



RESEARCH PAPER

Assessment of Youth Buying Behaviour for Organic Food Products in Southern Punjab: Perceptions and Hindrances

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PAPER INFO	ABSTRACT
<p>Received: August 30, 2021</p> <p>Accepted: December 27, 2021</p> <p>Online: December 30, 2021</p> <p>Keywords: Environmental Knowledge Organic Food Purchase Behaviour, Personal Attitude, PLS-SEM, Subjective & Moral Norms,</p> <p>*Corresponding Author: asifyaseen@bzu.edu.pk</p>	<p>This research examined the cognitive antecedental effects on organic food purchase behaviour for understanding the perceptions and hindrances associated with purchasing organic food products. Theory of Planned Behaviour (TPB) was adopted as a theoretical framework. A total of 250 young consumers in the two cities of Southern Punjab, Pakistan was randomly sampled and data were collected via a face-to-face survey method. Partial least square technique was employed to test the model. The results showed that attitude towards organic food purchasing motivated when moral norms were activated to consume organic food products. Further, environmental knowledge moderated the relationship of organic food purchase intentions and behaviour significantly. The findings highlighted the importance of moral norms as a meaningful antecedent that could increase the TP-based psychosocial processes if consumers have sufficient environmental knowledge. Therefore, farmers, organic products marketers, government administrators, and food retailers should take initiatives not only to highlight the norms and values but also when promoting organic food production and consumption.</p>

Introduction

The Preference for organic food consumption is one of the main strategies for achieving environmental sustainability. Climate change is no more a theory but a hazardous fact of modern life. Due to global warming, every year is predicted to be the warmest year with more than 2°C (36°F), causing more draughts and heatwaves along with high floods due to high sea levels (about 3mm per year) (Ekelund & Tjarnemo, 2014). Climate changes like global warming and other enormities are the results of human activities like emission of Greenhouse gases, urban sprawl, deforestation, waste disposals and last but not the least genetic engineering (Ekelund & Tjarnemo, 2014). Pakistan has been ranked 7th among most vulnerable countries from climate change (Abubakar, 2020). Consumptions of eco-friendly products can be a way out for environmental problems (Pinem, 2019). Among eco-friendly products, organic food has got special attention (De Maya & Munuera, 2011). Because,

nearly 30 percent of the environmental issues accredited to consumption are believed to be originated by food and drink (Ekelund & Tjärnemo, 2014) and environment friendly food purchasing can reduce the impacts of food on the environment (Laureti & Benedetti, 2018).

Organic food consumption has become one of the most popular sustainable consumption alternatives (Rizzo & Cembalo, 2020). Organic food is defined as the food which does not include synthetic inputs (e.g., pesticides and chemical fertilizers), genetically engineered organisms and food additives during their production process; hence they are environmentally safe and congenial (Lockeretz, 2007). Organic food is a Western invention (Lockeretz, 2007) and is often viewed as more nutritious and less harmful for health; therefore, their demand is increasing appreciably (Wang & Dang, 2020). UN highlighted very close relationship between climate change and sustainable food and agriculture practices with a very radiant message that: "The climate is changing, Food and agriculture must too" (Food and Agriculture Organization of the UN, 2016).

For the purpose of sustainable organic food consumption, the role of consumer is pivotal in deciding to invest more in organic food purchase. As such, sustainable consumption primarily addresses the sustainability objectives focusing the very relevance of consumer's choices (Rizzo & Cembalo, 2020b). Therefore, it is imperative to know the decision-making process of individuals regarding organic food products. In developed economies, extant research studies explored organic food purchasing behaviours, such as, in china. Wang & Dang, (2020b), explained the relationship between environmental consciousness and organic food purchase intention. In USA, such relationships are also explore to understand the nuances of sustainable organic food consumption (Lee & Yun, 2015).

