Psycho-Behavioral Concordance of Ecological Consumer in India: An Empirical Analysis

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DOI:10.26573/2008.2.2.3
Volume 2, *Number* 2
May 2008, *pp*. 115-128

This paper analyses psycho-behavioral concordances based on demographic factors of ecological consumers within and between urban consumption cultures of India. The basic tenet of analysis was that the percentage basis of analysis of data that collected through Likert scale usually does not support in classifying groups for similarity or dissimilarity of opinion or behavior. Hence, a separate test is necessary to understand the psychographics, and behavioral similarity of ecological consumer for further research and exploration. The result of analysis confirms that income level is a major influencing factor for concordance of opinion, behaviour and psychology of eco-consumer within and between eco-cultural boundaries of India

Keywords: Concordance, Ecological Consumer, Psychograph, Attitude, Behavior

1. Introduction

There has been growing attention to issues of environmentally conscious consumption behavior. This growing attention interprets consumer behavior as a combination of consumers' awareness for ecological impacts of a product or service, and consumers desire to reduce those impacts. This combination of behavior is known as environmentally conscious consumer behavior (ECCB). Over the past two decades, consumer psychology and market research have demonstrated substantial growth in ECCB across a range of markets. Many case studies demonstrate how the product developers and marketers have capitalized on this positive attitude and effectively differentiated their product in terms of their 'environmental friendly' character (Lozanda and Wimsatt, 1995). Environmental marketing draws conclusion(s) on consumer behavior in response to demographic factors. Addition to demographic factors, psychographic factors such as consumers' altruistic tendencies and beliefs regarding consumption would directly lead to positive environmental outcomes (Roberts, 1996). Demand for green product usually stimulated by using advertising to validate ECCB. The drivers of ECCB reinforces the connection between consumers' behavior and tangible social, economic, or ecological benefits by providing a supportive decision environment. This decision environment reduces or mitigates perceived negative mediating factors. In the marketing and consumer related behavior another term gaining more attention, i.e. 'Ecological Consumer (EC)**'**. Ecological consumer is a term used to denote the person or a group of persons

who exhibit(s) the environmentally conscious behavior at the time of consumption of goods and services. Ecologically conscious consumers can therefore be regarded as a group of ordinary folk who shows concern for the environment, believe that their actions can make a difference, and are facilitated by the market context to translate their concern into pro-environmental consumer behavior.

Sustainable consumption (Gupta et al., 1993-1996) is a natural outcome of decades of work on cleaner production and eco-efficient industrial systems globally. Consciousness of Indian consumers towards environmental concern has been consistently increasing, particularly, since Bhopal tragedy (Gupta, et al. 1993-1996). Subsequently, the Indian consumer became aware of the need to make more ecologically conscious and responsible purchase and looked to institutions to behave in a responsive way. Consumers 'belong' to more than one group (based on kinship, class, age, religion etc) with different set of expressed needs (The UNEP Global Consumer Class survey highlights aspects of multiple nature of group 'belonging'). Social and cultural influences on motivations and attitudes enforce the consumers to behave multiple ways. This is relevant for India too. The multiplicity of consuming groups influence multiple ways on consumers' psychograph as well as producers. In India, due to recent economic renaissance income level of consumer is swelling very high (Hemam, Reddy, and Gadgil). Therefore, new opportunities and challenges would emerge in the market, for which, policy makers, producers, and green marketers should know the emotions and attitudes, behaviors of emerging ecological consumers to address their needs. Research action focused on *consumption* may help in putting the mind for creation of new systems of *production and consumption*. This may be truly sustainable both environmentally and economically because, this system would have a high possibility for enhancing quality and equality of cultural, social, and physical existence for the people.

