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DO CONSUMERS' BELIEFS, KNOWLEDGE, AND AWARENESS PLAY AN IMPORTANT ROLE IN WILLINGNESS TO ADOPT PRO-ENVIRONMENTAL BEHAVIOUR?

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DO CONSUMERS' BELIEFS, KNOWLEDGE, AND AWARENESS PLAY AN IMPORTANT ROLE IN WILLINGNESS TO ADOPT PRO-ENVIRONMENTAL BEHAVIOUR?

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Abstract

The research examined the role of belief and knowledge/ awareness about the environment on willingness to adopt pro-environment behaviour by consumers. The research also investigated the control effect of Gender and Education level on the effect of knowledge/ awareness and belief on wiliness to adopt pro-environment behaviour. The research is based on Eco scale questionnaires used to measure the constructs (Knowledge, Belief, and Pro-environmental actions). The questionnaires were used to survey a sample of 615 respondents in the Delhi National Capital Region (Delhi- NCR). Structural Equation Modeling is used to demonstrate the fitness of the proposed model. The research reveals that beliefs have a negative effect on willingness to act while knowledge/ awareness has a positive effect on willingness to act. However, knowledge/awareness positively mediates the effect of belief on willingness to act. The research also reveals that the level of education and gender do not significantly control pro-environmental behaviour. The research is one of its kind to explore the psychological and behavioural implications of environmental protection.

Keywords: pro-environment behaviour; willingness to act; knowledge & awareness; belief

1. Introduction

There is scarcity of research in India on the role of peoples' belief, knowledge and pro-environmental actions. In order to study people's actions promoting pro-environmental behaviour, it is essential to examine factors that affect the said behaviour. Pro-environmental behaviour is a requisite to handling climate change that has become a major concern for world society (Seroussi et al., 2019). Climate change is responsible for extreme natural disasters all over the

world. These disasters cause major economic losses for societies irrespective of the demographics (Hsu, 2015). Environment is defined as air, water, and land in or on which people, animals and plants live. An unprecedented environmental crisis due to toxic air, water contamination and cities sheared of their green cover are threatening people's health, livelihood and development. The main reasons for environmental deterioration are rapid growth in economy, and change in patterns of consumers' consumption and behaviour (Chen & Chai,2010). By-products of consumption and inconsiderate consumption habits lead to depletion of natural resources and irreversible environmental destruction (Trott 1997; Tuna &Özkoçak, 2012).It is obvious that consumption guides production. Excess consumerism along with blind production, if not properly managed, may lead to environmental problems (Haron et al., 2015). Sustainable consumption habits can help prevent environmental degradation (Miran et al., 2008). This calls for consumers to become environmentally responsible in their behaviour (Taufique et al., 2014).

Environmental problems can only be solved by citizens who exhibit environmentally responsible behaviour such as using public transport and adopting similar environment-friendly activities (Qiang Wang, 2013). Citizens can exhibit environmentally responsible behaviour only when they have adequate awareness, sufficient knowledge, genuine desire and willingness to act in favor of the immediate environment (Stone et al., 1995).

Therefore, the objective of the paper is to investigate the effect of belief, knowledge, and awareness which play an important role in willingness to act towards pro-environmental behaviour. Ecological Paradigm Scale was utilized to measure respondents' beliefs towards the environment and further to examine how those beliefs were linked to awareness and willingness to act.

2.Review of literature

Environmental change can be controlled by public awareness, appropriate government interventions and measures adopted by people for mitigating detrimental impacts of negative environmental behaviour (Mufti Nadimul & Atiqul, 2019). People strongly inclined towards nature reflect strong pro-environmental commitment (Müller et al., 2009). Women's lifestyle, self-image, economic condition and health guide buying intention of female customers for ecofriendly cosmetics. Purchase patterns of environment-friendly beauty care products are guided by buying intention, ethical consumerism, brand image, as well as usage experience, pharmacological essence of products, price and promotion, and visual cues in stores (Sharmila et al.,2015). A strong relation

was found between buying a green product, and eco- friendly legislation and penalties for polluting the environment (Derrek & Ross, 2010). Age, gender and values predict pro-environment behaviour (Onel & Mukherjee, 2014). The pro-environmental behaviour of well-educated people can be largely attributed to the following factors in the environmental context - obligatory sense, impact from problems of environmental degradation, outcome expectancy of behaviour, knowledge and appropriate action (Janmaimool, 2017). Males and females differ in attitudes towards the environment (Tikka et al., 2000).

Effective pro-environmental behaviour requires commitment (Awareness, Attitude, Motivation, and Willingness to act) from people of the land (Bohensky, 2016). Role of awareness and belief on the perceptual relationship of these variables on climate change risk was examined among a group of farmers in Hungry; the study revealed that, "Awareness of extreme weather events was a significant driver of adaptation behaviour." (Li et al., 2017).Climate change is a prominent threat to human race as well as the natural eco-system. Comparative effect of "socio-demographic characteristics, geography, perceived well-being, and beliefs on public climate change awareness and risk perceptions at national scales" was examined in over 119 countries worldwide. Results reveals that educational attainment was the single strongest predictor of climate change awareness (Lee et al., 2015).