Molinillo & Japutra, (2020), studied the drivers of organic food purchasing in two socially and culturally distinct economies of Brazil and Spain. In Belgium, Poelmans & Rousseau, (2017) inspected that consumers are ready to pay price premiums for organic beers; While in the Italy, Carfora & Cicia, (2019), investigated the future organic milk consumption behaviour from a psychological perspective; in Germany von Meyer-Höfer & Spiller, (2015), aimed at finding determinants of organic food consumption and Goetzke & Spiller, (2014), clarified the organic food consumption motives as healthier lifestyle and high level of well-being. In emerging economies, research studies are also getting interest, Like in China, study by Hsu & Chen, (2014), investigated the influence of regulatory fit on organic food purchase behaviour. Furthermore, in Taiwan, Teng & Wang, (2015), studied the impact of organic food labelling on purchase intentions of customers at supermarkets and health food stores. Yazdanpanah & Forouzani, (2015), in Iran investigated factors affecting student's organic food purchase intentions. Study in Malaysia by Saleki & Mohammad, (2019), examined the factors affecting consumer's intentions to purchase organic food. In Indonesia, Darsono & Irawati, (2018), reported an insight of various factors impacting consumer's attitudes, intentions leading to actual purchase behaviour.

Pakistan has enjoyed true blessings of natural environment since its earliest days, however, climate changing conditions has brought on slowly and steadily reduced cold weather in Pakistan (Climate Change: Winters Shrinking by One Day Every Year, 2016). Pakistan has 64,885-hectare organic agricultural land and has only 0.2% contribution in world organic industry (*The World of Organic Agriculture Statistics & Emerging Trends*, 2020). Pakistani consumers spend half of their income on food but organic food adoption is quiet low (Akbar & Danish, 2019). Therefore, there is a need to identify the determinants of buying behaviour in a nascent market like Pakistan.

The present study aimed at investigating the role of moral norms considering it as an important factor for understanding the psychosocial process of buying and consuming organic food products by utilizing an extended TPB model (Shaw & Newholm, 2016). The research explained how an individual unfolds ethical behaviour in a specific context such as buying and consuming organic food (Jayawardhena & Stride, 2016). The study also examined the moderating role of environmental knowledge between intention and behaviour (Fraj-Andrés & Martínez-Salinas, 2007). This study contributes in organic food literature in several manners. Investigation of individual consumer behaviour in organic food context will give valuable insights. This also shed light on understanding of the role of moral norms and extending the current literature on moderating role of environmental knowledge, specifically within the context of organic food purchasing behaviour.

Literature Review

Theoretical Framework:

Consumer behaviour is a complex phenomenon to explain, let alone predicting it (Ham & Stanic, 2018). It combines elements from various other sciences like biology, economics, and sociology and most importantly from cognitive psychology. Owing to the developments in economics, technology and market information explosion, consumer's consumption knowledge has dramatically increased leading towards more green purchase behaviours (Wang & Dang, 2020c). In economics and business, consumer behaviour is approached widely through theory of planned behaviour. This study also incorporates the theory of planned behaviour in order to understand the various determinants of consumer purchasing behaviour. The underlying assumption of the theory is that a person's behaviour is driven by the intentions to perform the specific action. Intentions in turn are determined by three cognitive antecedents: attitude, subjective norms, perceived behavioural control (PBC) (Carfora & Cicia, 2019). (Ajzen, 1991) also recommended moral norm as the strong predictor of behavioural intention along with attitude, subjective norm, PBC. So, the 'moral norm' is integrated in the research model to show that it has a significant impact in forming the organic food purchase intentions (J. Thøgersen, 2002). Various empirical research studies showed support for this idea of the inclusion of moral norm and

proposed that it could help to enhance the explanatory ability of TPB (e.g., (Yazdanpanah & Forouzani, 2015).

Attitude

An attitude is a conceptual propensity which shows the extent of favour and disfavour through the evaluation of any entity (Eagly & Chaiken, 1998). Positive or negative orientation towards any product does have significant influence on consumer's choice (Michaelidou & Hassan, 2008; Thøgersen, 2002). In case of organic food, its nutritional value imposes positive effect on consumer's attitudes toward organic food (Liang, 2016). Consumers' attitude is also very much linked with organic food' environmentally friendliness and eco-sensitivity (Magnusson & Sjöden, 2003). Research has confirmed that there exists a positive and crucial relationship between consumer's attitude and intention to purchase organic food (e.g., Padel, S., & Foster, 2005).

