Consumers' Perception of Responsibility for Climate Change

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The call for move to a lower-carbon economy is pressing strategic challenge widely accredited by policymakers. Poignant to a lowercarbon economy requires measures, including hi-tech innovation, stringent regulation, investments, financial incentives, organisational change, and education. Climate change is also linked to the consumption of private households their choices and behaviours for products. Like all environmental markets, the global 'carbon market' is a creation of regulations. In this paper we have tried to find out consumers perception of responsibility for factors responsible for climate change, and the relation between their behaviour towards their uses of products responsible for climate change and weather their some demographic profile influence their behaviour towards these factors.

Key Words: Climate change, Consumers, Environmental behaviour

INTRODUCTION

Scientific consensus is that economic growth has placed an indefensible burden on the environment. Over-consumption, use and the creation of pollution and waste are degrading the ecosystem services', and disturbing survival and well-being (WRI, 2005). The most pressing environmental challenge is to preventing and responds to disruptive climate change; which significantly impacts the global economy. Review by the Nicholas Stern (2006) states that unless 1% of GDP is invested in responding to the climate challenge its consequence could shrink economy by 20% by year 2035. The call for move to a lower-carbon economy is pressing strategic challenge widely accredited by policymakers. Poignant to a lower-carbon economy requires measures, including stringent regulation, hi-tech innovation, investments, financial incentives, education, and organisational change. Climate change is also linked to the consumption of households and their choices and behaviours of products they consume. It has therefore become a focus for academic research, much of which was comprehensively synthesised by Tim Jackson (2005) in his research, Motivating Sustainable Consumption. Jackson's synthesis, as such consumer behaviour is multidimensional experience. Influence by their demographics,

values, knowledge, emotions, attitudes, and circumstances.

Scientifically climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity. However, from the regulatory perspective, as defined by United Nations Framework Convention on Climate Change (UNFCCC) climate change refers to "A change of climate which is attributed directly or indirectly to human activity that alters the composition of global atmosphere and which is in addition to natural climatic variability observed over comparable periods".

Climate change is an extreme case of externality its origin is in global human activities for production as well as for consumption and its implications is global and long term. Responding to climate change is therefore a global venture governs by international legal, regulatory and institutional frame work and includes business response through fast emerging carbon market globally. Like all environmental markets, the global 'carbon market' is a creation of regulations. The dynamics of global carbon market results from institutions, and specific measures agreed periodically by the nations which are party to the UNFCCC.

There are many dimensions to the climate changecorporate accounting of greenhouse gas emissions (Carbon foot prints), business strategies to include climate change challenges and opportunities in corporate business plan, mitigating greenhouse gas emissions by business. Various other factors influences consumer behaviour like attitude, perceived self efficacy, and situations. (Bagozzi, et.al. 2002) also researched inconventional, as well as sustainable, consumption contexts. Grob's (1995).

REVIEW LITERATURE

Sustainability-orientated consumer research encompasses a variety of concepts of more sustainable consumption using a range of labels for consumers and their behaviour (including green, greener, sustainable, pro-environmental, ethical, environmentally conscious, ecological Jackson, 2005). Consumers inrelation to sustainability concerns toenable markets to be meaningfully segmented (Straughan & Roberts, 1999); types of consumer to understand how theyare motivated to consume more sustainably (Jackson, 2005); testing theacceptability of price premiums for more sustainable products (Laroche, Bergeron,& Barbaro-Forleo, 2001); and exploring why there is frequently a significant gapbetween consumers' reported willingness to consume more sustainably and actual behaviour (Vermeir& Verbeke, 2006).One contentious issue affecting early attempts at profiling consumers and segmenting markets for sustainability were that they were often largely based on sociodemographicvariables (Straughan & Roberts, 1999). However, as Schlegelmilch, Bohlen, andDiamantopoulos (1996) the value of using sociodemographicvariables became increasingly contentious, particularly given the tendency for different studies to produce inconclusive and contradictory results for particular demographicvariables (Kilbourne & Beckman, 1998; Robinson & Smith, 2002). Diamantopouloset.al. 2003provides a critical review of the literaturelinking sociodemographics to environmentally orientated consumer attitudes and behaviours and concluded that sociodemographics alone are of limited value forprofiling, but are more potentially useful when used in combination with otherinfluences such as values, attitudes, or knowledge. This study builds on this insight bytesting the value of sociodemographic variables when used with other sociopsychologicalvariables. Research profiling consumers and segmenting them in terms of sustainableconsumer behaviour also has another acknowledged weakness, which is a tendencyto focus on individual behaviours (such as recycling or purchasing of a particular typeof product) and on specific impacts such as energy usage (Spangenberg & Lorek, 2002). This is problematic because the research literature

indicates that while sometypes of sustainable behaviour are influenced by factors such as values, others are not. Even amongst those behaviours influenced by values, particular values influencedifferent behaviours in different ways (Barr, 2007; Corraliza & Berenguer, 2000; Pepper, Jackson, & Uzzell, 2009). Another problem with the overemphasis on individual behaviours and impacts is that it is the cumulative impact of all a consumer's behaviour that is significant. This isdemonstrated by the 'rebound effect' associated with behaviours such as energy saving.Reducing domestic-energy use apparently lessens a consumer's environmental impact, but if the resulting financial savings are spent on energy intensive goods and services, this may not be the case (Herring, 1999). This paper seeks to gain insight into overallconsumer lifestyles and their perception by considering a range of behaviours and by evaluating their effect in relation to climate change.

