Exploring Age-Related Environmental Attitudes in the Context of Wood Product Certification

Denese Ashbaugh Vlosky

Richard P. Vlosky

Working Paper #51 Louisiana Forest Products Laboratory Louisiana State University Agricultural Center Baton Rouge, LA

May 31, 1999

The authors are Ph.D. Candidate and Research Assistant, School of Human Ecology and Associate Professor, School of Forestry, Wildlife and Fisheries, Louisiana State University Agricultural Center, Baton Rouge, Louisiana

Address correspondence to Dr. Richard P. Vlosky, 227 Forestry Wildlife and Fisheries Building, Louisiana State University, Baton Rouge, LA 70803. Phone: (225) 578-4527; FAX: (225) 578-4251; email: vlosky@lsu.edu

Introduction

The purpose of this paper is to explore the relationship between age and environmental perceptions. The context is environmental issues and "green certification" in the forest product industry. Explored are general environmental attitudes, attitudes about the extraction and manufacturing of various resources, and attitudes toward the environmental certification of wood products in the aging population. The area of environmental certification provides a new context in which to study the perceptions and attitudes of the elderly. Of specific interest is whether or not attitudes about general environmental issues and the processing of various building materials can predict attitudes about certification. In addition, other variables are evaluated that have been found to be related to environmental organization and race. This work adds to the current literature by looking at age segments of the population, their attributes, and their attitudes with regard to two distinct issues, environmentalism and wood product certification.

Environmental Certification of Wood Products

In response to increasing environmental concerns about our forests, many parties including environmental organizations, retailers and wood product companies are interested in developing environmental standards, which companies could follow in the growing and harvesting of timber. Those that follow these standards or practices would have their products "certified" which would delineate their products as 'green'. Companies that certify their products encourage environmentally minded consumers to buy their products over those not grown and harvested in the same environmentally sound manner (Ozanne & Vlosky, 1997). These efforts are far from philanthropic in the minds of many company executives. They are intended to counter the common perception by the general public that most forest practices involving the harvesting of wood do irreversible damage to the environment (Peterson, 1994).

The issue of the marketing of certified wood products is basically hypothetical at this point in time. Only about .5 percent of internationally traded wood products have actually been certified (Baharuddin & Simula, 1994). Although untested in practice, the assumption is that consumers who have a strong bent toward environmentalism will also have a strong desire to pay significantly more money for these products (Upton & Bass, 1996). Various researchers have explored the connection between the concept of certification and projected consumer demand with varying results (Ozanne, Vlosky, & Fontenot, in press; Ozanne & Vlosky, 1997; Upton & Bass, 1996; Baharuddin & Simula, 1994; Bourke, 1995; Waffle, 1994). So too are researchers exploring which certification agencies the consumer would be most likely to trust or believe (Vlosky, Ozanne, & Fontenot, in press; Ozanne & Vlosky, 1997).

A battery of questions in this study relates to the environmental certification of wood products. Other questions ask respondents which organizations they would be likely to trust to certify that products are environmentally grown and harvested, such as individual companies or environmental organizations. These questions and their responses will allow further exploration into the relationship of the elderly and environmental motivations and perceptions.

Age and the Environment

Age and environmental attitudes have been studied across a broad range of environmental issues. Most researchers have found age to be a consistent predictor of environmental concern, with relatively younger people more environmentally concerned than relatively older people (Buttel, 1979; Malkis & Grasmick, 1976; Van Liere & Dunlapp, 1980; Mohai & Twight, 1987). Attitudes in these studies were measured across the whole range of survey respondents, from individuals 18 years to 75 years of age and above. However, no studies have addressed the differences in attitudes between and among segments of the elderly population, and with respect to gender specific segments of the aged.