A survey, which investigated the consumers' attitudes towards eco-products, is a case study on 'eco-friendly packaging (EFP) and consumer buying behavior that conducted in Mumbai, India (Sharma and Babel 2002). The objective of the study was to assess the impact of EFP on consumer buying behavior in India. The data collected from randomly selected respondents from the city-Mumbai. It analysed views of respondents belonging to different age groups, gender, income and educational groups. Recently, Fraj and Martinez (2007) studied on Behaviour of Ecological Consumer in Spain, which reframed original model of Melony (1973). Fraj deployed the structural equation modeling technique to fit the model to Spanish environment. Higginbotham (1989) specifically focused on environmentalism and consumer attitudes in the US environment. The study of Higginbotham concentrated on safety, environmental protection, pesticide and pest control, weed control, fertilizers, trickle irrigation, and organic farming. Present study is not similar to above three studies.

2. Objectives of the Study

The present paper aims to describe the psychographic profile of Indian ecological consumers and to examine the psycho-behavioral concordance of ecological consumer within and between the referred consumer groups. As there are no similar research evidences found in the context of India, hence, present study may provide a foundation for new analysis in future under ambit of ecological consumer,

consumption behavior, and eco-conscious production and marketing. Thus, the purposes of the present study are to highlight on psychographic variables, and to empirical deduce the concordance level of consumers' attitude toward environment within a few selected cities of India.

3. Hypotheses

1. The level of attitudinal (affect commitment and environmental attitude) and behavioral concordance are very high within and among the groups of ecological consumer (based on occupation, income level, and city dwellers).
2. The level of attitudinal and behavioral concordance among the referred groups of ecological consumer is equal.

4. Methodology

The Survey and Measure: The original scale constructed by Maloney et al. (1975) contained four dimensions. Of the four dimensions, three dimensions, namely- Affect commitment *(ac)*, Environmental Attitude *(ea)*, and Ecological Behavior *(eb)* chosen in the study made by Fraj and Martinez, 2007. The same dimensions selected for the present study. Each dimension contained 10 items originally, assessed with Likert points. In the present study, 7 points Likert scale converted to 5-point scale that ranged from point Strongly Disagree (1) and Strongly Agree (5). The reasons for conversion were to avoid breadth of responses, and to facilitate the respondents. Three items from sub construct of *ac* and *ea*, i.e. one from each as per the suggestion of respondents, and for the result of principal components analysis, an item from the sub construct *eb* had been removed.

Pre-test, Scale Validation and Test of Reliability: A pre-test questionnaire covering the items of Maloney et al. (1975) revised scale was adopted and administered to 40 consumers initially to examine the response possibilities to the queries on ecological consumer. At the time of administration, many respondents out of 40 suggested eliminate items related to actual commitment behavior. They were 'I keep track of my congressmen's voting records on environment issues' need to be eliminated from the questionnaire, hence, eliminated accordingly from the scale. Suggestions came for modification of sentences to fit the Indian environment, and that was done before completing the pre-test survey. Revised questionnaire consisted of three sections. First section was about purchase behavior of consumers for ecological products and commodities. Second section incorporated attitudinal and behavioral dimensions, they are- Affect Commitment (*ac)*, Environmental Attitude (*ea*), and Ecological Behaviour (*eb*). Third section consists of a few demographic factors.

The questionnaire administered to another 70 numbers of consumer of Guwahati City to complete the pre-testing phase. Finally, (40+70=) 110 questionnaires were processed for validation check for a proposed sample of 700 respondents.

The scale originally developed in the cultural environment in USA is completely different from the cultural environment of Indian cities. Hence, the scale adopted for measurement need to be tested as well as to validate to match up Indian environment. To validate components i.e. *ac*, *ea*, *eb* of scale and their internal items reliability operation under the SPSS deployed to calculate the reliability coefficient

(Cronbach's alpha), inter, and intra item correlation coefficient (in Table 1). Inter-Item Correlation (*IIC*), Single Measure Intra-Class Correlation (*SMICC*), and Average Measure Intra-Class Correlation (*AMICC*) calculated to substantiate the Chronbach Alpha. Scales ware validated by using data from 110 questionnaires collected from Guwahati City.

