to their personal norms towards organic food

2.6 Environmental Concern

Environmental concern measures to the extent that an individual is aware of environmental problems in general and offers support for corrective measures and ensures personal involvement for an intended solution (Dunlap and Jones, 2002). Schultz et al. (2005) argued that environmental concern is rooted in a person's value system (Stern and Dietz, 1994); that is people are concerned for environmental problems when these problems threaten things individual values (Steg et al., 2014). Higher consumer's environmental concern is based on strong biospheric values; these values further motivate a person intrinsically to involve himself or herself in pro-environmental behaviour (De Groot and Steg, 2009). While acting in the line with value-based environmental concern stimulates the feelings of self-esteem, pride and self-satisfaction (Onwezen, 2015). Environmental concern is less general than values, however, it is based on inherent values system aspired by an individual (Joireman et al., 2001; Schultz, 2001). Hence, environmental concern associates strongly with personal norms (Steg et al., 2011). Alternatively, some studies view environmental concern to be less successful in explaining personal norms and acceptability judgments than values (Schultz 2001; Lee et al., 2009; Englis and Phillips, 2013). Therefore, the results from previous literature for environmental concern and personal norm link are mixed and inconclusive.

Based on above mentioned literature, the following hypothesis is proposed:

H4. Consumer's environmental concern positively relates to personal norms towards organic food

2.7 Environmental Self-identity

Environmental self-identity is defined as the way people form their self-concept in connection to nature and the environment; hence, a belief emerges within themselves that the environment is important to all and is an important part of who they are (Whitmarsh and O'Neill, 2010; Hansen et al., 2018). Furthermore, self-identity divulged in environmental way is the view point where an individual articulates oneself as environment friendly person (Van der Werff et al., 2013). Previously, particularly in environmental psychology, the studies have analysed the impact of specified self-identities on consumer behaviour which are consistent with those identities. For instance, self-identity towards saving energy promotes intentions to save energy (van der Werff et al., 2013), specific perceived identity to be recycler encourages an individual towards recycling act (Nigbur et al., 2010), the identity of being activist in environmental way prompts a person towards environmental activism (Fielding et al., 2008) and the identity realised as a consumer of organic dietary products motivates an individual to consume organic food (Hansen et al., 2018). Moreover, environmental self-identity relates to a person's motivation intrinsically encouraging one in eco-friendly manners, resultantly eco-centric action be performed by the individual (Sandhu et al., 2018; Pelozo et al., 2013; Van der Werff et al., 2013). Environmental self-identity implies activation of personal norms to act in sustainable manners because non-sustainable behaviour threatens valuable self-identity and self-esteem (Whitmarsh and O'Neill, 2010). Therefore, following hypothesis has been proposed:

H5: Consumer's environmental self-identity positively relates to their personal norms towards organic food

2.8 Aspiration of Responsibility

Aspiration of Responsibility is defined as social and psychological belief where an individual realises the feelings of responsibility (social or environmental) about problems caused by his or her behaviour (Steg and De Groot, 2010). On the other hand, Stern et al. (1999) conceptualize aspiration of responsibility as a pro-environmental belief that defines an individual's feeling of held responsible for adverse circumstances of not acting eco-friendly way and consequently a group of people or things are facing threat and that he or she can do something to elevate that threat (De Groot and Steg, 2009). Stem from qualitative research in the domain of organic food to explore the factors that contribute towards purchase decision, suggests that the consumers sometimes relate feelings of good conscience and feelings of responsibility to the well-being of their family and others, particularly in the case of buying organic food (Zanoli, 2004). A situation in which the individual is aware of the fact that the wellbeing of others depends upon his or her act, in return the individual feels responsible for his or her action and resultant consequences, hence, can be classified as personal norms (Schwartz, 1977; Davies et al., 2002).

According to the above analysis, the following hypothesis is proposed:

H6: Consumer's aspiration of responsibility positively relates to personal norms towards organic food

Further, this study suggests the mediating role of consumers personal norms towards organic food between the relationship of awareness of consequences, injunctive social norms. Environmental concern, environmental self-identity, aspiration of responsibility and organic food purchase intentions.

H7: Consumer personal norms positively mediate the relationship between awareness of consequences and purchase intention towards organic food

H8: Consumer personal norms positively mediate the relationship between injunctive social norms and purchase intention towards organic food

H9: Consumer personal norms positively mediate the relationship between environmental concern and purchase intention towards organic food

H10: Consumer personal norms positively mediate the relationship between environmental self-identity and purchase intention towards organic food

H11: Consumer personal norms positively mediate the relationship between aspiration of responsibility and purchase intention towards organic food

2.9 Willingness to Pay

Willingness to pay is defined as the premium payoff that a consumer wish to offer for a product, or else, this is the amount that makes a person in-different purchasing or abstaining a product (Le Gall, 2009). In past research it is validated that individual's financial resources proved to be a critical self-capability particularly in the case of eco-friendly buying (Tully and Winer, 2014). Consumers indeed, show inclination towards paying higher prices for hazards free food and diet (Zepeda and Li, 2007; Roitner-Schobesberger et al., 2008; Paul and Rana, 2012). Organic food is considered to be a premium priced product competitively, therefore willingness to pay premium prices are a better indicator for purchase intentions (Tung et al., 2012). The pricing factor strongly influences consumer's decision making for green products (Osterhus, 1997). The past studies showed a positive link between personal norm and stated willingness to pay for green products including organic food products (Spash et al., 2009; Voon et al., 2011; Bishop and Barber, 2015). In the past studies, WTP has been used as a moderator between the relationships of attitude and eco-friendly purchase intentions (Berger et al., 1994; Ling, 2013).