EVOLVING NOTIONS OF CONSUMER RESPONSIBILITY

CSR has received significant attentionacademically (Peng, 2009, Jenkins, 2009), an equivalent concept of 'consumer social responsibility', have received relatively littleattention (Brinkmann & Peattie, 2008). The marketing literature consider the social responsibility of consumers, it has restricted to the behaviour of the consumerrather than the company, and of consumer deceit rather positivebehaviours (Brinkmann & Peattie, 2008). However, there is an emerging normativeconcept of the 'citizen consumer', which Gabriel and Lang (1995) define as 'aresponsible consumer, a socially-aware consumer, a consumer who thinks ahead andtempers his desires by social awareness, a consumer whose actions must bemorally defensible and who must occasionally be prepared to sacrifice.', such a concept of consumer responsibility is still immature in marketing, butother disciplines of social-science such as health, personal responsibility tend to be more prevalent (Attell-Thompson, 2005;Bricas, 2008).Williams (2005)discusses roles consumers play, suggesting an increasing role for consumersocial responsibility to complement CSR. Williams suggests, since 66% of consumers believe they can influence acompany's environmental and ethical behaviour, they might therefore be prepared toaccept some responsibility for how companies behave. He urges the development of aproactive notion of consumer social responsibility that encourages more socially and environmentally

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favourable behaviour by companies. This could include information relating to companies' practices and policies (Peters, 2005) and to the consequences of consumers' choices.Consumer response also depends on their ability to understand theinformation, Shaw and Clarke (1999) note, individuals are often confused aboutenvironmental issues and are inconsistent in making connections between an issue likeclimate change and aspects of their own lifestyles and consumption (Anable, Lane, &Kelay, 2006). Ability to act on relevant information will also depend on the consumer'ssense of perceived behavioural control (Armitage & Conner, 2001; Giles & Cairns, 1995) and their wider sense of self-efficacy (Terry & O'Leary, 1995).Rodrigues et al. (2008) and Lenzen et al.(2007) use ecological economics to frame responsibility in terms of ascribing who isaccountable for (a) environmental pressure and (b) the environmental impacts ofproducers or consumers respectively. Munksgaard and Pedersen (2001)sought to ascribe responsibility for CO2 emissions from a policy perspective. From amarketing perspective, what ismore significant is the consumer's sense of responsibility, and how they perceive and ascribe responsibilities for the environmental consequences of products, production impacts, purchase behaviour, and consumption and disposalbehaviours. For companies and policymakers seeking to develop more sustainablesystems of consumption and production, the role that consumers' sense ofresponsibility plays in their willingness to engage in pro-environmental behaviour(PEB) is potentially vital and needs to be researched and understood.Kaiser and Schimoda (1999) in discussing the psychology of PEBsstress the need to develop personal responsibility, stating that 'If a person is aware of he consequences of certain behaviour, the ascription of personal responsibility becomes crucial'. Despite the growing emphasis on consumer responsibility, it remains under researched (Carrigan & Attalla, 2001), and is mostly discussed normatively and theoretically (Caruana & Crane, 2008). Relatively little empirical work has builton these ideas, and that which does exist explores the idea with a relatively narrow focus (Wray-Lake et.al. 2010). There is an irony that 'environmentally responsible' is one of the more commonly used labels for more sustainable consumer behaviour, when consumer environmental responsibility remains a comparatively under-researched and poorly understood concept.

UNDERSTANDING CONSUMER SOCIO-ENVIRONMENTAL RESPONSIBILITY

Webster's (1975) early extensive exploration of the 'socially conscious consumer' used as the dependent variable a measure of social responsibility, based on ascale developed by Berkowitz and Lutterman (1968) and refined by Anderson and Cunningham (1972). A weakness in the literature is a tendency to consider 'social responsibility' as abroad construct, and to assume that concepts like social responsibility, environmentalresponsibility, and altruism are interrelated and can be used interchangeably. Tucker, Dolich, and Wilson (1981) sought to break down the differences between general social responsibility and specific individual responsibility. They suggested that individual environmental responsibility was a subset of social responsibility, and the term individual social responsibility can be used interchangeably with altruism or prosocial behaviour. Anderson and Cunningham's (1972) Social Responsibility Scale, the working assumption within marketing scholarship has been that the socially and environmentally concerned consumer will be much the same thing. Another weakness is the tendency for research to focus on consumer perceptions of their personal responsibility in relation to an issue without attempting to understand the perceived allocation of responsibility to others, if consumers feel that others, such as governments or businesses, are more responsible than they are forcausing climate change, how would this affect their own behaviour and attitudes? Zacca (2006) observed that the attitude-behaviour gap often noted amongst consumers with strong pro-environmental attitudes was linked to uncertainty about consumer effectiveness combined with an expectation that government should tackle sustainability issues through regulation.