Table 1: *Scale Validation Analysis*

Dimension (items)	Inter- Item Correlation *(IIC)*		Single Measure Intra Class Correlation (*SMICC)*	Average Measure Intra Class Correlate - tion *(AMICC)*	Signif- icance	Reliability Coefficient	
	Min	Max				Alpha (ά)	Std item Alpha (α)
Affect Commitment ***(ac)*** (7-itemed)	-0.2658	0.8758	0.2116	0.6526	0.000	0.6526	0.6568
Environmental Attitude **(*ea*)** (7 itemed)	-0.2658	0.8256	0.2668	0.7181	0.000	0.7181	0.7230
Ecological Behavior **(*eb*)** (8- itemed)	-0.2419	1.000	0.2496	0.7496	0.000	0.7496	0.7349

Data Collection: To collect data contacted five professional surveyors originally from Assam but are working in selected cities mentioned in Table 2. Author requested them to collect 125 questionnaires from each city. To check authenticity of data collection telephone and mobile number of respondents were also collected, which used for re-tracing and rechecking of authenticity. Finally, returned 600 numbers of responded questionnaires and processed for final analysis (Table 2).

Analysis tools: The study used statistical tools such as cross tabs, Kendall's W for concordance analysis.

5. Psycho- Behavioral Profile of Consumer

Overall Profile: A brief scheme of agreement and disagreement was constructed from the data collected from the total sample (N=600). Table 3 revealing a very large portion (%) of consumer was concerned about environmental problems that affects on their ecological cognitive life.

This indicates possession of affect commitment by respondents and any contra influential act toward environment is affecting the mood of consumer. A majority of respondents showed willingness to stop buying products of a company who create environmental inconvenience. In addition, respondents were showing their willingness to pay pollution taxes, willingness to invest time for the ecological causes. Contrast to a considerable percent of consumer that showed negative attitude and unwillingness majority of respondents revealed as environmental friendly attitude.

Table 2: *Profile of Respondents*

Demographics	Frequency (n= 600)	Percentage
Citizen of (City)		
Bangalore	92	15.3
Delhi	121	20.2
Guwahati (NE)	111	18.5
Kolkata	96	16.0
Lucknow	72	12.0
Mumbai	108	18.0
Occupation		
Self Employed/entrepreneur	88	14.7
Executive	82	13.7
Housewife	104	17.5
Managers	99	16.5
Retired	93	15.5
Students	38	6.3
Teachers	96	16.0
Level of Income		
Rs 8,000-10,000	195	32.5
Rs. 11,000- 15,000	267	34.5
Rs. 16,000-20,000	123	20.5
Rs. 21,000- above	15	2.5

As regards actual commitment or explicit ecological behavior of consumer a majority of them reported environmentally friendly purchase behaviour. There is little difference in responding meeting of an organization especially concerned with bettering the environment. Majority of consumer are showing indifference in product switching behaviour for ecological reason. Regarding ecology related reading and subscription of publication a very less (20%) percent of consumers showing positive reading behaviour.

Psychograph of Ecological Consumer (Citywise): By splitting collected data city wise, the scores of psychographic dimensions were mutually compared. Table 4 showing majority of respondents bear a moderate level affect commitment (*ac*) attitude. Delhi city showing highest percent (i.e. 37.2%) of respondents bearing high level of *ac* followed by Guwahati (i.e. 36.0%), followed by Bangalore City (i.e. 31.5%). Again, Bangalore followed by Kolkata (i.e. 30.04). Among the respondents of Guwahati, majority (69.4%) of respondents showed high-level of positive environmental attitude or verbal commitment to environmental action. Similarly, consumers of Bangalore city revealed a high level (63.0) of environmental attitude, occupied second position among the referred cities. Delhi occupied third position in term of representative citizen holding a high level of positive environmental attitude (58.7) or verbal commitment to do things positively. Mumbai emerged as first among the referred cities having a highest but moderate environmentally committed consumer, i.e. 71% representative customers.