It is, therefore, imperative to assess the impact of WTP as a moderator on the relationship between consumer's personal norms and organic food purchase intentions. As suggested by Baron and Kenny (1986), a moderating variable is introduced where the relationships between independent variables and the dependent variable are inconsistent or vague. A review of previous literature for this study suggests that the impact of personal norms on purchase intentions is inconsistent (Magnusson et al., 2001; McEachern and Mcclean, 2002; Thøgersen et al., 2015; Yadav and Pathak, 2017). Based on the suggestions for utilisation of a moderating variable to elaborate inconsistencies (Baron and Kenny, 1986) and the usability of potential moderator (Ling, 2013; Moser, 2015; Persaud and Schillo, 2017; Hansen et al., 2018), this study considers the moderating effect of WTP for further understanding of the objective relationship.

In the light of above stated statements this study following hypotheses:

H12: Consumer's willingness to pay moderates positively the relationship between personal norms and organic food

purchase intentions.

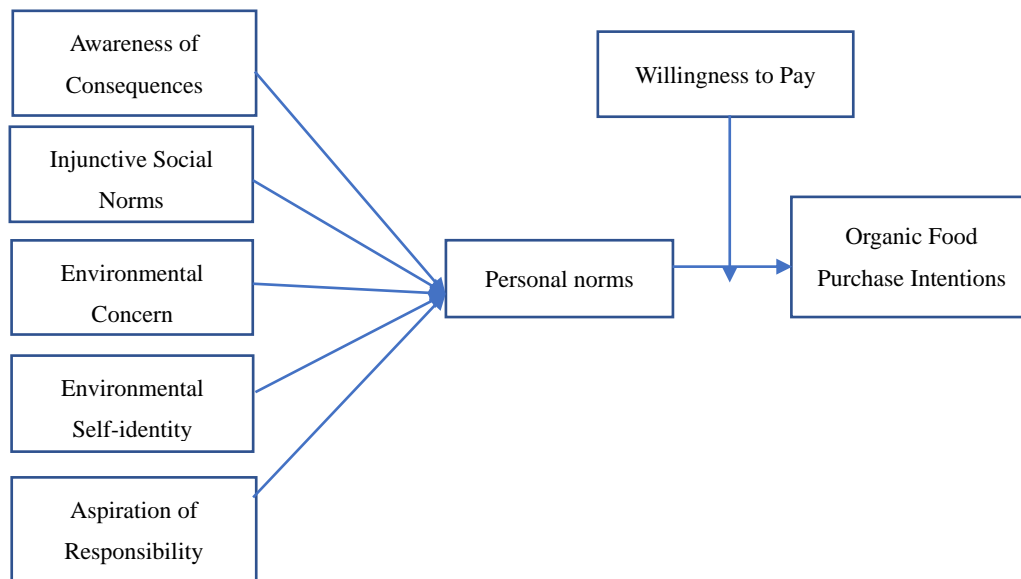


Figure 1. Research framework

3. Methodology

Present research follows the quantitative approach. Numerous researchers find this process robust to see trends or relationships among variables, theories, models and hypotheses (Creswell, 2013). The current study aims to test the influence of pro-environmental beliefs on personal norms and subsequent intentions to purchase organic food, whereas personal norms mediate the relationship. Further, it examines the moderating roles of willingness to pay among the link of personal norms and organic food purchase intentions. Thus, it requires the collection of numerical data to test the relationships mentioned above. For this purpose, the use of quantitative research is ideal for the study. Questionnaires were used for data collection. These questionnaires were in English language, in line with Asif et al. (2018) and same was administered to the respondents randomly.

3.1 Research Measures

The study measures the consumers' personal norms through six item scale adapted from Abrahamse et al. (2009). The personal norms refer to consumers' sense of realising intrinsic obligation to buy pro-environmental organic food products. Five items for measuring Injunctive social norm were adapted from Vermeir and Verbeke (2008). These items elicited respondents' perceptions to which a specific behaviour is commonly accepted or not (Cojuharenco et al., 2016). To measure awareness of consequences, 13 items were adapted from studies by Magnusson et al. (2003). It is operationalized as 2nd order construct representing two dimensions of awareness of consequences (environment and social health related). These items sought respondents' sense of awareness regarding the negative consequences on environment and social health due to chemically intensive agriculture practices and conventional food products. Environmental self-identity is measured by five items adapted from Hustvedt and Dickson (2009). These items measure the consumer's ability seeing himself or herself as an environmentally-friendly person and likely to purchase organic food products because it is important to all and an important part of who he or she is. Further, environmental concern is measured by 5 items adapted from Yadav and Pathak (2016). These items measure the extent to what the consumer concern for environmental care influence his or her intentions to buy green products. Aspiration of responsibility is measured by 5 items scale adapted from Han and Hwang (2016). Aspiration of responsibility refers to the feelings of responsibility that an individual aspires due to the adverse effects of chemically intensive 'non-organic' conventional food products on others people's health and the environment. Willingness to pay is measured through 4 items scale adapted by Trivedi et al. (2015). The scale items measure an individual's inclination to pay for organic food. Finally, Organic food purchase intentions are measured by six item scale adopted from Wee et al. (2014). Please see appendix for questionnaire items. The items operationalizing the constructs were measured using a 5-point scale. To measure purchase intentions, personal norms, awareness of

consequences, injunctive social norms, environmental concern, environment self-identity and aspiration of responsibility and willingness to pay, the scale was anchored at 1 for ‘strongly disagree’, and 5 for ‘strongly agree’.