Subjective Norms

Subjective norm is related to the motivations of the individual to behave in a manner which is fabricated to meet up with the beliefs and expectations of his/her important ones like family members, friends, peers or other significant beings (Eagly & Chaiken, 1998). Findings of various studies have shown a definite positive relationship between subjective norms and intention to buy organic food (e.g., Chen, 2007; Vermeir & Verbeke, 2006). The literature is thoroughly documented with the studies signifying the importance of subjective norms particularly for pro-environmentally behaviours (Biel & Thøgersen, 2007; John Thøgersen, 2009). Vermeir & Verbeke, (2006), in their study relating to sustainable dairy products, informed that people' willingness to comply with others can be a strong predictor of intentions. Prior research on organic food consumption found the significant positive relationship between subjective norms and consumers' intention to purchase organic food (Al-Swidi & Shariff, 2014).

Perceived Behavioural Control (PBC)

Perceived behavioural control is the study of consumer's own perceptions relating to their personal control over their own actions. These perceptions about barriers and abilities to perform are also believed to influence the consumer's judgment about the risks and benefits associated with the organic foods. PBC is considered as the superior interest phenomena than other tangible controls since it initiates people's intuition comfortably or cause to struggle for performing the behaviour (Verbeke & Vackier, 2005). Godin & Kok, (1996), noted that PBC contributes to predict the intentions relating to health-conscious behaviours. Chen, (2007), demonstrated that PBC specifically enhance intentions of consumers to buy organic foods. However, Arvola & Shepherd, (2008), and Tarkiainen & Sundqvist, (2005), did not find any significant relationship between PBC and intentions of buying organic food product. Organic food is relatively expensive than conventional food

and availability is also crucial because people need to find some speciality food market even in developed countries (Tarkiaine & Sundqvist, 2005). Therefore, Thøgersen, (2009), opined that PBC shaped by such price and availability barriers influence organic food purchasing behaviour. Specially, in Pakistan where organic food is sold at premium prices and availability is also limited to exclusive organic food shops. So, literature documents income or financial aspect of PBC as most important determinant of organic food purchasing (Al-Swidi & Shariff, 2014).

Moral Norms

Moral norm also known as personal norm or moral obligation (Aertsens & Van Huylenbroeck, 2009). cites to people' own beliefs regarding right and wrong actions (Parker & Stradling, 1995). It is originated from the Norm-Activation theory of altruism given by a psychologist (Schwartz, 1977). Moral norm helps an individual to act in a certain way is either right or may be wrong. Various research studies showed that strength of moral norm may cause variations in the environmentally responsible behaviour of individuals (Arvola & Shepherd, 2008; John Thøgersen, 2009). In their studies, Thøgersen & Ölander, (2006), and Dean & Shepherd, (2008), also pointed out that in purchasing organic food, moral norm is a strong predictor of intentions, even stronger than subjective norms. Harland & Wilke, (1999), reported that along with attitudes and perceived behavioural control moral norm was also the significant determinant of individual's intentions. Bamberg & Möser, (2007), in their study related to Value-Belief-Norm theory and Norm-activation-model respectively, indicated that extended TPB with moral norm aspect outperforms these two models in explaining environmental responsible behaviour.

Environmental knowledge (EK)

The consumer's knowledge of environmental issues and finding the alternatives and solutions are also another factor which has proved many times to influence the consumer's behaviour (Fraj-Andrés & Martínez-Salinas, 2007). Increasing public awareness about environmental issues and its protection compelled researchers to investigate environmental knowledge (Laroche & Barbaro-Forleo, 2002). Initially, studies focusing on environmentally responsible behaviour witnessed a linear relationship of knowledge to attitudes, and attitudes to behaviour (e.g., Hungerford & Volk, 1990). This view categorically proposes that knowledge of environmental issues would make consumers conscientious towards the environment, and thus he will act in more responsible manner (Hungerford & Volk, 1990). Chen & Tung, (2014), have found that an EK plays as much critical role in decision making of guests of green hotels. (Dagiliūtė & Niaura, (2014), studied the impact of environmental programs on student's attitude and found it positive. Fraj-Andrés & Martínez-Salinas, (2007), studied a moderating role of environmental knowledge between attitudes and pro-environmental behaviour. Werner &

Alvensleben, (1984), concluded that environmental knowledge actuates a positive impact on a consumer’s habits of buying and consuming eco-friendly products.