Table 3: *Dimensions that measures Attitudes & Behavior*

Dimensions and Items	N=600		
	Dis-agree (%)	In-different (%)	Agree (%)
Affect Commitment (ac)			
It frightens me to think that much of the food that I eat is contaminated with pesticides.	8.0	20.2	**71.8**
It generally infuriates me to think that the government does not do more to help in control of pollution of environment.	5.2	44.8	**50.0**
I become incensed when I think about the harm being done to plant and animal life by pollution.	11.8	30.7	**57.5**
I get depressed in on smoggy days.	11.0	50.8	**38.2**
When I think of the ways industries are polluting, I get frustrated and angry.	17.2	28.5	**54.3**
The whole pollution issue has never upset me too much since I feel it is somewhat over rated [R].	*10.5*	*15.2*	**74.3**
I rarely ever worry about the effects of smog on myself and family.	*15.2*	*24.8*	**60.0**
Environmental Attitude (ea)			
I would be willing to ride bicycle or to take the bus to work in order to reduce air pollution.	2.5	22.0	**75.5**
I would be willing to use a rapid transit system to help to reduce air pollution.	15.5	28.0	**56.5**
I would donate a day's pay to a foundation (NGO) to help to improve the environment of my city.	**44.7**	17.8	37.5
I would be willing to stop buying products from companies guilty of polluting the environment, even though it might be inconvenient.	22.0	27.3	**50.7**
I would be willing to write to local newspaper concerning ecological problems.	**48.8**	18.0	33.2
I would not go house to house to distribute literature on the environment (if requires). [R]	**48.0**	17.7	34.3
I would not be willing to pay a pollution tax even if it would be considerably decrease the smog problem	**57.3**	9.5	**33.2**
Ecological Behaviour (*eb*)			
I guess I've never actually bought a product because it had lower polluting effecter	22.0	27.3	**50.7**
I have contacted a community agency to find out what I can do about pollution at my Individual level.	24.7	16.7	**58.7**
I make special effort to buy products in recyclable containers.	11.8	22.7	**65.5**
I have attended a meeting of an organization specifically concerned with bettering the environment.	33.7	33.0	**33.3**
I switched products for ecological reasons.	15.0	**57.5**	27.5
I have never joined a clean up driver.	14.5	27.5	**58.0**
I have never attended a meeting related to ecology.	17.2	34.5	**48.3**
I subscribe to ecological publications.	**34.3**	**45.7**	20.0

R= Items are reverse and score is interpreted in reverse way.

The highest percent (i.e. 38%) of representative consumers of Bangalore city showed explicit ecological behaviour, followed by respondents of Delhi (34.7%). Lucknow city occupies third position in terms of high level of ecological behaviour by its representative consumers. Majority of representative consumers show moderate level of ecological behavior by their response as shown in Table 4.

Table 4: *Psychographic Profile of Respondents (in percentage)*

Dimensions	Bangalore			Delhi			Guwahati			Kolkata			Lucknow			Mumbai		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Affect Commitment(*ac*)	16.3	52.1	31.5	12.4	50.04	37.2	13.5	50.5	36.0	18.8	51.8	30.4	12.5	63.9	23.6	17.6	52.8	29.6
Environmental Attitude(*ea*)	8.7	28.3	63.0	5.8	35.5	58.7	1.8	28.8	69.4	31.2	59.4	9.4	40.3	58.3	1.4	5.5	71.3	26.8
Ecological Behaviour (*eb*)	20.7	41.3	38.0	21.5	43.8	34.7	27.0	46.0	27.0	16.7	54.1	29.8	23.6	45.8	31.6	19.4	60.2	21.4

% of Respondents, L= Low, M= Moderate, H= High

6. Analysis of Concordance

Concordance among Eco-consumer (City wise): The dictionary meaning of concordance is the state of being similar to something else (any point or attitude or behavior). An analytical techniques in statistics- concordance, testifies opinion similarity or agreement of large diverse samples toward something else, is measured through Kendall's W- Coefficient of Concordance. The psychographic profiles of ecological consumers prepared by computing the percentage of respondents responded as agree and disagree; percentage of people showing higher or lower level of attitude and behaviors. Studies adopting percentage and similar other quantitative expression are uncountable in behavioral researches that do not reveal the state of being similar to any point (or attitude or behaviour or something else). Hence, to examine objectively the state of being similar or agreement within a large sample to a specific point (here, attitude, and behavior) concordance analysis is used to compute the state of being similar, or degree of concordant.