Public opinion about climate change is multidimensional, dynamic and differentiated. "Public opinion on climate change includes, among others, belief about climate change, perception about climate change risks, and thoughts on if anything should be done to address it." (Shwom et al., 2015). A meta-analysis was done to assess the determinants and outcomes of belief in climate change using twenty-seven variables by synthesizing 25 polls and 171 academic studies across 56 nations. Results revealed that, "Climate change beliefs have only a small relationship with the extent to which people are willing to act in climate-friendly ways, and many intuitively appealing variables (such as education, sex, subjective knowledge and experience of extreme weather events) are overshadowed in predictive power by values, ideologies, worldviews and political orientation." Hornsey et al., 2016). It was perceived that knowledge is a major variable that creates concern about climate change and its effects. Having said that, recent research suggests that "knowledge about climate change has only a limited effect on shaping concern about climate change." (Shi et al., 2016).

A meta-analysis on 96 case research reports was done to examine the effect of local knowledge on climate change, revealing that among "746 local indicators

of climate change, mostly corresponded to local observations of climate change (40%), but also to observed impacts on the physical (23%), biological (19%), and socioeconomic (18%) systems". The study also revealed that, "Even if local observations of climate change are the most frequently reported type of change, the rich and fine-grained knowledge in relation to impacts on biophysical systems could provide more original contributions to our understanding of climate change at local scale." Reyes-García et al., 2016). Research studies related to the effect of knowledge/awareness, beliefs, and climate change, are either focused on the effect of belief or knowledge on climate change, or their focus is on descriptive characteristics of these variables (Ricart, Olcina, & Rico, 2019; Luís, Vauclair, & Lima, 2018; Ünal, Steg, & Gorsira, 2018; Hoppe, Taddicken, & Reif, 2018; Tomlinson, & Rhiney, 2018; Felicilda-Reynaldo et al., 2018; Reyes-García et al., 2016).

Therefore, this study is intended to examine the combined role of education and gender, along with beliefs and awareness, on pro-environmental behaviour in India.

2.1 Knowledge and awareness

Awareness amongst the public is vital to combat the possible negative impacts of environmental degradation and to promote possible support for the environment (Ghazali et al.,2016). The main social and political goal in the last two decades has been managing and raising awareness about the environment (Ham, Mrcela, & Horvat, 2016). Knowledge about the environment and related issues has effect on perception about environmental risks and willingness to pay for the environment (Onel, & Mukherjee, 2016). Responsible environmental behaviour is found to be associated with knowledge of environmental issues and actions, attitude, and sense of responsibility and commitment. Knowledge about environment and healthy living influences consumers' ecological behaviour (Norazah, 2013). Values and environmental awareness predict pro-environmental behaviour (Pinto et al., 2011).Students with high levels of environmental awareness demonstrate positive effect on a pro-environmental attitude (Arı, & Yılmaz, 2017). Awareness, knowledge and risk perception about environmental issues such as climate change, positively influence attitude for pro-environmental action (Masud et al., 2015). Environmental knowledge of managers has a direct influence on green behaviour, and indirect influence on behavioural intentions, attitude and commitment towards green behaviour (Safari, Salehzadeh, Panahi, & Abolghasemian, 2018). Green brand knowledge leads to positive green marketing awareness, influences consumers' attitudes towards green brands, and is a major determinant for green product purchase

intention (Norazah, 2016). Level of environmental awareness among people is responsible for environmental concern and gets significantly enhanced with education level of respondents (Abegunde, 2017).

2.2 Belief

Environment-related behaviour has been found to have a clear relationship with peoples' beliefs about accountability related to influencing the environment (Victoria, 2011). The existing gap between consumer expectations and their perceptions about environment-friendly products influences sale of these products (Shih & Shiu, 2013).Green product purchase decision is influenced by self- identity, peer influence and past green buying behaviour (Khare,2015). A positive and significant relationship is indicated between sustainable attitudes and behavioural intentions towards green products such as renewable energy (Ul-Mulk, & Reynaud, 2018). Individual self-identity for instance, a farmer, influences assessment of environmental concerns like climate change and the willingness to implement measures to address these issues (Hyland et al., 2016). Consumers exhibit values and beliefs related to environmental protection through their consumption behaviour and buying patterns (Haws et al., 2013).

2.3 Willing to act

Willingness to pay and personal norms predict eco-friendly purchase behaviour (Andrea, 2015). Women demonstrate positive attitude towards the environment and buy more green products (Mainieri et al., 1997). Socioeconomic and demographic variables guide pro-environmental behaviour like recycling (Berger, 1997). Perceived environmental knowledge influences eco-labeled product purchase tendencies (Göçer& Bengü, 2017). Environmentally conscious people possess higher knowledge levels and buying intentions about environmental issues like carbon reduction ((Hsu & Lin, 2015). Green food and beverage behaviour is influenced by commitment, behavioural control and knowledge in the context of the environment (Yao-Fen Wang & Chung-Jen, 2016).