Theorists have hypothesize that the relationship between age and environmental concern is a result of either the cohort effect or the aging process. The cohort effect is the attitude difference among age-cohorts due to generational differences in socialization and experience. It makes sense that people of a similar age that have experienced similar historical and economic conditions would have the same pattern of attitudes toward certain issues, and a different response than respondents of another age-cohort with different social and economic experiences. This is particularly true of the often-studied baby boom generation, the prior "youth cohort," now their middle years. For example Buttel (1979) postulated that relatively younger people's environmental concern was the result of the cohort effect. He noted that they came of age during the environmental movement of the 1960s and 1970s, which emerged during a period of intense generational conflict that included conflicts on civil rights (Buttel, 1979). Thus this exposure could explain their greater concern over environmental problems.

Buttel (1979) also argued that attitude changes might accompany the aging process, as well. This is distinct from the cohort effect, where the assumption is that agecohorts have relatively stable attitudes across time. It can be argued that the process of aging causes individuals to become more cautious and conservative because they are fully integrated into the mainstream social system and have a greater interest in maintaining the status quo (Cutler & Kaufman, 1975; Glenn, 1980). They may be concerned about protecting social standing and wealth, or they may simply be slower to change at older ages. Likewise, younger people may be less invested in the prevailing social system and may therefore be more willing to attach themselves to new social systems from which they may benefit in the future (Hornback, in Buttel, 1979).

Based on Buttel's hypotheses, either of the two following results are expected in this study. If the aging process is at work, older people are expected to be generally less likely to express environmental concern than relatively younger people. If however, the cohort effect is at work, specific age cohorts of the elderly are expected to react differently than others, as all elderly were not raised with the same historical and social influences. For example, the relatively young-old cohort, 65-74, are expected to react significantly differently than the older cohort of 75 years and above.

Research Methodology

Survey Design

The survey questions used in this research are a part of a study conducted by Ozanne and Vlosky (1997). Their work analyzed "willingness to pay" for environmentally certified wood products over a range of consumer products. The survey is divided into four distinct parts. First, there is a group of sociodemographic questions designed to measure all of the usual suspects including income, race, marital status, sex, and political party. The second section measures attitudes about the environment, in general. The third section measures attitudes and awareness regarding the environmental certification of wood products. Finally, the fourth section asks respondents whether or not they regard the extraction or manufacturing of certain building materials to be harmful to the environment. (See Appendix I for Variable Definitions).

Specifically, respondents were asked to rate their level of agreement on a variety of environmental issues and certification issues on a 5-point Likert-type scale where 1= strongly disagree, 3= neither disagree nor agree, and 5= strongly agree. Because a limited number of people know what a certified wood product is, the researchers defined environmental certification three separate times in the survey. Therefore, the respondents were asked to use the following definition: "Environmental certification means independent third-party verification that the forest from which the wood comes from is managed in a sustainable manner and that the trees are harvested in an environmentally sound manner." In addition, they were asked to evaluate the harm that the extraction or the manufacture of various products (from steel to tropical or temperate timber) causes to the environment, also on a 5-point Likert-type scale.

Sample

The survey was conducted with addresses provided by a national sampling service provider. Out of 2,500 surveys mailed, 803 were included in this analysis, equaling an adjusted response rate of 33 percent. They attempted to study consumers who would be in the market for environmentally certified wood products, which may become more expensive than non-certified wood products. Therefore, only homeowners over the age of 18 with incomes of over \$30,000 were selected. In addition, an equal number of males and females were surveyed. Non-response bias was tested and was found to be statistically insignificant (Ozanne & Vlosky, 1997).

Data Analysis

Demographics

First, the sample was separated into two distinct samples, a sample with all of the respondents (N= 742) and a sample with just those individuals over the age of 65 (N= 153) to facilitate analyzing the data by age group or cohorts. The elderly sample age group ranged from 65 to 90, with the mean age and mode being 71 and 65 respectively indicating a rather young "old" sample. T-tests results indicate that