In Table5 Kcc is the Kendall's Coefficient of Concordance is a normalization of Friedman test and Chi Square (χ^2), an identical normalized value of Friedman Test. Kendall's W (Kcc). It is fit to interpret as the coefficient of concordance and symbolized here as Kcc, is a measure of agreement among raters.

Table 5

Dimensions	Bangalore (N=92)			Delhi (N=121)			Guwahati (N=111)			Kolkata (N= 96)			Lucknow (N=72)			Mumbai (N=108)		
	Kcc	***χ^2***	***Sig.***	***Kcc***	***χ^2***	***Sig.***	***Kcc***	***χ^2***	***Sig.***	***Kcc***	***χ^2***	***Sig.***	***Kcc***	***χ^2***	***Sig.***	***Kcc***	***χ^2***	***Sig.***
Affect Commitment (Df =6)	**.038**	21.08	.002	**.072**	52.00	.000	**.109**	72.54	.000	**.38**	21.99	.001	**.029**	12.68	.048	**.041**	26.34	.000
Environmental Attitude(VC)	**.161**	89.10	.000	**.132**	96.06	.000	**.181**	120.82	.000	**.179**	102.85	.000	**.197**	85.26	.000	**.198**	128.08	.000
Ecological Behaviour (EB)	**.090**	57.73	.000	**.064**	54.17	.000	**.102**	79.53	.000	**.059**	39.45	.000	**.097**	48.72	.000	**.140**	106.12	.000

Table 5.1

City	Affect Commitment (Concordance)		Environmental attitude (Concordance)		Ecological Behavior (Actual Commitment) (Concordance)	
	Kcc (Very Near to Zero)	Kcc (Nearer to One)	Kcc (Very near to Zero)	Kcc (nearer to one)	Kcc (Very near to Zero)	Kcc (nearer to one)
Bangalore	0.038***	-	0.161**	-	0.090**	-
Delhi	0.072**	-	0.132**	-	0.064**	-
Guwahati	0.109**	.	0.181**	-	0.102**	-
Kolkata	0.038***	-	0.179**	-	0.059**	-
Lucknow	0.029**	-	0.197**	-	0.097**	-
Mumbai	0.041**	-	0.198**	-	0.140**	-

***Very Low Concordance ***Equality in the level of concordance*

To interpret, coefficient *(Kcc)* value near zero indicates the existence of little concordance (agreement) and value near one indicate there is high level of concordance among the rater (Table 5.1).

Affect commitment (ac) as the concordant of which value range of coefficient (Kcc) are very near to zero for all the consumers of referred cities. Affect commitment concordance is very low for each group of consumers and the respective concordance for degree of affect commitment is similar for consumer of Bangalore and Kolkata.

Environmental attitude (ea) as a concordant considerably higher compared to the concordance of affect commitment, but statistically revealing a lesser level of concordance with Kcc value range within 0.10 to 0.20 for referred groups of consumers. Kcc values are not equal among the referred groups of ecological consumers.

Ecological behavior (eb) as the concordant among the referred groups of consumers exhibiting very small valued coefficients (value range is with 0.05- 0.140) for all groups of consumers.

Thus, in the context of *ac* and *ea* concordance levels are small and not similar to each other; that suggest to *rejects the hypothesis-1***. In the similar way concordance levels for actual ecological behavior are small that suggests to reject the hypothesis-1.The value concordance for consumers of the cities do not match or not equal to each other, that *accepts the hypothesis-2**.