3.2 Study Sites and Sampling

This study used mall intercept data collection method, whereas, shopping malls and respondents were sampled through cluster sampling. The respondents in this study were Pakistani consumers aged between 18 years and above who were contacted randomly when they were visiting shopping malls (Emporium mall, Dolmen Mall, City tower, millennium mall and centaurs tower) in five cities in Pakistan including four provincial capitals (Lahore, Karachi, Peshawar and Quetta) and federal capital Islamabad respectively. A survey instrument was administered to consumers while they were shopping by the researcher and two enumerators. A total number of 540 consumers were contacted to perform the survey, however, 450 responded. During the data screening, there were 20 surveys found incomplete these questionnaires were eliminated. Hence, the total number of valid cases for the survey was 430 which included 157 females (36.5%) and 273 males (63.5%).

3.3 Statistical Analysis

In the current study, the collected data was further analysed with descriptive and inferential statistics by SPSS v.22. Afterwards, for complex analysis, Partial Least Squares Structural Equation Modelling approach (PLS-SEM) was used by SmartPLS-3.

3.3.1 Detection of Outliers

To detect outliers, frequency tables of minimum and maximum values for all variables were used. An initial analysis of these frequency tables revealed that no values were found to be excessively outside the acceptable range. Furthermore, attempts were made to detect multivariate outliers using Mahalanobis distance (D^2). Mahalanobis distance (D^2) is defined as “the distance of a case from the centroid of the remaining cases where the centroid is the point created at the intersection of the means of all the variables” (Tabachnick et al., 2012). Based on 7 predictor variables of the study, degree of freedom at 7, and the using probability critical value method, Mahalanobis values were calculated and probability value examined through cdf Chi square (Tabachnick et al., 2012) with the help of linear regression method in SPSS v22. 2 cases were identified showing probability value probability value less than 0.001 cut-off value. These two cases were removed. Therefore 428 responses were used for further data analysis.

3.3.2 Assumption of Normality

After detecting and removing outliers, the normality of the collected data was assessed. The assessment of the normal distribution of scores for independent and dependent variables can be obtained by accessing skewness and kurtosis values as suggested by Pallant (2005). According to Kline (1998) the cut-off value for skewness and kurtosis may fall within the range of -3 and +3. There are some kurtosis values (i.e., awareness of consequences and willingness to pay) in this study not within the range of -3 and +3 as shown in Table 1.

According to results some kurtosis and skewness values show a deviation from normal distribution. Therefore, this study employed PLS-SEM. This is because PLS does not require normally-distributed input data.

Table 1. Result for Skewness and Kurtosis for normality test

Factors	Skewness		Kurtosis	
	Statistic	Standard Error	Statistic	Standard Error
Purchase Intentions	-1.216	.118	2.609	.235
Personal norms	-1.046	.118	1.905	.235
Willingness to pay	-1.229	.118	3.015	.235
Awareness of Consequences environment related	-1.193	.118	3.960	.235
Awareness of consequences social health related	-1.024	.118	3.046	.235
Injunctive Social Norms	-1.216	.118	2.907	.235
Environmental Concern	-1.352	.118	2.439	.235

Factors	Skewness		Kurtosis	
	Statistic	Standard Error	Statistic	Standard Error
Environmental Self-identity	-0.765	.118	1.051	.235
Aspiration of Responsibility	-1.055	.118	2.229	.235

3.3.3 Partial Least Square (PLS) Structural Equation Modeling Approach

Partial least squares (PLS) method is applied for evaluation of the mediating effects of personal norms on the relationships between environmental beliefs and consumer purchase intentions and moderating role of willingness to pay among the relationship of personal norms and purchase intentions in respect of organic food in Pakistan through SmartPLS version 3.0. PLS, as it is less sensitive to multivariate normal distribution data (Chin, 1998). In this study, bootstrapping analysis of 5000 sub-samples was used for estimation.

3.4 Analysis of Measurement Model

Using Smart PLS, in the first step, the measurement model (outer model) was examined to ascertain the appropriateness of loadings of the indicators (items) on the theoretically devised respective constructs. Outer model is evaluated in order to affirm that items measure the construct they were supposed to measure, consequently ascertaining that the instrument used is reliable. Furthermore, the analysis involves testing one second-order construct (Awareness of Consequences and all other constructs in the study are treated as first order constructs. Awareness of consequences including two dimensions of awareness of consequences (environment related and social health related). In the present study, there are eight latent variables which included five independent variables (Awareness of Consequences, Injunctive Social Norms, Environmental Concern, Environmental Self-identity, Aspiration of Responsibility), one mediating variable (Personal norms), one moderating variable (willingness to pay) and one dependent variable (Purchase intentions). Originally, the study model has included 49 reflective measurement items.