Social influence has no role in purchase intention and attitude for organic products, even in the introductory stages of the product. But attitude partially mediates the relationship between purchase intention for organic clothing and green consumption values relationship (Varshneya, Pandey, & Das, 2017). Attitudes of consumers towards environmental protection, fair trade, local products, availability of action related knowledge, time barriers and frequency of shopping, guide green food purchase behaviour (Carmen et al., 2003). Environment-friendly consumer behaviour is found to be dependent on social

influence, attitude towards green purchases, perceived knowledge about the environment, recycling acts, eco-labelling and pro-environmental awareness by media (Yatish Joshi et al., 2016). Concern for environment exerts an influence on attitude, subjective norms and behavioural control (Richa Chaudhary,& Samrat Bisai, 2018). Green buying was predicted by knowledge, beliefs, attitudes, demographic variables and pro-environment behaviour (Tina et al., 2010). Factors affecting intention to purchase organic food products among Indian consumers are found to be attitude, subjective norms, perceived control, organic knowledge, and awareness, ethical orientation, and concern for the environment (Bagher, Salati, & Ghaffari, 2018).

3. Theoretical background and hypotheses development

Study of consumer behaviour using their belief systems, attitude and subjective norms is evident in consumer psychology literature (Bang et al., 2000). The current study is rooted in the Theory of Reasoned Actions(TRA) devised by Fishbein and Ajzen (1975). The TRA advocates that individuals reflect the concerns of substitute behaviours before engaging in them, and that they pick to execute behaviours they subordinate with needed results. In the model, behaviours are determined by a person's intention to perform the behaviour. Fishbein and Ajzen suggest that behavioural intent (BI) is derived from two factors: (1) attitude toward the behaviour, and (2) subjective norms (or perceived social pressure associated with the behaviour), as shown in Figure 1.

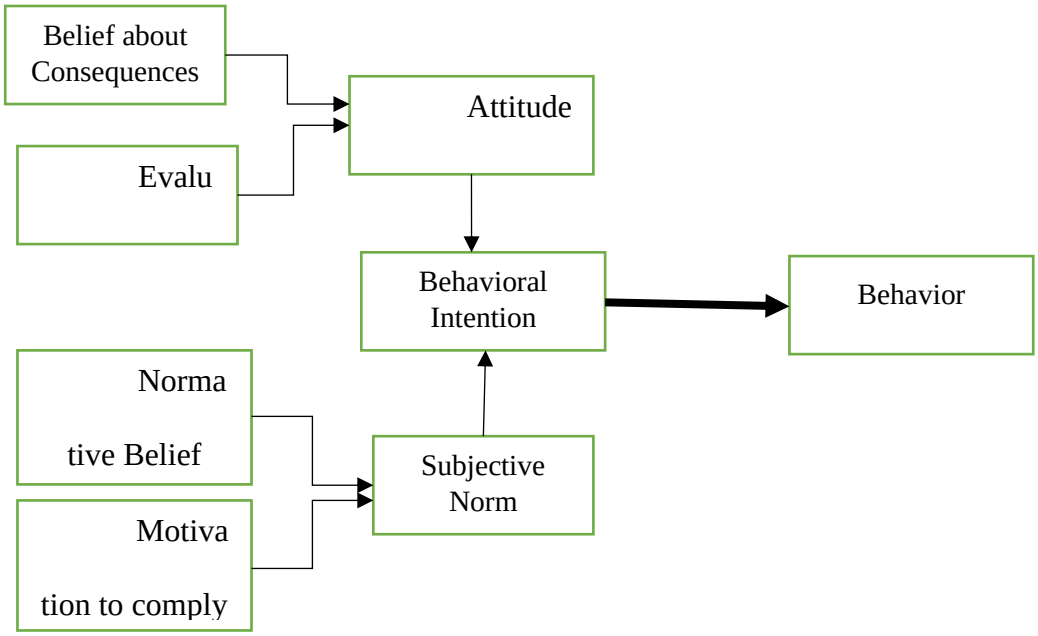

Figure 1: TRA From Fishbein and Ajzen (1975)

It is observed that threat of climate change and the consequences thereafter may lead to increase in pro-environmental behaviour and willingness to act towards it. "Consumers are interested in the environment largely because they are concerned about their own health or their children's future." (Bang et al., 2000). It was also explored that issues that relate to personal health and future may lead to knowledge accumulation and awareness (Zaichkowsky, 1986).Therefore, it is expected that people who are more concerned about climate change and personal health are more likely to be knowledgeable about consequences of pro-environmental behaviour(Figure 2), hence we posit:

H1*: Knowledge and Awareness Mediate the Effect of Beliefs on Willingness to act towards pro-environmental behaviour*.