Research Hypotheses

Based on above discussed literature, the researchers draw following research hypotheses and research model. Attitude towards organic food, subjective norm, perceived behavioural control and moral norms are the independent variables, intention towards organic food is mediating variable, environmental knowledge is moderating variable and organic food purchase behaviour is dependent variable.

- H1: Attitude towards organic food buying significantly affects organic food purchase intentions.
- H2: Subjective norms significantly affect organic food intentions.
- H3: PBC significantly affects organic food purchase intentions.
- H4: Moral norm significantly affects intentions to purchase organic food.
- H5: Organic food purchase intentions significantly affect organic food purchase behaviour.
- H5a: Organic food purchase Intentions significantly mediates the relation between attitudes and organic food purchase behavior.
- H5b: Organic food purchase Intentions significantly mediates the relation between subjective norms and organic food purchase behavior.
- H5c: Organic food purchase Intentions significantly mediates the relation between PBC and organic food purchase behavior.
- H5d: Organic food purchase Intentions significantly mediates the relation between moral norms and organic food purchase behavior.
- H6: Knowledge of environmental problems significantly moderates the relation between organic food purchase intention and organic food purchase behaviour.

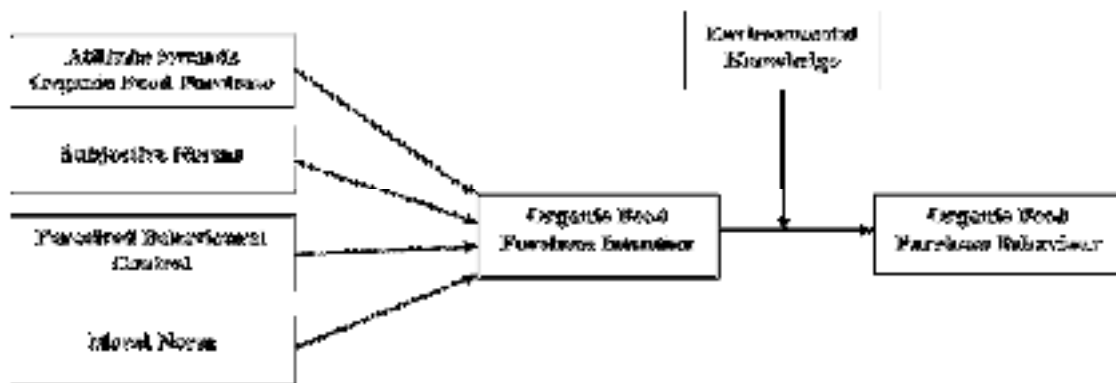


Figure 1. Hypothesized Model

Material and Methods

The study adopted deductive approach for theory testing (Saunders & Thornhill, 2009). For the purpose of sampling, first, public and private educational institutes were identified then at the second step, research scholars, faculty members, students having environmental knowledge/ concerned were selected. And finally at the third step, population framework was consisted of young educated students and faculty members. Respondents were provided an envelope containing the questionnaire, instruction letter and an informed consent to be signed by respondent and return if not available in face-to-face mode.

There were 321 protentional respondents, among these 279 completed the questionnaire. Finally, 29 respondents declared that they were not purchasing organic food products, however, leaned towards purchasing in future so these participants were excluded from the sample, the final sample comprised 250 respondents. For such study, sample above 100 is considered reasonable if partial least square of SEM mode is to be adopted for data analysis (Hair & Sarstedt, 2011).

Questionnaire consisted of four Independent, one mediating, one moderating and one depending variables. Attitude towards organic food consumption have six dimensions, Subjective norms have four dimensions, PBC and Moral norms both have four dimensions. Source of independent variable factors and their related Cronbach' alpha are given in the following table.

Table 1
Variable sources and Cronbach coefficient

Variable	Source	Cronbach coefficient
Attitude towards organic food Purchasing	Yazdanpanah & Forouzani, (2015)	0.85
Perceived behavioural control	(Shin & Hancer, 2016)	0.82
Subjective Norms	Al-Swidi & Shariff, (2014)	0.70
Moral Norms	(Shin & Hancer, 2016)	0.91

Organic food consumption intention was used as a mediating variable and eight factors were examined under this variable (Ueasangkomsate & Santiteerakul, 2016). Environmental Knowledge (EK) was used as moderator and four factors were scrutinized to examine the consumer's awareness about issues and impact of this awareness on consumption behaviour. Lee, (2010) provided the scale for measuring this variable. The Cronbach' alpha was 0.85 in the source study and items were modified for the particular context.