Convergent validity is the degree to which the measure correlates positively with other measures of the same construct (Hair et al., 2016). Further, in order to confirm convergent validity, the factor loadings and average variance extracted (AVE) were analysed through SmartPLS-3. Inter construct reliability is an important measure to analyse convergent validity. The construct reliability is assessed through cronbach's alpha (α) and composite reliability (CR). As per Table 2, 8 items (ACEnv1, ACEnv5, ACEnv7, ACEnv8, PN5, WTP3, AR3, AR4) were removed due to inter construct item factor loadings below 0.6. Furthermore, the AVE values of study measures were also been analysed ranging between 0.51 and 0.66, proved to be above the standard values recommended by Hair et al. (2016) i.e. 0.5. Thus, AVE values show a good level of construct validity (Barclay et al., 1995). Moreover, in order to assert convergent validity, the (α) value must be or above 0.70 (Hair et al., 2016). Table 2 displays that (α) for all constructs resulted above the value of 0.70 and appeared to be ranged between 0.710 and 0.840. This fact ensures the construct reliability. The final test to establish convergent validity was testing composite reliability (CR). According to Hair et al. (2016), CR value should fall at or above 0.7. As far as construct CR is concerned the values showing a range in between 0.801 and 0.882, exceeding well of standard value of 0.70. Hence, analysed CR values affirm convergent validity of study's outer model or measurement model.

Table 2. Reliability (factor loading, Cronbach's alpha, composite reliability and AVE)

Factors	Items	Standardized Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Awareness of Consequences Environmental	ACEnv2	0.729	0.710	0.821	0.534
	ACEnv3	0.741			
	ACEnv4	0.715			
	ACEnv6	0.738			
Awareness of Consequences	ACSoc1	0.700	0.763	0.840	0.513
	ACSoc2	0.711			

Factors	Items	Standardized Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Social	ACSoc3	0.710	0.743	0.853	0.659
	ACSoc4	0.721			
	ACSoc5	0.728			
Aspiration of Responsibility	AR1	0.804	0.782	0.851	0.533
	AR2	0.838			
	AR5	0.791			
Environmental Concern	EC1	0.790	0.763	0.837	0.509
	EC2	0.686			
	EC3	0.685			
	EC4	0.710			
	EC5	0.811			
Environmental Self-Identity	ESI1	0.730	0.761	0.839	0.511
	ESI2	0.755			
	ESI3	0.731			
	ESI4	0.703			
	ESI5	0.729			
Injunctive Social Norms	ISN1	0.703	0.717	0.839	0.637
	ISN2	0.763			
	ISN3	0.609			
	ISN4	0.779			
	ISN5	0.700			
Purchase Intentions	PI1	0.790	0.824	0.883	0.556
	PI2	0.741			
	PI3	0.722			
	PI4	0.726			
	PI5	0.766			
	PI6	0.726			
Personal norms	PN1	0.710	0.717	0.839	0.637
	PN2	0.679			
	PN3	0.725			
	PN4	0.709			
	PN6	0.733			
Willingness to Pay	WTP1	0.871	0.717	0.839	0.637
	WTP2	0.688			
	WTP4	0.824			

3.4.1 Discriminant Validity

The next phase is to confirm scale's discriminant validity. Discriminant validity ensures the discrimination of one

construct of the study with others. Meaning no two constructs are measuring same thing (Hair et al., 2016). Existing study evaluate discriminant validity with the help of Heterotrait-Heteromethod matrix (HTMT) approach. Traditionally, discriminant validity is analysed through Fornell-Larcker Criterion and cross loadings. However, these both measures display lower level of sensitivity towards discriminant validity, hence, demand for other statistically rigorous criterion alternatively. HTMT approach links back to classical multi-trait multimethod (MTMM) matrix proposed by Campbell and Fiske, (1959) as cited by Voorhees et al. (2016). Further, HTMT enables discriminant validity in systematic manners ensuring construct validity properly. HTMT assess average correlation of study construct confirming all the constructs of interest must quantify different phenomena under study. Observed construct must not be highly correlated. Statically, HTMT values for reflective constructs must be at 0.90 or below of that (Henseler et al., 2015). Following two tables 3 and 4 presenting HTMT ratio for 1st order and 2nd order constructs separately respectively.

Subsequently, table 3 and 4 show none of the value in HTMT matrix is higher than 0.9 (Henseler, et al., 2015), hence the discriminant validity of study construct is established. After getting acceptable results for the measurement model, i.e., establishing reliability and validity of the study's constructs, the next step was to assess the structural model.