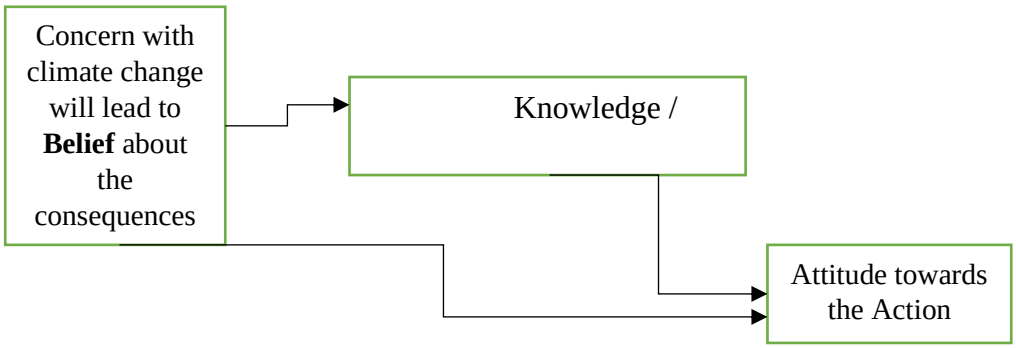

Figure 2: Theoretical Framework

Prior studies have revealed that opinion of people about climate change is multidimensional and dynamic in nature; beliefs about climate change are therefore, multidimensional and dynamic. Scarcity of research has been pointed out with regard to the control effect of gender and education on belief and willingness to act. This research intended to examine the control effect of gender and education on willingness to act towards pro-environmental behaviour. Hence we posit:

H2: *Gender and Education Moderate the effect of beliefs and knowledge/ Awareness on willingness to act.*

4. Research Methodology

Eco Scale questionaries' are the main instruments for collecting data in this survey research. Eco scale questionaries' are a set of standard qualitative questions having 31 items. Answers are analysed using Structural Equation Modelling. The questionnaire items were posed to 1000 respondents personally.

There were 615 valid responses. Random sampling was used to identify respondents. PLS-SEM was used to measure the constructs as well as to analyse the proposed model (Figure 2). To examine the control effect of education and gender, R software LAVAAN packages were used (Daniel Oberski ,2014).

4.1 Data collection and sampling

In order to meet objectives of the study, primary data was collected from residents of Delhi-NCR using a structured questionnaire. The questionnaire had thirty-one items, out of which knowledge and awareness dimension had twelve items, belief had four items and willingness to act had fifteen items. Table 1 presents the demographic profile of respondents who participated in the study. Almost eighty-nine percent of the respondents have academic qualification of graduation or above. As per Table 1, seventy-eight percent of the respondent fall in the category of age 18 years and above. Both these parameters imply that the study captures perception of educated youth of the country towards eco-consciousness. Survey was conducted in such a way that common method bias due to survey structure was to be mitigated by following procedures as suggested in seminal literature by Podsakoff et al., (2003). To avoid biases due to place and source, we collected data from different places and different sources; after doing so, reliability of the data was checked and assured (MacKenzie et al. , 2011; Malhotra et al.,2006; Podsakoff et al., 2003).Non response bias was controlled using the standard procedure proposed by Fulton, B. R. (2018).

Table 1: Demographic Profile of Respondents

Approximate monthly household income (Rs.)	**Percentage**	**Age(in years)**	**Percentage**	**Education(Highest Qualification)**	**Percentage**
Above Rs. 100000	13.4	Above 58	1.9	School	4.6
Rs. 80000-100000	13.4	48-58	7.0	Undergraduate	16.4
60000-80000	18.9	38-48	8.9	Graduate	39.7
40000-60000	22.8	28-38	24.4	Post Graduate	39.3
20000-40000	16.5	18-28	53.9	**Gender**	**Percentage**

Below 20000	15	Below 18	3.9	Male	67.3
				Female	32.7

n=615

5. Data Analysis and model fit

The study has been conducted in two steps. In the first step, we used PLS-SEM to examine the mediating role of Knowledge between Belief and Willingness to act. In the second step, the study statistically controlled for the effect of gender and education on Belief and Willingness to adopt pro-environmental behaviour.

The proposed model was examined using PLS-SEM. The 615 responses for 31 items are appropriately assigned to the latent construct (Belief, Knowledge/awareness and Willingness to act). It was observed that out of 31 items, only 23 items were loaded appropriately to one of the latent constructs as shown in Table 2; rest of the items were discarded as they were not loaded appropriately.

Table 2: Items loading

Items	Beliefs	Knowledge	Willingness to Act
X11	**0.08**	**0.64**	**-0.08**
X12	**0.03**	**0.65**	**-0.02**
X13	**-0.07**	**0.35**	**0.19**
X14	**0.08**	**0.45**	**0.06**
Y6	**-0.11**	**0.45**	**0.08**
Y7	**-0.15**	**0.32**	**0.09**
X2	**0.14**	**-0.09**	**0.5**
X3	**-0.16**	**0.01**	**0.54**
X4	**-0.1**	**-0.05**	**0.47**
X5	**0.23**	**0.05**	**0.11**