General Environmental Attitudes

In both the total sample and the elderly sample the variable Age was recoded into a variable called "R-AGE," signifying "recoded age" which corresponds to various age cohorts to assist in categorical analyses. In the elderly sample, two cohorts were segregated, those "young-old" between the ages of 65-74 and the "old" and "old-old" over the age of 75. The gerontology literature typically distinguishes between the "old," ages 75-84, and the "old-old," ages 85 and above (Atchley, 1994). However, so few respondents in this database were over the age of 85, so the "old" and "old-old" categories were collapsed into just one "over 75 year old" cohort, hereby referred to as the "old" cohort. In the total sample, Age was separated into four cohorts, those 21- 39, 40 to 64, 65-74 and 75 and above. The youth cohort is signified by the younger age range, those 21 to 39, the age of those individuals established and ensconced in the workforce is signified by the 40-64 year age group. The young-old, 65-74, and old and old-old, those over the age of 75, are separated just as they are in the elderly sample.

T-tests were conducted to discern if there were differences between the 65-74 year old group and the 75 and over age group across environmental and certification issues (**Table 1**).

VARIABLE	T-VALUE	LEVEL OF SIGNIFICANCE
BUYPROD	29.13	.000
POLIT	4.76	.000
MEMBER	13.34	.000
INCOMES	6.74	.000
SEEK	21.50	.000
EDU	22.31	.000
SEX	4.08	.000
MARSTAT	32.43	.000
TRUST	16.35	.000
PURCH	13.92	.000
SUSTEMP	26.98	.000
REDEF	27.20	.000
UNDER	27.77	.000
CERTTROP	29.42	.000

Table 1. T-tests - differences between the 65-74 year old group and the 75 and over age group across environmental and certification issues

GLASS1	14.10	.000
TEMP1	16.34	.000
PLASTIC1	19.60	.000
TROP	21.47	.000
TEMP	18.34	.000
PLASTIC	17.70	.000
STEEL	18.58	.000
ENVORG	7.77	.000
IND	15.51	.000
FED	15.08	.000
CERT	11.34	.000
INDIVI	33.71	.000
BELIMP	31.95	.000
BELPACK	22.80	.000
ENVINFO	26.37	.000
PAYMORE	20.26	.000
BUYPRODS	29.13	.000

In addition, analysis of variance (ANOVA) was conducted on four groups: those 21-39, 40-64, 65-74 and 75 and above to measure differences between the youth cohort, those middle-aged individuals ensconced in the workforce, the young old, and the old (**Table 2**). There were differences between the age groups for two of the general environmental awareness variables. The young-old cohort was less likely than the youth

cohort to buy products that are considered environmentally safe; they were also less likely than the middle-aged cohort to pay more for environmentally friendly products. There were also differences in the age groups for two of the questions regarding environmental certifying agencies. The old age cohort was less likely to trust the federal government as a certifying agency than the youth cohort; the old age cohort was also less likely to trust the wood product industry as a certifier.

Very few differences were found through ANOVAs by age group on questions specific to the certification of wood products. The middle-aged group was more likely to pay a premium for certified wood products, and was more likely to believe that consumers in general would do so, as compared to the youngest age group. Interestingly, the old age group was also more likely to believe that consumers would pay more for such products as compared to the young.

VARIABLE	POST ANOVA TEST	MEAN DIFFERENCE IN GROUPS (I-J)	LEVEL OF SIGNIFICANCE
BUYPROD	LSD	1.0 & 3.00 3193	.025
PAYMORE	LSD	1.0 & 2.00 2599	.020
FED	LSD	3.00 & 4.00 .4262	.033
IND	LSD	1.0 & 4.00 .4537	.018
STEEL	LSD	1.0 & 3.00 .3633	.008
PLASTIC	LSD	1.0 & 2.00 2348 3.00 & 2.00 - 2727	.033
TROP	LSD	1.0 & 4.00 .4731	.018
STEEL1	LSD	1.0 & 4.00 .5711 2.00 & 4.00 .4954	.002 .003
PLASTIC1	TUKEY/SHEFFE/LSD LSD	2.00 & 4.00 .5225 1.0 & 4.00 .4130	.001 .019