Table 3. HTMT criterion for 1st order

	ACEnv	ACSoc	AR	EC	ESI	ISN	PI	PN	WTP
ACEnv									
ACSoc	0.553								
AR	0.237	0.29							
EC	0.322	0.333	0.2						
ESI	0.233	0.246	0.494	0.194					
ISN	0.295	0.321	0.269	0.226	0.359				
PI	0.406	0.463	0.405	0.473	0.42	0.547			
PN	0.319	0.375	0.596	0.261	0.554	0.427	0.597		
WTP	0.169	0.326	0.341	0.138	0.320	0.369	0.289	0.364	

Table 4. HTMT criterion for 2nd order

	AC	AR	EC	ESI	ISN	PI	PN	WTP
AC								
AR	0.307							
EC	0.379	0.2						
ESI	0.277	0.494	0.194					
ISN	0.357	0.269	0.226	0.359				
PI	0.505	0.405	0.473	0.42	0.547			
PN	0.404	0.596	0.261	0.554	0.427	0.597		
WTP	0.296	0.341	0.138	0.320	0.369	0.289	0.364	

3.4.2 The Structural Model

After ensuring validity and reliability of measurement model or inner model, the study structural model or outer model was assessed. In this process path coefficient among constructs was analysed through SmartPLS-3 (Henseler et al., 2015). The analysing process involves standard bootstrapping to determine the significance of path coefficients where 428 cases were evaluated with 5,000 sub-samples bootstrapped. (Hair et al., 2016). The structural model estimates representing intervening variables (i.e., consumer personal norms and willingness to pay and consumers) are detailed in Figure 1.

Structural model, i.e., path coefficient was tested by running PLS Algorithm using SmartPLS 3.0. The path coefficient (refer to Figure 1) represents the hypothesized relationship between the constructs and its standardized value is between -1 and +1 (Hair et al., 2016).

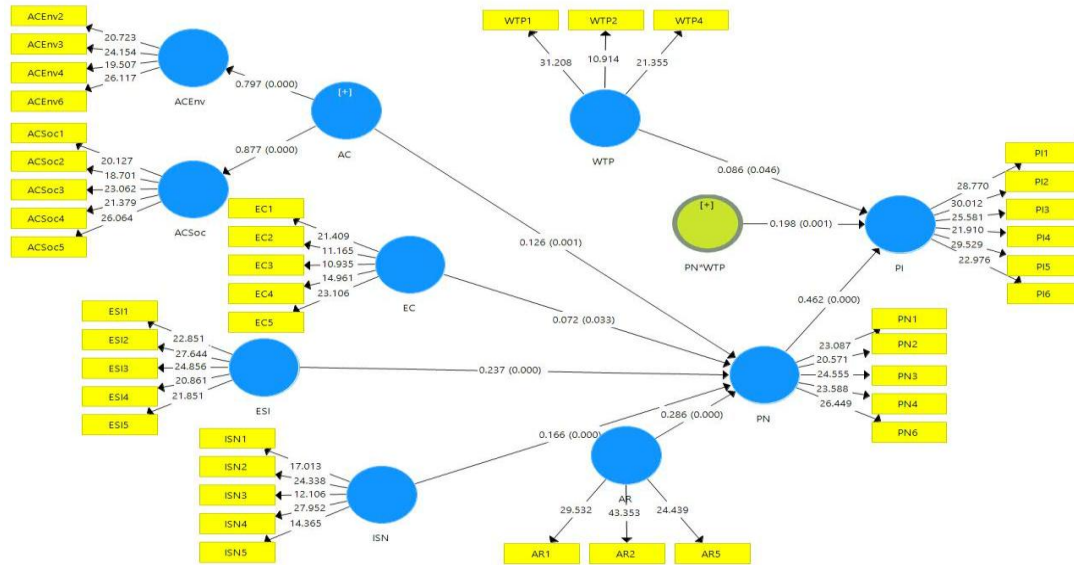


Figure 1

Note: PI- Purchase Intentions; PN- Personal norms; AC- Awareness of Consequences; ACEnv- Awareness of Consequences environmental; ACSoc- Awareness of consequences social; ISN- Injunctive Social Norms; EC- Environmental Concern; ESI- Environmental Self-identity; AR- Aspiration of Responsibility; WTP- Willingness to Pay.

3.4.3 R Square

Coefficient of determination (R^2) of endogenous latent variable is perhaps the most commonly used criteria for assessing structural model (Hair et al., 2016). As per Cohen (1988), R^2 value of 0.27 indicates substantial, 0.13 indicates moderate, and 0.02 indicate weak R^2 values. Results show that the R^2 value of consumer personal norms (0.346) are substantial value whereas purchase intentions (0.285) shows substantial value as well. The two R^2 values in this study indicate that all five exogenous variables (awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility) collectively explain 34.6% of variance in the mediating variable (i.e., personal norms) and the overall R^2 value indicates that all seven exogenous variables i.e. (awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility, personal norms and willingness to pay) collectively explain 28.5% of variance in the endogenous variable (i.e., purchase intention). This follows that the model has substantial predictive validity based on the assessment of the R^2 values of the endogenous latent variables, consumer personal norms (0.346) and purchase intention (0.285).

3.4.4 F Square

After coefficient evaluation, Hair et al. (2016) suggests assessing the effect size (f^2). Effect size refers to the difference in R^2 before and after inclusion of a particular exogenous construct from the model. According to Cohen (1988), an obtained value of 0.02 indicates small effect, a value of 0.15 indicates a moderate effect and a value of 0.35 indicates a large effect. However, Chin et al. (2003) have asserted that even the smallest effect size (f^2) should be reported as it can impact the endogenous latent variables.