Concordances Based on Occupations: This test conducted for testing the concordance based on occupational groups. Table 6 summarizes only coefficient of concordance (Kendall's coefficient) symbolically Kcc for the different categories of eco-consumers.

Table 6

Dimensions	Entrepreneur			Executive			Housewife			Manager			Retired			Students			Teachers		
	Kcc	***χ²***	***Sig***	***Kcc***	***χ²***	***Sig***	***Kcc***	***χ²***	***Sig.***	***Kcc***	***χ²***	***Sig***	***Kcc***	***χ²***	***Sig***	***Kcc***	***χ²***	***Sig***	***Kcc***	***χ²***	***Sig***
Affect Commitment (df= 6)	.06	33.5	.00	.05	26.6	.00	.048	23.4	.00	.14	82.8	.00	.04	21.0	.00	.26	58.2	.00	.19	106.4	.00
Verbal Omitment (df=6)	.20	103.7	.00	.27	131.2	.00	.21	132.6	.00	.21	123.1	.00	.27	148.1	.00	.32	72.6	.00	.24	136.2	.00
Ecological Behaviour (EB) (df=7)	.10	60.2	.00	.15	86.2	.00	.10	73.1	.00	.19	139.4	.00	.23	147.1	.00	.16	92.7	.00	.12	83.0	.00

In Table 6.1, the concordances of three-dimensional construct of eco-behaviour are summarised to show higher and low concordances for different occupational groups of eco-consumers.

For concordances for *ac*, the coefficients for different occupational group of consumers were classified under two groups. For first group, the coefficient *(Kcc)* values ranges within .01 to 0.20 (near to zero) and other within 0.21- 0.30.

Table 6.1

City	Affect Commitment (Concordance)		Verbal Commitment or environmental attitude (Concordance)		Ecological Behavior (Actual Commitment) (Concordance)	
	Kcc (Very Near to Zero)	*Kcc* (Nearer to One)	*Kcc* (Very near to Zero)	*Kcc* (nearer to one)	*Kcc* (Very near to Zero)	*Kcc* (nearer to one)
Entrepreneur	0.063**	-	0.196**		0.098**	-
Executives	0.054**	-	-	0.267*	0.150**	-
Housewife	0.038**	-	-	0.212*	0.100**	-
Managers	0.139**		-	0.207*	0.194**	-
Retired	0.038**	-	-	0.267*	-	0.226*
Students	-	0.255*	-	0.319*	0.161**	-
Teacher	0.185**	-	-	0.236*	0.124**	-

********Very Low Concordance *Moderate level of concordance*

The *Kcc*s for occupational groups, they are Entrepreneur, Executives, Housewife, Managers, Retired, Teachers falls within first category, and stating very smaller but un-uniform concordance for affect commitment. However, the coefficient for students (=0.255) is much larger which stating moderate concordance. Affect

commitment or opinions on affect of existing environment to student show moderate concordance.

For verbal commitment or environmental attitude (*ea*) as the concordant, the co-efficient of concordance (*Kcc*) are within the range 0.01 to 0.20. The concordance on environment attitude among and within entrepreneurial group of consumers is of small values. The coefficients of concordance for the group Executive, Housewife, Managers, Retired, Students, and Teachers are larger falls under second groups i.e. 0.21-40 (moderate concordance). Among the groups, students' *ea* are moderately concordant (Kcc-31.9), i.e. opinions are moderately similar within groups but emerged as top concordant among the groups. The coefficient between groups is not equal in meaning thereby concordance between groups for EA are not any way similar.

In respect to actual ecological behavior *(eb)* of the occupational groups of eco-consumer i.e. entrepreneur, executives, housewife, managers, students and teachers are fall within the range 0.01 to 0.20 which were near to zero, denoted small concordance within and between the groups. The ecological behaviour of retired people is moderately concordant of which coefficient of concordance for but emerged as largest one. There is no equality among the coefficient of concordances for ecological behaviour of referred occupational groups.