X6	**0.45**	**0.11**	**-0.12**
X7	**0.42**	**-0.04**	**0.05**
X8	**0.09**	**-0.15**	**0.4**
X9	**0.09**	**0.18**	**-0.09**
X10	**0.13**	**0.21**	**0.13**
X15	**0.42**	**0.13**	**-0.12**
X16	**0.11**	**0.17**	**0.12**
X17	**0.09**	**0.13**	**0.37**
X18	**0.52**	**0.13**	**-0.01**
X19	**-0.13**	**0.16**	**0.44**
X20	**0.32**	**0.06**	**0.23**
Y1	**0.45**	**0.06**	**0.15**
Y2	**0.5**	**-0.06**	**-0.04**
Y3	**-0.09**	**0.08**	**0.36**
Y4	**0.14**	**-0.04**	**0.21**
Y5	**0.06**	**0.14**	**0.15**
Y8	**0.47**	**0.12**	**0.2**
Y9	**0.54**	**0.01**	**-0.06**
Y10	**0.64**	**-0.07**	**-0.09**

The measurement model and path coefficients are shown in Figure 3. After two iterations for model fit, it was observed that the cut-off loading factor should be 0.4 for best model fit, therefore we further refined the model and discarded five more items. The final loaded items are shown in Figure 3. The path coefficients are also shown in Figure 3. It was observed that there is a negative relationship between belief and willingness to act towards pro-environmental behaviour. However, knowledge/awareness mediates the relationship between belief and willingness to act because in the presence of knowledge, the relationship

becomes positive. There may be a few ways to have common method variances in this research. First source may be because dependent and independent variables were measured by the same person. Second source may be the personal bias of the respondent towards a particular company, place and time. The third source of common method bias may be the items, and structure of the survey itself (MacKenzie et al., 2011; Podsakoff et al., 2003).

To avoid personal and social biases of the respondents and to reduce common method variance, data collection was done over two different sources and at different points of time. Properties of these possible sources are explained in the data collection section (Podsakoff et al.,2003). Also, Herman's single factor test was done on the data and showed that the common variance of common factor was 1.8 percent. Marker variable test revealed that correlation between the factors was not an issue since they were within standard limits (Malhotra et al.,2006). A major source of endoginity is Common Method Variance(CMV) itself; however, as this research does not have a meaningful effect of CMV, there is less chance that error terms in the path model have an endoginity bias (Ullah et al. ,2018). Diagnostics measures for multicollinearity, collinearity for constructs were also taken care of to avoid any effect of multicollinearity. Analysis shows that the collinearity indicator (variance inflation factor) falls below the acceptable cut-off point (VIF <5) (Hair, Tatham, Anderson, & BLACK, 2006). The Average Variance Extracted (AVEs) of each construct was > 0.50 (Table 3) , which adequately reflects unidimensionality (Fornell & Larcker, 1981). This indicates that the observed items explain more variance than the error terms. Finally, unidimensionality was supported by the composite reliability of each construct, which exceeds the 0.80 cut-off value (Hair et al., 2013; Segers, 1997).

Reliability and validity of the constructs are adequate as shown in Table 3, while the discriminant validity of the constructs is shown in Table 4. The relevant fir measures are adequate as shown in Table 5. To study control effects of gender and education, we examined two models as shown in Tables 6 and 7 wherein we tested the control effect of gender and education between knowledge and willingness to act, as well as between belief and willingness to act (see Figure 4). Result reveals that gender and education marginally control the effect of knowledge on willingness to act while they do not control the effect of belief on willingness to act.