Table 5

Effect Size of Exogenous Variable	f-squared	Effect size
Personal norms	0.277	Moderate Effect
Awareness of Consequences	0.020	Small Effect
Injunctive Social Norms	0.036	Small Effect
Environmental Concern	0.007	Very Small Effect
Environmental Self-identity	0.069	Very Small Effect
Aspiration of Responsibility	0.103	Small Effect

As indicated in Table 5, the effect size of personal norm on purchase intention is 0.277 and the effect sizes for awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility on personal norms were 0.020, 0.036, 0.007, 0.069 and 0.103 respectively. Hence, following Cohen (1988) guidelines, respective effects sizes of the six exogenous latent variables can be reported as moderate, small, small, very small and small respectively.

3.5 Hypotheses Testing

Hypotheses testing for the study is analysed through bootstrapping in SmartPLS 3.0. To run bootstrapping, the researcher used 5,000 samples with the 428 cases.

3.5.1 Direct Relationship

Structural model, i.e., path coefficient was tested by using SmartPLS 3.0 to run the PLS Algorithm. Table 6 shows that consumer personal norms towards organic food has a positive and significant impacts on purchase intentions towards organic food ($\beta = 0.459$, $t = 10.843$, $p < 0.001$). Therefore, hypothesis 1 is supported.

Further table 6 shows that awareness of consequences ($\beta = 0.126$, $t = 3.277$, $p < 0.01$), injunctive social norms ($\beta = 0.166$, $t = 4.176$, $p < 0.001$), environmental concern ($\beta = 0.033$, $t = 1.827$, $p < 0.05$), environmental self-identity ($\beta = 0.237$, $t = 4.874$, $p < 0.001$) and aspiration of responsibility ($\beta = 0.132$, $t = 5.075$, $p < 0.001$) shows significantly positive influence on personal norms towards organic food. Hence, H2, H3, H4, H5 and H6 are supported.

Table 6

Hypotheses	Relationship	Beta Value	Standard Deviation	T Statistics	P Values	Decisions
H1	Consumers' personal norms -> organic food purchase intentions	0.459	0.042	10.843	0.000***	Supported
H2	Awareness of consequences-> Personal norms towards organic food	0.126	0.038	3.277	0.001**	Supported
H3	Injunctive social norms-> Personal norms towards organic food	0.166	0.040	4.176	0.000***	Supported
H4	Environmental concern-> Personal norms towards organic food	0.033	0.018	1.827	0.034	Supported
H5	Environmental self-identity-> Personal norms towards organic food	0.237	0.049	4.874	0.000***	Supported

H6	Aspiration of responsibility-> Personal norms towards organic food	0.132	0.026	5.075	0.000***	Supported
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Note: *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

3.5.2 Indirect Relationship (Mediation)

The bootstrapping results, table 7 shows that the consumers' personal norms toward the organic food is a significant mediator for the relationships between awareness of consequences and intention to purchase organic food ($\beta=0.058$, $t=3.141$, $p=0.001$); injunctive social norms and intention to purchase organic food ($\beta=0.131$, $t=4.277$, $p=0.000$); environmental concern and intention to purchase organic food ($\beta=0.033$, $t=5.089$, $p=0.000$); environmental self-identity and intention to purchase organic food ($\beta=0.109$, $t=1.841$, $p=0.030$); aspiration of responsibility and intention to purchase organic food ($\beta=0.076$, $t=5.255$, $p=0.000$). Furthermore, as indicated by Preacher and Hayes (2008), the indirect effect of 95% bootstrapped confidence interval, as indicated in Table 7, shows that consumer personal norms mediate the relationship between awareness of consequences and purchase intentions towards organic food (LL=0.025, UL=0.090); injunctive social norms and purchase intentions (LL=0.089, UL=0.171); environmental concern and intention to purchase organic food (LL=0.008, UL=0.069); environmental self-identity and purchase intentions (LL=0.070, UL=0.154); aspiration of responsibility and purchase intentions (LL=0.046, UL=0.114) because the lower limit (LL) and upper limit (UL) do not straddle a 0 in between the indications. Therefore, H7, H8, H9, H10 and H11 are supported, hence, accepted.

Table 7

Hypotheses	Relationship	Beta Value	Std Dev	T Value	P Value	Bootstrapped Confidence Interval		Decision
						95% LL	95% UL	
H7	Awareness of consequences->personal norms-> Purchase intentions	0.058	0.04	3.141	0.001**	0.025	0.090	Supported
H8	Injunctive social norms-> personal norms-> Purchase intentions	0.131	0.039	4.277	0.000***	0.089	0.171	Supported
H9	Environmental concern -> Personal norms -> Purchase intentions	0.033	0.047	5.089	0.000***	0.008	0.069	Supported
H10	Self-identity -> Personal norms -> Purchase intentions	0.109	0.039	1.841	0.030*	0.070	0.154	Supported
H11	Consumer's aspiration of responsibility-> Personal norms->Purchase intentions	0.076	0.054	5.255	0.000***	0.046	0.114	Supported

Note: *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

3.5.3 Moderating Relationship

Next this study analyses moderating effect of willingness to pay in terms of its strength between the relationship of

consumer personal moral norms and intentions to purchase organic food. In this study product indicator approach has been applied through SmartPLS-3. Therefore, estimates are shown in Table 8 after applying the product indicator approach. This approach is used to evaluate the moderating impact of consumer willingness to pay on the relationship between personal norms and purchase intentions towards organic food. It could be recalled that hypothesis 12 stated that consumer product willingness to pay moderates the relationship between consumer personal norms and purchase intentions. The results from Table 8, show that the interaction term (consumer's personal norms x consumer's product willingness to pay) was positive and significant ($\beta=0.198$, $t = 2.997$, $p= 0.001$), therefore, Hypothesis 12 is supported, hence, accepted.