Organic food consumption behaviour is used as dependent variable to see the overall impact of independent, mediating and moderating variables on the consumption behaviour. This variable was measured by four factors also using 5-point Likert scale. A 5-point Likert scale was utilized to elicit the responses for the variables under investigation.

The study used Smart PLS 3 software to employ Partial Least Square of Structure Equation Modelling (PLS-SEM) for examining the data. PLS Algorithm and Bootstrapping were used to test the reliability, validity, hypotheses testing and relationship among independent, mediating, moderating and dependent variables calculated and following tests were applied on the collected data.

Results and Discussion

Demographic profile of the respondents

Dataset consisted of 250 surveys from public and private universities of Southern Punjab, Pakistan, represented a robust sample size for PLS-SEM.

Table 2
Respondents Profile

Variables	Frequency	Percentage
Gender		
Male	108	49
Female	112	51
Age (Years)		
20 or below	91	41
21-30	127	58
31-40	1	0.45
41-50	1	0.45
Above 50	0	0
Monthly Income (PKR, Thousands)		
Nil	166	75
Less than 20	47	21
21-30	3	1.36
31-40	4	1.81
41-50	0	0
Above 50	0	0

The study assessed multicollinearity before going to further analysing the data. Variance inflation factor (VIF) provided the value to examine multicollinearity and no value was found greater than 5, the threshold value of VIF.

Cronbach' alpha was used to assess internal consistency (Cronbach 1951). The range of Cronbach 's alpha of all construct was 0.667 to 0.847. Further, internal consistency was also determined by the composite reliability (CR). (Henseler & Sinkovics, 2009), argued that in PLS path models internal consistency, reliability of latent (unobserved) variables is underestimated by "Cronbach's alpha". The results of CR also revealed that the measures are robust in terms of internal consistency reliability. The CR index revealed range from 0.681 to 0.877 which is an acceptable range (Liang, 2016). Results are given in the following Table 3:

Table 3
Average variance extracted, composite reliability and Cronbach's alpha

Constructs	AVE	Composite Reliability	Cronbach's Alpha
Attitude towards organic food	0.641	0.834	0.803
Environmental knowledge	0.590	0.756	0.821
Moral norm	0.538	0.693	0.693
Perceived behavioural control	0.452	0.681	0.667
Organic food purchase behaviour	0.706	0.877	0.705
Organic food purchase intention	0.555	0.813	0.848
Subjective norm	0.370	0.695	0.753

Fornell & Larcker, (1981) method was used to evaluate discriminant validity at construct level. As per the method, correlation or square root of AVE of a construct with its own indicators must be greater than the correlation between the constructs and any other construct (Fornell & Larcker, 1981). In the study, the square root of AVE values was found greater than the corresponding off-diagonal correlations indicating satisfactory discriminant validity.

Table 4
Fornell-Larcker criterion

Constructs	ATT	EK	MN	PBC	PB	PI	SN
ATT	0.800						
EK	0.629	0.768					
MN	0.626	0.657	0.733				
PBC	0.629	0.600	0.559	0.672			
PBC	0.792	0.626	0.570	0.531	0.840		
PI	0.639	0.744	0.726	0.644	0.632	0.745	
SN	0.329	0.219	0.270	0.241	0.357	0.363	0.608

Hypotheses Testing

Table 5
Results for Direct Effects

Relationships	Beta Coefficient	Standard Error	T Statistics	Significance
ATT → PI	0.1464	0.0565	2.5918	<0.01
SN → PI	0.1287	0.0440	2.9252	<0.01
MN → PI	0.4488	0.0573	7.8262	<0.01
PBC → PI	0.2699	0.0576	4.6831	<0.01
PI → PB	0.2285	0.1068	2.1406	<0.05
EK → PB	0.1959	0.0945	2.0723	<0.05
PI * EK → PB	0.2790	0.1421	1.9637	<0.05

Preacher & Hayes, (2008) mediation analysis technique was employed after bootstrapping the secondary impact of subsamples. Bootstrapping is often used to test the mediating effect in the model as this strategy is good in little size tests. This is also free from the presumptions of large or small samples that is why it is also a better strategy to test the mediating effects. In this study PLS-SEM is being utilized so bootstrapping is likewise a better for this analysis.