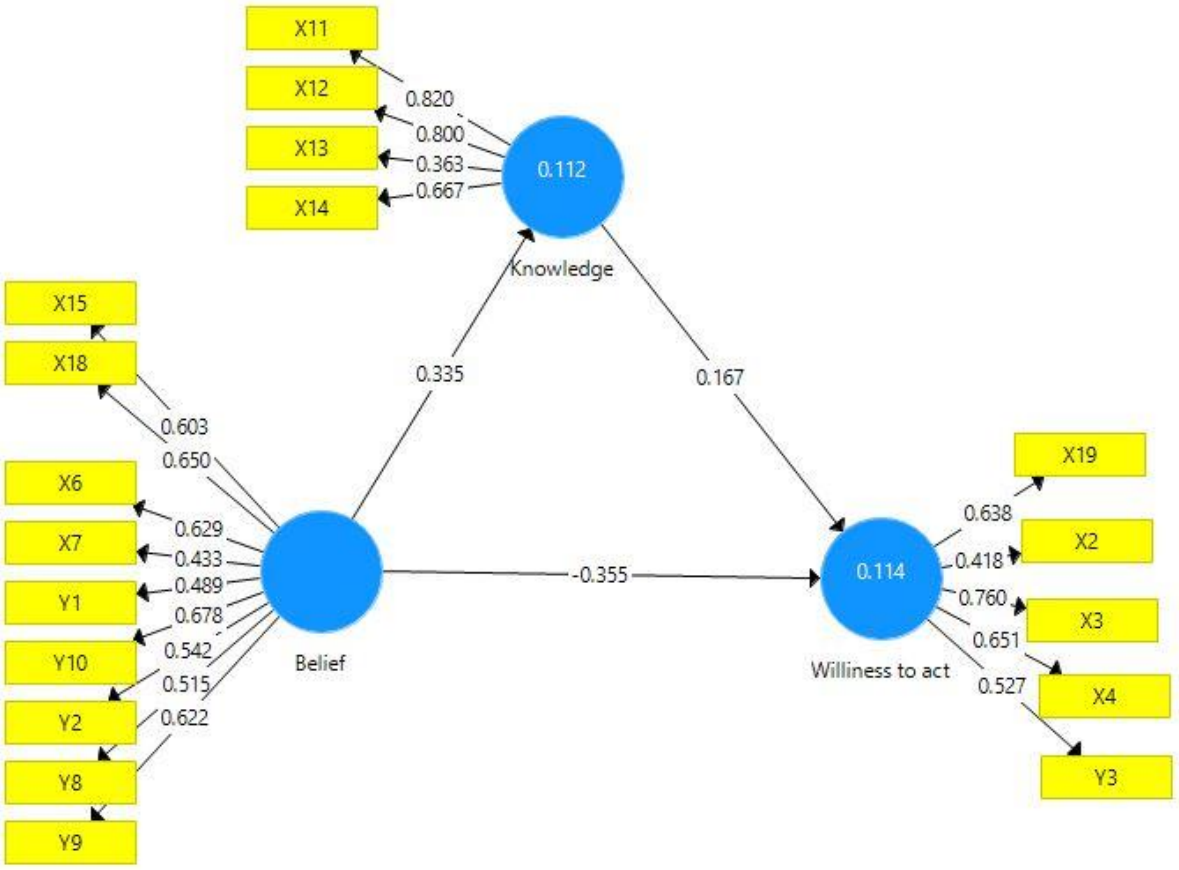

Figure 3. PLS-SEM Model

Table 3: Construct Reliability and Validity

		Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
	Belief	0.751	0.765	0.817	0.623
	Knowledge	0.751	0.700	0.769	0.712
	Willingness to act	0.731	0.710	0.741	0.652

Table 4: Discriminant Validity(Fornell-Larcker Criterion)

	Belief	Knowledge	Willingness to act
Belief	0.579		

Knowledge	0.335	0.687	
Williness to act	-0.299	0.048	0.610

Table 5: Model Fit

	Saturated Model	Estimated Model
SRMR	0.081	0.081
d_ULS	1.123	1.123
d_G	0.182	0.182
Chi-Square	618.989	618.989
NFI	0.661	0.661

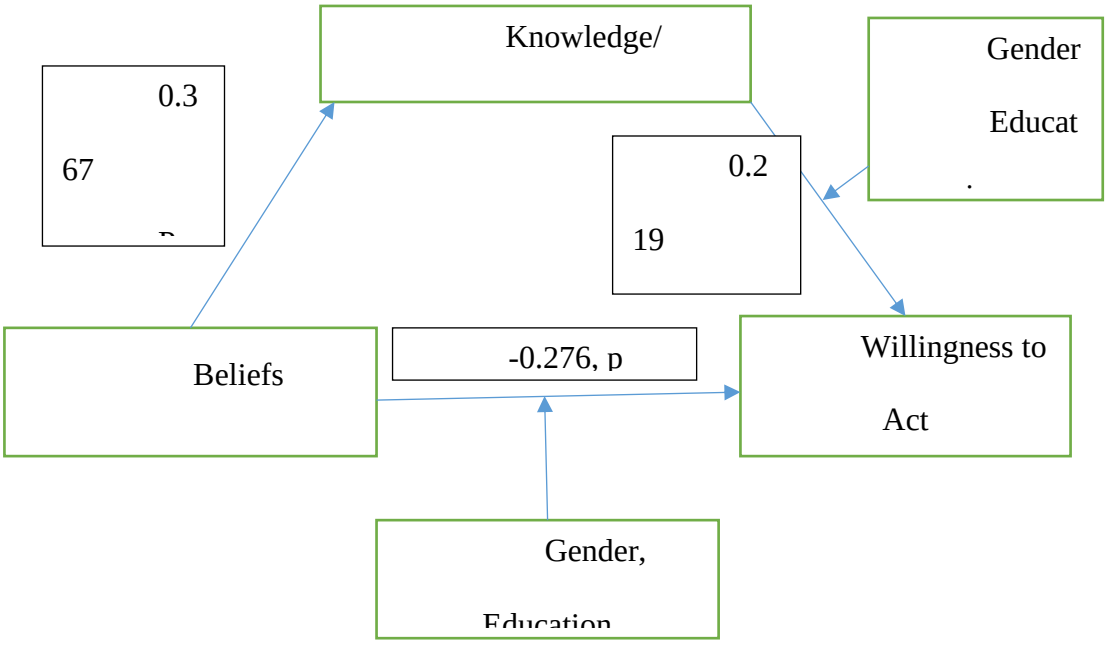

Figure 4. R Lavaan Model with control variables (Education and Gender)

The research study was conducted to examine the following hypothesis:

H1: Knowledge Mediates the Effect of Beliefs on Willingness to act.