1 able 2. Analysis of variance (ANOVA) Age Groups: 21-39, 40-04, 05-74
--

	TUKEY HSD/LSD	2.00 & 4.00	
GLASS1		.4438	.018
		2.00 & 3.00	
		.3249	.014
	LSD	1.0 & 3.00	
		.2941	.022
		1.0 & 4.00	
		.4130	.014
		1.0	
PAYPREM	LSD	1.0 & 2.00	020
		2548	.030
CONSPAY	TUKEYHSD/ SHEFFE/ LSD	1.0 & 2.00	
	LSD	3542	.008
		1.0 & 4.00	
		4741	.012

In order to determine whether or not age was **the** explanatory factor in evaluating the differences in the means tests for the above variables, regression analysis was run on both the elderly and total samples. However, first, a factor analysis was conducted on groups of variables in both the elderly and total samples. Variables were added roughly corresponding to the Likert-type questions on 'attitudes' or 'beliefs' about environmental and wood product certification, excluding those on the extraction and manufacture of specific materials. The technique employed was Maximum Likelihood with Varimax Rotation, where the Eigenvalue was greater than 1. All variables used in each factor scored over .50 on the Rotated Factor Matrix. In addition, reliability analysis was conducted on each set of factors, where a score of at least .80 would signal inclusion in the factor. In fact, each of the factor sets had a reliability analysis score of over .90.

The results for the total sample were two factor scores that were labeled "general environmental attitude" and "attitude about wood product certification". The factor solution for the elderly sample is almost identical and resulted in factors with the same names (**Table 3**).

Table 3. Factor Analysis Total and Elderly Samples

VARIABLE NAMES	FACTOR 1	FACTOR 2	RELIABILITY ANALYSIS
INDIVI	.90803	.15238	
BELIMP	.88782	.18547	
ENVINFO	.75229	.35128	
BUYPRODS	.69406	.33370	
BELPACK	.55333	.18248	
PAYMORE	.48482	.42413	FACTOR 1 .8959
CERTTEMP	.22210	.82989	
CERTTROP	.23034	.77844	
SUSTEMP	.29540	.74716	
SEEK	.25671	.70859	
PAYPREM	.16146	.67527	FACTOR 2 .8868

TOTAL SAMPLE ROTATED FACTOR MATRIX

ELDERLY SAMPLE ROTATED FACTOR MATRIX

VARIABLE NAMES	FACTOR 1	FACTOR 2	RELIABILITY ANALYSIS
SUSTEMP	.86389	.31632	
REDDEF	.80123	.38099	
CERTTROP	.75322	.23874	
CERTTEMP	.71786	.40298	
SEEK	.70810	.33546	
PAYPREM	.68431	.30053	FACTOR 1 .9241
INDIVI	.29261	.87541	
BELIMP	.28531	.85415	
BUYPRODS	.44537	.66701	
ENVINFO	.54116	.61139	FACTOR 2 .9079

Table 3 Variable DefinitionsFactors for Total Database

Factor 1: General Environmental Attitudes Present Oriented/Action

INDIV: I believe there is much individuals can do to improve the environment

BELIMP: I generally believe that there is much that individuals can do to improve the environment

BUYPRODS: Whenever possible, I buy products which are considered environmentally safe.

ENVINFO: I believe that environmental information on packaging is important.

BELPACK: I generally believe environmental information on packaging.

PAYMORE: I would pay more for environmentally friendly products

Factor 2: Attitudes on Certification Future Oriented/Hypothetical

SUSTTEMP: I believe that environmental certification can help sustain the health of US forests

CERTTROP: I believe that there is a need for environmental certification of the harvesting of tropical trees.

CERTTEMP: I believe that there is much need for environmental certification of the harvesting of US temperate forests.

SEEK: If available I would seek out environmentally certified wood products.

PAYPREM: I would pay a premium for certified wood products.

Factors for Elderly Only Database (65+)

Factor 1: Attitudes on Certification Future Oriented/Hypothetical

SUSTTEMP: I believe that environmental certification can help sustain the health of US forests

REDDEF: I believe that environmental certification can reduce tropical deforestation.