Table 8. Moderating effects of consumer willingness to pay

Hypothesis	Relationship	Beta Value	Standard Deviation	T Statistics	P Values	Decisions
H12	Consumer's willingness to pay moderates the relationship between personal norms and organic food purchase intentions	0.198	0.066	2.997	0.001**	Supported

Note: **: $p < 0.01$

3.5.4 Assessment of Predictive Relevance (Q^2)

Statistically a robust structural model must show its ability to display study predictive relevance. Mostly Stone–Geisser criterion is used to assess the predictive relevance of the model. According to this criterion inner model should be capable of predicting of endogenous latent constructs (Henseler et al., 2015). In order to perform this test, blindfolding procedure has been followed through SmartPLS-3. The cross validated redundancy measures of endogenous latent construct are represented by Q^2 (Hair et al., 2016). The standard value Q^2 value must be greater than zero, ensuring that the model has predictive relevance, on the other hand lower Q^2 values than 0 showing model lacks predictive relevance (Hair et al., 2016). According to Table 9, Q^2 values are more than 0, where personal norms (0.164) and purchase intentions (0.142). Thus, predictive relevance of the study's model has been established.

Table 9. Cross-Validated redundancies

Total	SSO	SSE	Predictive Relevance (1-SSE/SSO)
Personal norms	2140.000	1790.049	0.164
Purchase Intentions	2568.000	2204.248	0.142

4. Discussion

This study has tested the mediating effects of personal norms on the relationships between awareness of consequences, injunctive social norms, environmental concern, environmental self-identity, aspiration of responsibility and purchase intentions of consumers in organic food context. According to PLS results two-dimensional awareness of consequences, injunctive social norms, environmental concern, environmental self-identity and aspiration of responsibility significantly impacted personal norms, hence, both H2, H3, H4, H5 and H6 were supported; therefore accepted. The findings are as similar with the conclusions made by Shin et al. (2018), Hansen et al. (2018), Joanes (2019) and Shimoda et al. (2019). Additionally, triggered personal norms contribute to organic food purchase intentions. With effective promotional strategies creating consumers' awareness regarding adverse consequences on biosphere and organic food benefits to avert those consequences, acceptable social norms for right thing to do, general consciousness for environmental problems, value based environmental self-identity and consumers' sense of responsibility; could nurture consumers' constructive personal moral norms towards organic food (Steg et al., 2014; Zhao et al., 2019).

Further, the results reveal that the activated personal norms significantly and positively influenced organic food purchase intentions. Thus, supporting H1, which provide that by creating consumers' intrinsic moral motivation through effective environmental beliefs organic food marketers can create positive purchase intention within consumers for organic food. Hence, creative and effective pro-environmental marketing campaigns based on consumers' moral beliefs and norms can positively create consumers' purchase intentions towards organic food. These findings are consistent with Arvola et al. (2008) and Shin et al. (2018) who proclaimed the positive relationship between personal norms and organic food purchase intentions. Therefore, the realization of consumers' purchase intentions via personal norms are more likely to encourage consumers in their final decision making in Pakistani context. Henceforth, the consumers believe that organic food products ensure not only the environmental preservation but also are considered to be a critical for people health safety. Environmental beliefs ensure the activation of personal norms at initial stages. Particularly the PLS results verify that two-dimensional awareness of consequences (Magnusson et al., 2003) can produce effective intrinsic motivation. Moreover, injunctive social norms that guide social member what is right thing to do in a particular situation also can trigger personal norms as these norms are based on moral and value-based understanding prevailing in the society. The findings are in the line of Matthies et al. (2012). The study results also validate the positive impact of environmental concern on personal norms. Whereas, environmental concern ensures the altruistic behaviour based on selfless and moral values. This finding is in the line with the findings of Steg et al. (2011). Furthermore, environmental self-identity implies activation of personal norms to act in sustainable manners because non-sustainable behaviour threatens valuable self-identity and self-esteem. The results are in the line of the findings of Peloza et al. (2013). PLS results also verdict the activation of personal norms through aspiration of responsibility. Promotion activities based on messages conveying a sense of responsibility among individuals can instigate moral norms among them. The results are in the line with Gao et al. (2017). Hence, H2, H3, H4, H5 and H6 are supported. Additionally, the study also supports the mediating effect of personal norms among the relationship of all suggested environmental belief and organic food purchase intentions, thus, H7, H8, H9, H10 and H11 are accepted. Furthermore, the results also endorse that consumers' willingness to pay moderates positively the link between personal norms and organic food purchase intentions. The results of this study show that Pakistani consumers evaluate organic food morally and emotionally not only rationally, therefore, they are willing to pay even higher prices for environmentally friendly food. This willingness to pay higher prices for organic food instigates the intensity of intrinsic moral motivation towards organic food to buy organic food. The organic food marketers can enhance the effect of personal norms on consumers' purchase intentions towards organic food through promotional activities educating individuals about the features and benefits of organic food consumption, making them indifferent to organic food higher prices. Because paying for environmentally organic food would be in line with their biocentric moral values. It can encourage to consumers to pay more for organic food products. This corroborates findings obtained by Vermeir and Verbeke (2006). Therefore, H12 is supported.