H2: Gender and Education Moderates the effect of beliefs and knowledge/ Awareness, on willingness to act.

Table 6 Model 1 Control effect of Education and Gender on the effect of Belief on willingness to act

Model 1 Result	Model 1			
	Estimate	Std.Err	z-value	P(>|z|)
Knowledge ~				
Belifs	0.367	0.068	5.372	0.000
Willingness.to.act ~				
Beliefs	-0.276	0.055	-4.989	0.000
Knowledge ~	0.219	0.051	4.273	0.000
Moderation(control) effect of Education and Gender	-0.029	0.05	-0.587	0.557

Table 7 Model 2 Control effect of Education and Gender on the effect of knowledge on willingness to act

Model 2 Result	Model 12			
Knowledge ~	Estimate	Std.Err	z-value	P(>|z|)
Beliefs	0.375	0.069	5.401	0.000
Willingness to act ~				
Beliefs	-0.266	0.054	-4.894	0.000
Knowledge ~	0.198	0.049	4.055	0.000
Moderation(control) effect of Education and Gender	0.1	0.056	1.8	0.072

H1: Proved.

H2: Not proved as per data.

6. Discussion: Data Synthesis and Implications

The study focused on understanding the influencers of pro-environment behaviour. It identifies the variables as belief, knowledge, and awareness and willingness to act, as the primary variables influencing environment friendly behaviour. The researchers further looked at interactions between these variables along with demographic variables. On the basis of literature review, hypotheses were formulated and tested. As one understands, a variable like knowledge includes awareness, recall, and recognition about environment friendly products, brands, activities, social norms and behaviour. Belief refers to trust, faith and confidence in something without proof. Willingness to act in an environmentally favourable manner will include respondent's attitude, ability to act and action taken till date in an ecologically responsible manner. The first hypothesis tested whether knowledge mediates the effect of belief on willingness to act. Hypothesis 1 has been proved, implying that knowledge mediates the relationship between an independent predictor like belief and dependent variable like willingness to act. It explains how or why there is a relation between belief and willingness to act. Knowledge is a potential mechanism by which an independent variable, belief, can influence willingness to act. Degree and type of knowledge may guide the strength of the relationship between belief and willingness to act. For instance, one may find a strong association between belief about stubble burning and the willingness to get rid of stubble in a pro-environment way. This association is explained by knowledge about eco-friendly ways of getting rid of stubble and awareness of negative impacts of stubble burning on the environment, which would be the mediating variable. Hypothesis 2 has not been proved, which implies that gender and education do not moderate the effect of beliefs and knowledge/ awareness on willingness to act. We understand that a moderator is a variable that affects strength of the relation between the predictor i.e., belief, and dependent variable, willingness to act. This implies gender and education play no role in influencing the degree to which belief influences willingness to act.

6.1 Theoretical Contributions and implications for practice

This paper attempted to establish a connect between belief and willingness to act, on the basis of theory of reasoned action under the context of pro-

environment behaviour. Buyer's black box model and Howard Sheth model talk about influence of belief on behaviour of individuals. This paper can be taken up by academicians to discuss the influence of belief and impact of knowledge on consumer behaviour. Industrial practitioners, environment activists, governments may use the inferences drawn to frame communications around enhancing knowledge component to influence pro-environment action. Based on findings of the study, following are the implications for various stakeholders of the society in influencing and enhancing willingness to act towards pro-environmental behaviour.

One significant inference here is that environment problems can be solved by citizens who exhibit environmentally responsible behaviour. Citizens include all the stakeholders of a nation or the world. One of the major concern areas that need attention is the pattern of consumers' consumption behaviour which impacts production and service offerings of commercial enterprises. Consumption-led growth has a major deteriorating impact on the environment. Nevertheless, there are citizen corporations who look at things differently and show their belief and willingness to act positively and responsibly. The Japanese giant Panasonic has committed itself to energy saving production and has also adopted recycling oriented manufacturing. Stocking most of products from organic suppliers and making it available at affordable prices is what Walmart, the US retail giant, is doing. It has also improved the ingredient disclosure policy which enabled them to replace 10 hazardous chemical with safer options. Apple, on its part, has turned all its operations to renewable energy out of solar plants based in California. The Indian FMCG company, ITC, has 41% of their energy consumption from wind and solar energy. It is also committed, through harvesting rainwater, treating and recycling grey water, and attaining zero waste generation status, by reducing, reusing and recycling the solid waste generated. Understanding these initiatives, commercial enterprises should indulge in environmentally responsible business practices. Fleet of new managers and leaders sensitized with CSR and environmental concerns have to be the flag bearers. Enterprises need to conduct training for their managers so as to make them aware so that they would take responsible business decisions with respect to environment. Through their communications, they should influence the minds of consumers, create awareness messages that will change people's belief and knowledge, leading to change in intention and behaviour.