CERTTROP: I believe that there is a need for environmental certification of the harvesting of tropical trees.

CERTTEMP: I believe that there is much need for environmental certification of the harvesting of US temperate forests.

SEEK: If available I would seek out environmentally certified wood products.

PAYPREM: I would pay a premium for certified wood products.

Factor 2: General Environmental Attitudes Present Oriented/Action

INDIV: I believe there is much individuals can do to improve the environment

BELIMP: I generally believe that there is much that individuals can do to improve the environment

BUYPRODS: Whenever possible, I buy products which are considered environmentally safe.

ENVINFO: I believe that environmental information on packaging is important.

Extraction and Manufacturing

More significant results were obtained with ANOVAs that explored the differences in age cohort responses regarding the extracting and manufacture of Steel, Plastic, Temperate Lumber, Glass and Tropical Timber. The results mirror those of other studies finding that the elderly are less likely than the younger age groups to be environmentally sensitive. The young-old were more likely to feel that the extraction of steel was not harmful to the environment than the young. They were also less likely to feel that the extraction of plastics were harmful to the environment then either the young of the middle-aged. The old age group was less likely to feel that the extraction of tropical timber was harmful than the young.

The manufacturing set of questions produced similar results. The old were less likely to feel that the manufacturing of steel or of plastic were harmful to the environment than either the young or the middle-aged. And generally, the young and the middle-aged are more likely to feel that the manufacturing of glass is harmful to the environment than the young-old or old.

Discussion

The bivariate analyses showed the elderly as having very different attitudes about the environment and certification issues than the rest of the population. The more compelling results appeared with respect to the elderly and their attitudes about the extraction and manufacture of steel, plastic, glass, and temperate and tropical timber. Although the elderly did not differ significantly with respect to general questions about the certification of timber and general environment attitudes, they had very different feelings about the processing of various products and the effects of such processing on the environment. In most categories, in the analysis for the total sample, the elderly felt that the extraction and manufacture of all of the above listed items were not damaging to the environment. However, in the elderly sample-- which measures the differences in just the elderly cohorts-- there were no significant differences due to age. These results seem to signify that the aging process itself produces more conservative attitudes about the environment, rather than the opposing thesis that differences in age cohorts produce differing perceptions and results.

Again for both samples, political party, race (white) and at times gender, and being a member of an environmental organization appeared to be important predictors of who would think the processing of these materials was harmful to the environment. However, they were not consistent predictors across material types.

Conclusions and Considerations for Future Research

There are numerous questions that arise from these results. First, why would the elderly appear the same on measures of environment and certification attitudes if in fact they believe that the extraction and manufacture of many products are not harmful to the environment? Is it possible that the elderly interpret general environmental issues and questions differently than the rest of the population? If so, how do they view environmentalism? A possible answer to these questions might come from the survey design itself. This particular sample attempted to eliminate respondents with an income of less than \$30,000. This fact alone may have eliminated the results found in most of the literature where differences in environmental attitudes are found across the board with regard to age and gender. In fact, most of the differences due to age and gender may be

due to income and class or culture. In addition, this sample consisted of roughly equal numbers of males and females. In the elderly sample, this resulted in a pool of respondents that did not correspond to the demographic make-up of the US population, where the majority of the elderly are women. A sample of mostly elderly women from all economic classes may respond very differently from these respondents, half of who were male and who consisted of mainly the upper income echelon. These analyses should therefore be rerun in random sample of the entire population that captures representative income, class and gender differences in respondents.

References

Atchley, R. C. (1994). Social forces and aging: An introduction to social gerontology (7th edition.). Belmont, CA: International Thomson Publishing.

Baharuddin, H.J., & Simula, M. (1994). Certification schemes for all timber and timber products. <u>International Tropical Timber Organization</u>. Yokohama, Japan.

Blocker, T. J., & Eckbert, D. L (1989). Environmental issues as women's issues: General concerns and local hazards. <u>Social Science Quarterly</u>, 4(2), 586-593.