The mediating or indirect impact in relation to total impact is decided by the VAF (variance accounted for) value. Formula to calculate the VAF value is as follows:

(VAF = indirect impact/total effect*)

(*Total effect= indirect impact + direct impact)

The study showed that attitudes, PBC, subjective norms were mediated by the organic food purchase intentions, moral norm is partially mediated by the organic food purchase intentions and the mediator variable was related significantly to organic food purchase behaviour.

Table 6
Mediation Analysis

Relationships	Indirect impact	Total impact	VAF	Interpretation
ATT → PI → PB	0.0335256	0.0334	100%	Full mediation
MN → PI → PB	0.0335256	0.1026	33%	Partial mediation
PBC → PI → PB	0.0618071	0.0617	100%	Full mediation
SN → PI → PB	0.0294723	0.0294	100%	Partial mediation

Moderating impact of EK was analysed by the effect size as follows:

Table 7
Moderation Analysis

Relationship	Before Moderation (R ²)	After Moderation (R ²)	<i>f</i> ²	Effect Size
EK significantly moderates the relation between PI and PB	0.400	0.455	0.10	Small > 0.2 Small to medium

Moral norms and environmental knowledge have attested their relationship as predictor and moderator respectively on buying intention and actual purchase of organic food products, following one of the most important socio-psychological theoretical frameworks, the TPB. Findings have highlighted that TPB model has a strong explanatory value. All hypotheses relating to relation between attitude, subjective norm, PBC, and intention received support. The positive impact of subjective norms indicated that expectation about organic food purchase shared with family and friends, positively impact willingness to purchase organic food products.

This study had three-fold objectives: the first objective was to enhance our understanding about factors determining purchase behaviour with context specific account of organic food consumption.; second, to examine the impact of moral norm on intention formation; and third to observe the moderating role of 'environmental knowledge between organic food purchase intentions and organic food purchase behaviour. The present study integrated the 'moral norm' as the predictor of purchase intentions and results showed that among the four predictors (Attitudes, Subjective norms, PBC and Moral norms) moral norm is the most significant predictor of organic food purchase intentions ($\beta=0.44$, $p < 0.01$) followed by PBC ($\beta=0.267$, $p < 0.01$), Attitudes ($\beta=0.146$, $p < 0.01$) and Subjective norms ($\beta=0.128$, $p < 0.01$), indicating that moral norm was a material predictor in relation to organic food context. Like the research study of Thøgersen, (2002), found that personal (moral) norms could be the important predictor in purchasing red wine, this study may also propose that moral norm can be a determining factor in the context of organic food purchase behaviour.

Consumers who consider that it is their ethical responsibility to purchase organic food and take it as a positive and self-rewarding phenomenon, ultimately are more likely to encourage their intentions. In other words, consumers may coincide this moral belief to their religious views. Islam is the most concerned religion in terms of food apprehensions. It is governed by the rules and customs that are not only favourable for human being but also for society. So, this result was a glimpse of this Islamic approach of Pakistani

consumers that for them it is their moral responsibility to purchase environment friendly products such as local organic food products.

PBC was second the highest significant predictor of organic food purchase intentions. The significant result supports the hypothesis and numerous other studies like Robinson & Smith, (2002) and Vermeir & Verbeke, (2008), revealing that PBC is an influencing predictor of sustainable products purchasing. It can be concluded that consumers who think that their own control and confidence on organic products are sufficient than holding positive attitudes, are more likely to intend to purchase organic food products. Therefore, they will purchase more organic food when they will have highest degree of self-control on behaviour.

Attitude was the third major predictor of organic food purchase intentions reflecting that people have positive attitude towards organic food purchasing and they also intend to do so. This significant finding supports the hypothesis and is in line with many studies where significant effect of attitudes is found on the behavioural intentions (Nguyen & Potvin, 1996; Vermeir & Verbeke, 2008). So, suggesting the phenomena that attitudes do have influence on the organic food purchase intentions because consumers consider organic food consumption beneficial for them and their surroundings. For them it's a unique idea to avoid emerging issues of food and environment.