Concordances Based on Income Level

Finally, to examine the level of concordance among the different income groups of ecological consumer Kcc were computed (Table 7). Table 7.1 summarizes the Kcc and level of concordance for the components of attitudes and behaviour of respondents as ecological consumers.

For the affect commitment *(ac)*, the coefficients of concordance for referred income groups (in Table 7.1) are under the two groups. Concordance for affect commitment among the respondents of highest income groups are revealing very high (*Kcc*= 0.406, near to 1), the *Hypothesis-1* for this income group and coefficients is *rejected***. It has been seen that lower the income level, the coefficients of concordance on AC is low for these income groups *hypothesis-1 is rejected***. In-equality of Kcc values stating there are absence of similarity in degree of concordance for attitude among the referred income groups of ecological consumers (*Hypothesis-2 is accepted**).

Table 7

Dimensions	Rs. 8000-10,000 (N=163)			Rs. 11,000-15000 (N=267)			Rs. 16000-20000 (N=135)			Rs. 21,000-above (N=35)		
	Kcc	***χ^2***	***Sig***	***Kcc***	***χ^2***	***Sig***	***Kcc***	***χ^2***	***Sig***	***Kcc***	***χ^2***	***Sig***
Affect Commitment (Df=6)	.015	14.328	.026	.080	128.17	.000	.082	66.189	.000	.406	85. 23	.000
Verbal Commitment (df= 6)	.205	200.93	.000	.166	266.69	.000	.189	152.99	.000	.405	85.153	.000
Ecological Behaviour (EB) (df=7)	.133	151.65	.000	.072	134.50	.000	.164	154.82	.000	.314	76.94	.000

Table 7.1

Income Level	Affect Commitment (Concordance)		Verbal Commitment or Environmental attitude (Concordance)		Ecological Behavior (Actual Commitment) (Concordance)	
	Kcc (Very Near to Zero)	*Kcc* (Nearer to One)	*Kcc* (Very near to Zero)	*Kcc* (nearer to one)	*Kcc* (Very near to Zero)	*Kcc* (nearer to one)
Rs. 8000-10,000	0.015**	-	-	0.205*	0.133**	-
Rs. 11,000-15,000	0.080**	-	0.166**		0.072**	-
Rs. 16,000- 20,000	0.082**	-	0.189**	-	0.164**	-
Rs. 21,000 and above	-	0.406*	-	0.405*	-	0.314*

***Low concordance, * Moderate Level of Concordance*

For verbal commitment or environmental attitude concordance, the income groups within Rs. 11000-15000, and within Rs.16,000-20,000 falls within Kcc value range 0- 0.20 (near to zero) (*rejects the Hypothesis-1***). Coefficient values near to zero stating prevalence of least concordance within and between members of group. However, verbal commitment within and between income groups Rs 8,000-10,000, and Rs. 21,000 and above confirming moderate level of concordance (*accepts the Hypothesis -1* for the moderate level*). The concordance (value of Kcc) on EA within the income group 21,000 and above is highest among all the groups. There are no equality in value of Kcc between income groups hence *accepts the hypothesis-2**.

For ecological behavioral or actual commitment, the coefficient of first three low-income groups of consumers emerged as less concordant. Meaning thereby, ecological behavior or actual commitment for ecology within and between referred groups of low-income category indicating low concordance, interpreting hereby, group members do not hold similar ecological behaviour (*RejectedHypothesis-1***). The coefficient of concordance (Kcc) for Ecological behaviour of the high-income group of consumer (Rs. 21,000 to above) indicating moderate concordance for ecological behaviour (rejects the hypothesis-1). The values of Kcc for all the referred income groups are not equal as Table 7 revealed which indicated to *accept the hypothesis -2** for ecological behaviour or explicit ecological commitment.