Bourke, I.J. (1995). International trade in forest products and the environment. <u>Unasylva</u>, <u>46</u>, <u>11-17</u>.

Brody, C. J. (1984). Differences by sex in support for nuclear power. <u>Social Forces</u>, <u>63(1)</u>, 209-228.

Buttel, F H., & Flinn, W. L. (1978). Social class and mass environmental beliefs: A reconsideration. <u>Environment and Behavior, 10(4)</u>, 433-450.

Cutler, A. J., & Kaufman, R. L., (1975). Cohort changes in political attitudes: Tolerance of ideological nonconformity. <u>Public Opinion Quarterly</u>, 39, 69-81.

Davidson, D. J., & Freudenburg, W.R. (1996). Gender and environmental risk concerns: A review and analysis of available research (1996). <u>Environment and Behavior, 28(3)</u>, 302-339.

Devall, W. B. (1970). Conservation: An upper-middle class social movement: A replication. Journal of Leisure Research, 2(4), 123-126/

George, D.L., & Southwell, P.L. (1986). Opinion on the Diablo Canyon nuclear power plant: The effects of situation and socialization. <u>Social Science Quarterly</u>, 67, 722-735.

Glenn, N.D. (1980). Values, attitudes and beliefs in O.G. Grim, Jr., and J. Kagan, (Eds.) <u>Constancy and Change in Human Development</u> Cambridge: Harvard University Press pp. 362-369. Lowe, G.D., & Pinhey, T.K. (1982). Rural-urban differences in support environmental protection. <u>Rural sociology</u>, 47(3), 114-128.

Lowe, G.D., Pinhey, T.K., & Grimes, M.D. (1980). Public support for environmental protection: New evidence from national surveys. <u>Pacific Sociological Review</u>, 23(4), 423-445.

Mitchell, R.C. (1979). Silent springs/solid majorities. Public Opinion, 2, 16-55.

Mohai, P. (1985). Public concern and elite involvement in environmental-conservation issues. <u>Social Science Quarterly</u>, 66(4), 820-838.

Mohai, P. (1990). Black environmentalism. Social Science Quarterly, 71(4), 745-765.

Mohai, P. (1991). Men, women, and the environment: An examination of the gender gap in environmental concern and activism. <u>Society and Natural Resources</u>, *5*, 1-19.

Mohai, P. (1997). Gender differences in the perception of most important environmental problems. <u>Race, Gender & Class, 5(1)</u>, 153-169.

Mohai, P., & Bryant B. (in press). Is there a "race" effect on concern for environmental quality? Forthcoming in <u>Public Opinion Quarterly, 62(4)</u>, pp. 1-26.

Nelkins, D. (1981). Nuclear power as a feminist issue. <u>Environment, 23(1)</u>, 744-765.

Ozanne, L.K., Vlosky, R.P., & Fontenot, R.J. (in press). A conceptual model of U.S. consumer willingness-to-pay for environmentally certified wood products.

Ozanne, L.K., & Vlosky, R. P. (1997). Environmental certification of wood products. Women in Natural Resources, 19(3), 4-8.

Ozanne, L.K., & Smith (1998). Segmenting the market for environmentally certified wood products. <u>Forest Science, 44(3)</u>, 379-389.

Peckinpaugh, T. (1982). The specter of environmentalism: The threat of environmental groups. <u>Special report, Republican Study Committee</u>. Washington D.C.: US House of Representatives.

Peterson, C. (1994). Green certification of wood. <u>Current issues in forestry, 6(1)</u> Boston Mass: University of Massachusetts Cooperative Extension Service.

Schahn, J., & Holzer, E. (1990). Studies of individual environmental concern: the role of knowledge, gender and background variables. <u>Environment and Behavior, 22(6)</u>, 776-786.

Stern, P., Dietz, T., & Kalof, L. (1993). Value orientations, gender and environmental concern. <u>Environment and Behavior</u>, 25(3), 322-348.