Objective of the Study

The present study will try to explore, examine the following objective:

- To analyze the consumers' environmentally related behaviours
- To analyze Demographic variables and their role in consumers' responsibility orientations

Research Hypothesis

• For analyzing the awareness of environmentally related behaviours among Indian Customers, we attempts to identify the association between consumers' awareness for environmentally related behaviours, their preference for the purchase with their demographics characteristics.

RESEARCH METHODOLOGY

Data for the present study was collected from the respondents from different respondents at Mall at Bareilly, U.P. India, through a structured undisguised questionnaire, using mainly the questions based on the 5 - point Likert scale (e.g. 1. Strongly Disagree, 2. Disagree, 3. Do not know, 4. Agree, 5. Strongly Agree).

Our population area is the Mall at Bareilly city, since they attract customers from different places and constitute of all age groups, educational background and different income classes for their purchases. The sample size for the present study is 248 respondents; the questionnaires were administered personally to the respondents.

RELIABILITY AND VALIDITY

The questionnaire was reviewed by experts in the field and suggestions given by them were incorporated. The result of pilot testing among 50 respondents was studied and necessary amendments were done in order to make questionnaire more valid. The present study had adopted internal consistency analyses, to conduct reliability testing Cronbachacame out to be .692, and the value is high enough to proceed with the questionnaire.

DATA ANALYSIS AND METHODS

Information gathered from different sources after filtration generates relevant data, which is edited and coded subsequently. The data was analyzed and interpreted with the help of SPSS. Hypothesis framed for the research work have been tested with the help of t-test and Chi-square test.

As far as respondents are concern Service class were 87(35.2%), Self Employed were 69(27.9%), Business Class were 91(36.8%), 11(4.5%) were in age group of 25 yrs to 35 Yrs, 131(53\%) were 36 yrs to 45 Yrs, 62 (24.7\%), 44 (17.8\%) were 56 Yrs and above, 160 (64.8\%) were male and 87 (35.2\%) were female respondents.

H01: Demographic variables do not has any role in consumers' environmentally related behaviours and climate change

For gender of respondents as far as t value is concern value of p is greater than .05, (Table 1) and so we may conclude that there is no significance difference between the means of the two values. For Age group and Profession Anova (Table 2.a and Table 2.b) was performed and we could not found any significant difference among means of different age groups and different professions. Hence we may conclude age, gender and profession has no role to play in consumers' environmentally related behaviours and climate change.

H02: There is no correlation among awareness and act on consumers' responsibility orientations on climate change

The value of correlation among Belief in Climate change and act on climate is.797 and it highly correlated and we may conclude that respondents who are aware about climate change and they feel that they shall act in their behaviour for their purchase as far as climate change matters are concern.

CONCLUSION

Research demonstrates a relationship between a consumers' environmental responsibility and their environmentally related consumption behaviours. Respondents those who are aware about climate change and they feel that they shall act in their behaviour for their purchase as far as climate change matters are concern. Consumer environmental attitudes and knowledge are two of the most common factors for concern. Consumers' socio demographic variables can still be useful in understanding and predicting pro environmental behaviours, as far as our study is concern age, gender and profession is concerns, we could not find role to play in their environmentally related behaviours and climate change. But certainly consumers can help reduce the impact of climate change if they can change what they buy on a regular basis as they are aware about the consequences to the damage to the environment.

Table 1 Independent Samples Test

		t-te	t-test for Equality of Means	
		df	Sig. (2-tailed)	Mean Difference
Act on climate change	Equal variances assumed	245	.113	401
Act on climate change	Equal variances not assumed	184.164	.109	401

Table 2. a Multiple Comparisons

Dependent Variable: Act on climate change

LSD

(I) Professioin	(J) Professioin	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval
					Lower Bound
1	2	278	.307	.366	88
	3	.042	.285	.883	52
2	1	.278	.307	.366	30
	3	.320	.304	.293	28
3	1	042	.285	.883	60
	2	320	.304	.293	92

Table 2.b Multiple Comparisons

Dependent Variable: Act on climate change

LSD

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	2	.348	.597	.560	83	1.52
	3	.626	.623	.316	60	1.85
	4	.045	.641	.944	-1.22	1.3
2	1	348	.597	.560	-1.52	.8
	3	.278	.295	.347	30	.86
	4	303	.331	.361	96	.3
3	1	626	.623	.316	-1.85	.60
	2	278	.295	.347	86	.30
	4	580	.376	.124	-1.32	.1
4	1	045	.641	.944	-1.31	1.2
	2	.303	.331	.361	35	.9
	3	.580	.376	.124	16	1.3

Table 3 Correlations

		Belief In Climate change	Act on climate change
Belief In Climate change	Pearson Correlation	1	.797**
	Sig. (2-tailed)		.000
	Ν	247	247
Act on climate change	Pearson Correlation	.797**	1
	Sig. (2-tailed)	.000	
	Ν	247	247

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