Subjective norms along with other determinants also have significant and direct impact on intentions implying that organic purchase behaviour could be, in effect, a symbolic behaviour which embodies various other societal meanings for them and this result is in line with other studies (Ham & Frajman Ivković, 2015; Vermeir & Verbeke, 2008). In case of Pakistan, according to Hofstede, (1991) definition of 'collectivism', individuals as the consumers are the part of a collectivist community. They are complaints rather than deviants with respect to their reference groups. When it comes to purchase a novel product, they usually lack self-autonomy. They somehow require approvals so that risk associated with a particular behaviour might be avoided. However, this is contradictory to the significant result of PBC because significance of subjective norms means consumers do not have sufficient self-confidence or control on their behaviours. The justification for this contradiction can be such that people do think first that they have self-control on their decisions and it's after effects as well as influence of others are contributing to develop that self-control.

Furthermore, mediation was tested with regards to the mediation effects of organic food purchase intentions on the predictors and organic food purchase behaviour. Results showed the complete mediation of attitudes, subjective norms and PBC and limited mediation of moral norm by the intentions. Complete mediation of attitudes suggested that attitudes are the very important consideration to intend and ultimately perform the behaviour. Complete mediation of subjective norm proposes that influence of important ones does have collision with organic food purchase behaviour through intentions. And,

complete mediation of PBC suggests that perception of self-control on behaviour is strongly flourished by the intentions. Partial or limited mediation of moral norm bring to mind the consideration that moral norm is important one but its impact directly on the behaviour is instrumental. It may be due to the fact that moral consideration of any Muslim individual towards any behaviour does not need any go between to perform that behaviour.

The study offered the inclusion of environmental knowledge and the attempted to trace its impacts on the relationship between intentions and behaviour. The consumer's knowledge of environmental issues and finding the alternatives and solutions are the other factors which have proved many times to influence the consumer's behaviour (Fraj-Andrés & Martínez-Salinas, 2007; Schahn & Holzer, 1990) categorised such environmental knowledge as the 'abstract knowledge'. Hines & Tomera, (1987), in their study found this abstract knowledge as the most significant construct in environmental related behaviour. Further, individuals who are rather active in environmental related behaviour have the knowledge about the problems and efforts to solve them. This is the single significant factor, which clearly differentiate them from others (Stern, 1992). So, knowledge about the environment and its related issues eventually becomes a skill form of human beings. In this regard, finding suggests that it enhances the relation thus converting intention into performing that behaviour.

Conclusion and Recommendations

The present study showed that moral norms appeared significantly important to explain organic food purchase behaviour. The findings also revealed that well-informed consumers about environmental issues could reduce the negative impacts of their behaviour on the environment and on society as a whole. The study offers theoretical and practical implications. The study has extended model inspired by theory of planned behavior with moral norms construct and its greater significance among all predictors is a fair theoretical contribution. Further, the study attempted to contribute by the inclusion of moderating effect of environmental knowledge on the relationship of organic food purchase intention and purchasing behavior in context of Pakistan (Gerring, 2012).

For the practical implication, farmers, organic product marketers, state-government administrators, and food retailers need to promote communication campaign and develop long term relationship with customers to build knowledge about awareness of environmental issues and ethical practices to make the environment clean and green by using organic food products.

Although the study offered significant implications for producers and marketers and policy makers, it has some limitations. First, the study focused on public and private universities in two major cities of Southern Punjab, so further studies can be planned to collect data from other major cities of Pakistan to increase sample representativeness.

Second, given the cross-sectional nature of the study, a longitudinal study could be designed to capture the change and velocity in buying organic food products from the price sensitive customers. Third, it is pertinent to assess actual buying behavior given the unsought nature of organic food products. Testa & Frey, (2018), in this regard have pointed that sometimes intention to perform the behavior and actual or observed behavior are not strongly connected.

Finally, Future research can be expanded with additional variables such as trust, health consciousness behavior with large sample sizes and diverse target population for the generalization of the results.

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