Tucker, W. (1978). The environmentally concerned citizen: Some correlates. Environment and Behavior, 10(4), 389-418.

Upton, C. & Bass, S. (1996). <u>The forest certification handbook.</u> Delray Beach, Florida: St. Lucie Press.

Van Liere, K. D., & Dunlap, R. E. (1980). The social bases of environmental concern: A review of hypotheses, explanations and empirical evidence. <u>Public Opinion Quarterly, 44,</u> 181-197.

Waffle, R. (1994). The market realities of certification. <u>Presentation at the Conference on</u> <u>Sustainable Forest Management: Current Trends, Perspectives and Options for Lumber</u> <u>and Wood Manufacturers.</u> Louisville, KY: Sponsored by Purdue University.

Definition of Variables & Measurement

Unless otherwise noted, all scales for the following questions are as follows: Strongly Disagree 1, 2, Neither Disagree or Agree 3, 4, to Strongly Agree 5

BUYPRODS	Whenever possible, I buy products which are considered environmentally safe
PAYMORE	I would pay more for environmentally friendly products
ENVINFO	I believe that environmental information on packaging is important
BELPACK	I generally believe environmental information on packaging
BELIMP	I generally believe that environmental information on packaging is important
INDIV	I believe that there is much that individuals can do to improve the environment

From the list below please rank the level of trust you have regarding environmental certification claims

1= I trust this entity the most 4= I trust this entity the least	
CERT	Private certification company
FED	The federal government
IND	Wood product's industry

ENVIROG Environmental organization

Extracting raw materials to produce the following products is harmful to the environment from 1 Strongly Agree, 2, 3 Neither, 4, 5 Strongly Disagree

STEEL	Steel
PLASTIC	Plastic
TEMP	Temperate Lumber
GLASS	Glass
TROP	Tropical Lumber

The Manufacturing process to produce the following products is harmful to the environment

STEEL1	Steel
PLASTIC1	Plastic
TEMP1	Temperate Lumber
GLASS1	Glass
TROP1	Tropical Lumber

For the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement. Where 1 is Strongly Disagree, 3 is Neither, and 5 is Strongly Agree

CERTTEMP	I believe there is much need for environmental certification of the harvesting of US temperate forests
CERTTROP	I believe there is a need for environmental certification of the harvesting of tropical trees
PAYPREM	I would pay a premium for certified wood products
UNDER	I understand the concept of environmental certification
REDDEF	I believe that environmental certification can reduce tropical deforestation

SUSTTEMP	I believe that environmental certification can help sustain the health of US forests
PURCH	I have purchased environmentally certified wood products in the past year
SEEK	If available, I would seek out environmentally certified wood products
TRUST	I trust environmental claims made by wood product suppliers
CONSPAY	I believe that consumers will pay a premium for environmentally certified wood products
RMEMBER	Are you a member of an organization whose primary mission it is to protect the environment?
	1 yes, 0 no
ETHNIC	What is your ethnic group?
	 Caucasian African American Native American Asian or Pacific Islander Other
BLACK	1 Black 0 Else
WHITE	1 White 0 Else
RPOLIT	To which political party do you most closely affiliate yourself?
	Republican -1 Independent 0 Democrat 1
PVIEWS Bad data, did not enter	Express your political views from 1 to 5, with 1 being extremely liberal to 5 being extremely conservative

AGE	Age in years, no categories
RAGE	Split into 2 or 4 categories
	4 for total database: 21-39 = 1/40-64=2/65- 74=3/75+ =4 2 for 65+ database: 65-74=1/75+ = 2
RSEX	1 Female 0 Male
MARSTAT	
	 Never married Divorced or separated Widowed Married
ED	 Some high school High School grad Some College College grad Graduate degree
INCOMES	How many household incomes do you enjoy?
	1 Single income 2 One full-time 3 One part-time
	4 Two full-time
	6 No incomes
TOTALINC	 Under 20K 20-39K 40=59K 60-79K 80-99999K 100-124,999K 125-149K Over 150K