Spending CSR budget on environmental improvements and sensitization is another important initiative to be taken. Awareness on eco-friendly enterprises can contribute immensely to alter the present climate change situation by

providing eco-friendly solutions to the people. Such examples can be found in an enterprise which provides plant based food for high protein which tastes like meat, reducing consumption of animal based food which is a major factor contributing to climate change. Wipro Eco-Energy project by one of the leading firms in India, Wipro, has a green business which provides "intelligent and sustainable solutions for enterprise-wide energy operations and efficiency management." They partner with companies to help them reduce their carbon footprints and energy wastage, and has been instrumental in driving awareness towards reducing carbon footprints. Lush Cosmetics is an all-natural bath and body brand that makes everything from shampoos and fragrances to massage bars out of eco-friendly products and practices. They introduce new innovative products like solid shampoo bars to reduce packaging waste, and offering free products to customers who bring in empty product packaging to recycle. Such initiatives have bigger impact and create realization amongst the citizens, influencing their behaviour positively towards eco friendliness.

Much of the success of such experimentation depends on positive behaviour of citizens having real concern, which can be generated through awareness. NGOs on the ground can be the biggest change agents to promote use of eco-products amongst the public along the length and breadth of society. Encouraging youth and new generation entrepreneurs to start their own businesses based on eco-themes not only can be a successful model but will encourage early adaptability as well. Local area self-help groups have been effective channels of distribution and information dissemination. They would prove successful in creating awareness, resulting in behavioural change of people.

Researchers, as one of the key stakeholders, are quite powerful and can influence the belief and knowledge of persons who influence the minds of millions. Businesses and other organizations are conscious about new research in their areas. Environment Protection Agency, (EPA) targets stakeholders who can learn from their research outputs through publications, workshop, conferences, to spread awareness. EPA has published 200 researches since 2000 and also encourages people to take up research in this area.

The core of activity of the Institute of Environment Protection, a National research institute, is to conduct research and development work for national economy in the field of environmental protection, sustainable development, climate change, and R &D for rational use of the environment and its resources, including optimization of the spatial structure of protected areas. This way, research fraternity of the respective areas can choose to take more research projects that can assist in improving the climate situation; they can innovate

fresh ideas and ways to make actions in their areas more environmentally conscious and suitable. For example, R&D in the construction industry can research on making environmental friendly material for buildings that do not harm the air or land. A premier agency in India, Environment Protection Training and Research Institute [EPTRI], provides training, consultancy, applied research services, and extends advocacy in the area of environment protection to industries, regulatory bodies, government organizations and NGOs, and works towards bringing about change for a more balanced development. They can approach various stakes such as business, government, NGOs, to work on application of their research findings on the ground and in communities. Successful research work should be promoted through websites, conferences, lectures and many more ways.

Academicians like Govind Singh and Bunker Roy are connected to the very root of awareness creation and they nourish positive future workforce of the world. They have the ability to nourish students with practical environmental awareness which will encourage young minds to take up initiatives to bring in change. Students with high levels of environmental awareness demonstrate positive effect on pro-environmental attitude (Arı, & Yılmaz, 2017). Rajendra Pandurang Kerkar is a teacher from Goa who has successfully encouraged and involved school students in active participation in rallies on noise pollution under the aegis of the Tamil Nadu Pollution Control Board, a Government agency in India.

At the most basic level, dedicated programs on environmental behaviour in organizations should be held to bring in awareness among students of all streams. Workshops on environment protection to encourage students to take up initiatives and brian storming sessions on design of solutions are recommended. Academicians could also take up macro marketing of terms such as Willingness to act for Environment through targeted campaigns which can create waves of awareness in students as well as the general public.

Effective pro-environmental behaviour requires commitment (Awareness, Attitude, Motivation, and Willingness to act) from people of the land (Bohensky, 2016). It is the Individual who should be aware of his/her part to conserve the environment by taking small initiatives within their capacity. One can contribute by taking simple pledges to reduce carbon footprint such as not using single use plastics, using cycles rather than cars, using trains instead of flights, where possible. Planting trees in local areas for greener locality are simple steps with long range impact.

7. Conclusion, Limitations and Scope for Future Research

This study focused on the relationship between belief, knowledge, demographic variables and willingness to act pro-environmentally. For influencing behaviour of masses, efforts should be made to enhance knowledge and awareness. As the study reveals, gender and education do not act as enhancers between belief and willingness to act. Thus, institutions should attempt to enhance knowledge of all the people in their domains.

The present study is geographically limited because data was collected from a sample of respondents located in Delhi-NCR only. Any research that uses data for inferential statistics assumes the data to be collected randomly from the total population.

Further research may focus on including other parameters which influence pro-environment behaviour such as social norms, influence of government and private enterprises. Researchers may also like to study location specific issues such as air pollution, water pollution, soil pollution, climate change, and willingness, knowledge and belief amongst the population to act in an environment friendly manner. Further focus could be on studying pro-environment initiatives that have been successful, and others which have not been, and factors/ reasons thereof. Researchers may also try to look at the theory of cognitive dissonance and study whether behaviour also influences attitude towards pro-environment behaviour.

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