Overall Psycho-Behavioral Concordance

The overall psycho-behavior (*ac+eb→eb*) for citizen of each referred cities, of each occupational group, and income level emerged as disconcordant (values to compare horizontally for each city). This finding supports to theoretical proposition of Maloney (1975), Fraz, Elena and Martinez (2007) on ecological behavior as dependent variable of attitudes (*ac+ea*) in the context of the cities incorporated in the study.

7. Discussion and Limitations

The coefficients of concordances computed for consumers of referred cities in this study explain least similarity of attitudes. Least attitudinal concordance i.e. *ac, ea* of a particular group of consumers of particular city may be result of complexity associated with stimulus, motivation, psycho- behavioral categories of diverse member, selected group in this survey.

The behavioral categories stem mainly from the fact that people's conceptions, and inferences may be based on very different premises with respect to available information and value judgments. People's conceptions on ecologically responsible consumption may vary. First, in terms of *what are the relevant behavioral elements involved*, i.e., what behaviors considered ecologically relevant; secondly, in terms of *weight or magnitude of each behavior* involved in their patterns of ecologically responsible consumption (Wang, 2005). These need to be tested by considering various demographic and psychographic factors of diverse environment within the country India.

Ecologically conscious consumers choose to engage in all relevant behaviors, or they may lack opportunity or ability to do so (Pieters, 1991; Bell, 1994; Thøgersen, 1994). This may be another reason of low level of concordance shown in analysis based on occupation of consumers. A few eco-minded consumers decide to do everything right, or in environmentally responsible manner. More probably, majority of green consumers do only what they perceive as their fair share of things that they know and come to think as environment-friendly behaviors. Nonetheless, although people do not regularly engage in some or many of ecologically relevant behaviors they know of (Goody and Lovaro-2003**),** these support findings of present study. Another possible reason of low concordance, which linked to *commitment problem*, debated in the study made by Abdul-Muhmin **(**2007). Consumers are generally willing to be ecologically responsible, consumer want to co-operate and contribute to production of environmental quality, since, the contribution of a single consumer is only marginal, short-term benefits from defecting are tempting. May be, for these reasons there are less explicit ecological behavior among the consumers (Myers and Jennifer -2002). In addition, may be experience, availability of time, age factor are determinants of pro-ecological attitude and behavior, those exhibiting higher level of concordance in case of retired groups of consumers.

However, income level is a good determinant for forming pro ecological attitude and behaviour among the consumer. The analysis revealed higher income group of consumers exhibiting high level of concordance. However, to confirm the linkages, main limitation here was adequate sample. From a very limited number of high-income groups of consumers agreements had found. Hence, further research need to incorporate more respondents from high-income group of consumer to explain their psycho -behavioral concordance and to examine their ecological consumption attitude and behaviour.

8. Conclusion

This study examined the concordance or attitudinal and behaviour similarity among the diverse groups of ecological consumers based on a few demographic factors. The results of the study revealed that there exists significant attitudinal and behavioral disagreement within and between demographic groups. Finally, confirms the criticality of linkages of demographic factors with ecological behavior of consumers in and within the cultural boundary of India. This disagreement may be due to more psychographics rather than demographic reasons. High- income level is a basis for high concordance of attitude and behaviour within and between the consumer groups. There by concludes -in case of ecological consumption, attitude and behaviour are much more dependent on income levels of consumers.

Teacher, students, and retired as eco-consumer show higher level of attitudinal and behavioral concordance than other occupational groups. These groups exhibit environmentally conscious behaviour at the time of consumption of goods and services. From the tests, found that place/state and occupation are considerable determinants for attitudinal and behavioral disconcordence among the eco-consumer. This needs further exploration to unfurl the basic reason for existence of attitudinal and behavioral dissimilarities among consumers though they experience same affect of eco-environment. This can be priority areas for future research for eco-consumerism.

***Acknowledgments*:** The author acknowledge sincerely to Pritam Borah (Delhi), Sanjib Gohain (Lucknow), Sekhar Boro (Mumbai), Rupam Kr. Kalita (Kolkata), Mukul Gohain (Bangalore) for their co-operation and support in collection of data.

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