5. Conclusions and Recommendations

The results of this research have insinuations for practice and research as organic food buying is getting an issue of great importance in Pakistan. In practical scenario; specifically marketing application, existing results are critical to organic food segmentation, targeting, positioning and promotion of better market demand in organic food context. Personal norms were proved to be prime factor mediated the effect of awareness of consequences, injunctive social norms, environmental concern, environmental self-identity, aspiration of responsibility and purchase intentions regarding organic food. Marketing managers should, therefore, develop various effective strategies to communicate adverse consequences on environment and society due to extensive use of chemically intensive agricultural inputs and resultant food products. It should also be communicated that consumption of organic food would be the right way that consumer should follow as member of society and those must behave in socially responsible manner. Further, with the help of these finding marketers can provide positive recommendations to consumers through marketing and communication channel such as emails, SMS, twitter and Facebook.

As far as theoretical significance is concerned the study involved quantitative research approach with the application of PLS providing a useful apprehension regarding mediating role of personal norms between the link of pro-environmental beliefs and purchase intentions in organic food context. The study outcomes contribute significantly the emerging literature on organic food buying behaviour, which is still under researched area, specifically in Pakistani outlook. As per future research recommendations are concerned the moderating effects of demographic factors can produce important conclusions. As individuals are differentiated in terms of age, gender, education and occupation; such exercise, may find pro-environmental belief as suggested in this study and their

impact on consumers' personal norms and subsequently on purchase intentions for organic food may fluctuate in the terms of importance. Further, the expansion in existing research model is suggested with variables associated with emotion and habits, and examine at different geographical areas i.e. other sub-continental countries.

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Appendix

Constructs	Adapted From
Purchase Intentions	Wee et al. (2014)
I will buy organic food products in the near future	
I plan to buy organic food products on regular basis	
I plan to buy organic food products for my long-term health benefits	
I plan to buy organic food products because those are more concerned about food safety	
I plan to buy organic food products because those are more environmentally friendly	
I plan to buy organic food products because I am concerned about animal welfare	
Personal norms	Abrahamse et al. (2009)
I feel an obligation to purchase organic food rather than non-organic food	

Constructs	Adapted From
Consuming organic food rather than non-organic food makes me feel like a better person	
If I consume organic food rather than non-organic food, I feel as if I am making an individual contribution to something better	
I feel morally obliged to purchase environmentally friendly organic food products, regardless of what other people do	
I feel guilty when I purchase environmentally harmful products	
I would consider myself a better person if I purchase environmentally friendly organic food products	
Consumer willingness to pay	Trivadi (2015)
It is acceptable to pay a premium to buy organic food	
I am intending to spend extra in order to buy organic food	
I am intending to pay more for organic food	
I feel proud to have environmentally friendly food in my house though they costlier to conventional food	
Awareness of Consequences	Magnusson et al. (2003)
<i>When I purchase organic food, it is important to me that this helps to</i>	
Reduce the amount of chemicals that run-off into lakes and watercourses (ACEnv)	
Reduce the use of artificial fertilisers in agriculture (ACEnv)	
Reduce the use of anti-weed chemicals and pesticides in agriculture (ACEnv)	
Reduce the pollution of the soil (ACEnv)	
Reduce the medication of farm animals (ACEnv)	
Improve the general state of the environment (ACEnv)	
Improve health of the domestic animals (ACEnv)	
Preserve biodiversity in nature (ACEnv)	
Improves the people health (ACSoc)	
Give myself a good conscience (ACSoc)	
Reduce the risk for illness in people (ACSoc)	
Give my family better food (ACSoc)	
Avoid risks that may be associated with eating non-organic foods (ACSoc)	
Injunctive Social Norms	Vermeir and Verbeke (2008)
My family thinks I should buy organic food	
My friends expect me to buy organic food	
People, who influence my buying behaviour, think I ought to buy organic food	
Many people in the society think I should buy organic food	
People who are important to me expect me to buy organic food	
Environmental Concern	Yadav and Pathak (2016)
The delicate balance of the nature can be easily upset	
Human beings are severely abusing the environment	

Constructs	Adapted From
Humans must maintain the balance with nature in order to survive	
Human interferences with nature often produce disastrous consequences	
The earth is like a spaceship with limited room and resources	
Environmental self-identity	Hustvedet (2009)
I think of myself as an environmental consumer	
I am a socially responsible consumer who buy organic food	
I think of myself as someone who is concerned about environmental issues	
I think of myself as an organic food consumer	
I think of myself as someone who is concerned about unhealthy food issues	
Aspiration of Responsibility	Han et al. (2016)
I believe that every food buyer is partly liable for environmental problems caused by chemically intensive conventional food products	
I feel that every food buyer is jointly liable for the environmental deteriorations caused by chemically intensive conventional food products	
Every food buyer must take responsibility for the environmental problems caused by chemically intensive conventional food products	
I feel an obligation to choose organic food instead of a conventional one when deciding on buying food product	
Regardless of what other people do, because of my own values/principles I feel that I should behave in an environmentally friendly way while buying food products	