# 1993 PUBLIC OPINION ON ENVIRONMENTAL ISSUES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

By

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Bachelor of Science

Oklahoma State University

Stillwater, Oklahoma

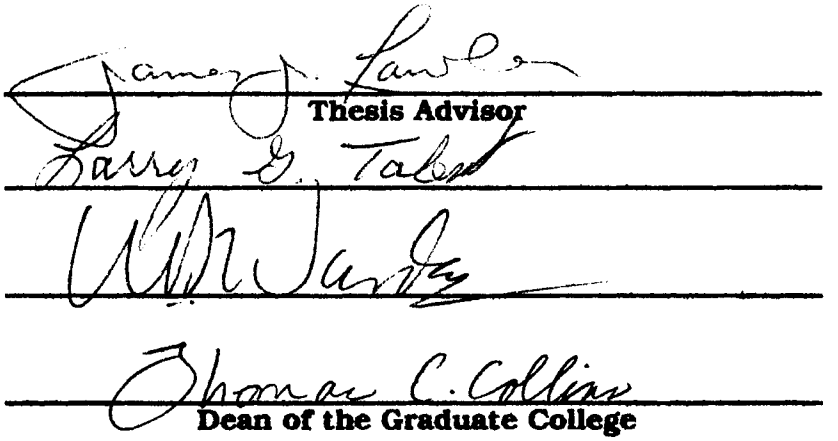
1991

Submitted to the faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May 1994

OKLAHOMA STATE UNIVERSITY

**1993 PUBLIC OPINION ON ENVIRONMENTAL ISSUES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Thesis Approved:**



**Thesis Advisor**

**Dean of the Graduate College**

## ACKNOWLEDGMENTS

**There are five individuals in particular to whom I am extremely indebted. First, I thank my advisor and Political Science professor, Dr. James Lawler, for his patience and friendship during my undergraduate and graduate studies at Oklahoma State University.**

**Second, I owe special thanks to Dr. William (Bill) Warde, Environmental Sciences committee member and Statistics professor. Dr. Warde devoted to me countless hours of extra assistance during my thesis design and data collection stages.**

**Third, I would like to thank Dr. Larry G. Talent, Environmental Sciences committee member and Zoology professor. I greatly appreciate Dr. Talent's counselling through the many technical graduate courses I completed at Oklahoma State University.**

**Fourth, I am particularly indebted to William (Will) Focht, Geology instructor and friend, for the extra sacrifices he made in his personal life to edit this and other projects of mine. I have been truly enriched by my acquaintance with Will.**

**Most of all, I thank my closest and dearest friend, Monica L. Groves. No words can express the importance of her strength and encouragement. She is the major force driving me toward success. For this reason and others, I dedicate this report to her.**

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## NOMENCLATURE

| | |
|---|---|
| **ABC/WP** | **American Broadcasting Company** |
| **AmDm** | **American Demographics** |
| **Bwk/Hrris** | **Business Week and Harris Surveys** |
| **CBS/NYT** | **Columbia Broadcasting System and the New York Times** |
| **CEQ** | **Council on Environmental Quality** |
| **CEQ/RFF** | **Council on Environmental Quality and Resources for the Future** |
| **EPA/Rpr** | **The Environmental Protection Agency and the Roper Organization** |
| **Ford/HRN** | **Ford Motor Company and HRN consulting** |
| **HW** | **Hazardous Waste** |
| **MNES** | **Michigan National Election Survey** |
| **NORC** | **National Opinion Research Center** |
| **ORC** | **Opinion Research Corporation** |
| **TSD** | **Treatment, Storage and Disposal** |
| **%** | **Percent** |

# CHAPTER I

## INTRODUCTION

Since the 1960s, environmental quality has been a major concern in the United States. For the purposes of guiding policy, surveys on public opinion and attitudes have been conducted since 1965. In particular, researchers have studied various demographic characteristics that may be associated with environmental concern over this time. This research adds another link in the chain of public opinion surveys continuously monitoring public attitudes on environmental issues.

This research covers public opinion in the five states that comprise Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas) of the United States Environmental Protection Agency (USEPA), and addresses only those environmental issues that are subject to USEPA jurisdiction. Region VI was selected because it has been shown to have the lowest ranking of the 10 USEPA Regions in the environmental policy indicators: "state environmental management," "voting records of state representatives" and "commitment to environmental protection" (Davis and Lester 1989; League of Conservation Voters 1992; and Lester 1990). With respect to state environmental management, Arkansas, Louisiana, Oklahoma, and Texas are identified as "delayers." They exhibit a weak commitment to environmental protection but possess a strong institutional base. New Mexico is identified as "regressive." It exhibits weak commitment and has a weak institutional base (Davis and Lester 1989, and Lester 1990). In considering the voting records of the Congressional representatives from Region VI states, Region VI ranks last (only 26.22%) in support of pro-environment legislation among the 10 USEPA regions (League of

Conservation Voters 1992). Finally, in considering Region VI states' commitments to environmental protection on a 23 issue indicator scale, Region VI ranks last (only 33.97% pro-environmental) among the 10 USEPA regions (Davis and Lester 1989).

The League of Conservation Voters (1992) has found that Republicans are less supportive of pro-environment legislation than Democrats. It is interesting to note that from 1968 to 1992, five states in Region VI have voted primarily for Republicans in Presidential elections (Famighetti 1994).

Policy makers and USEPA officials could significantly benefit from the results of this survey in four ways. First, a scientific survey of this nature can be utilized as a key lobbying resource, and could lend credibility to Agency policy making. Second, the survey results also could support increases in Agency resources. Third, the survey can be utilized to guide and influence policy at least in the Region VI states. Finally, since Region VI encompasses the five sunbelt states, one of the fastest growing and most populous regions of the United States (Famighetti 1994), survey results on public opinion in this region could carry a great deal of weight nationally.

In this public opinion survey, the relationships between environmental concern and six demographic characteristics are studied. In particular, verification of the relationships found in prior surveys is examined. The literature on public opinion on environmental issues will be examined to identify patterns of relationships between demographic influences and environmental attitudes.

# CHAPTER II

## LITERATURE REVIEW

I have reviewed surveys, journals and books discussing public opinion on environmental issues from 1965 to 1993. During my research, I looked for surveys that contained questions on government and USEPA support of environmental action, individual environmental action, economics and the environment, and perception of environmental threat. Also, I looked for surveys with demographic questions such as gender, age, occupation, education, and income. I have organized my review of these items from surveys during a 1965 to 1993 time-frame.

### The Sixties

The middle to late 1960s has been recognized as the origin or dawn of the environmental movement (Bean 1983; Dunlap 1989; Krause 1993; Mitchell 1990; and Shaw 1985). Public opinion surveys by organizations like Gallup, Opinion Research Corporation (ORC), and the Harris Polls indicated an awakening concern during this period. The survey questions mostly covered issues on government support of environmental action, economics and the environment, and public perception of environmental problems. The hightened awareness on the environment has been partially credited to Racheal Carson's best selling book "Silent Spring," more active environmental and conservation organizations, and the growing science of ecology (Bean 1983; Dunlap 1989; Kraft and Vig 1990; and Mitchell 1990). Evidence has shown that these events and others took United States policy from an era of game management and conservation to the broader

era of environmental management (Shaw 1985).

## The Seventies

During the 1970s, public concern for the environment leveled off, or declined depending on the issue. Public concern for government support of environmental protection and action leveled off as demonstrated in surveys by the Roper Organization, Opinion Research Corporation, and the Council on Environmental Quality, CEQ (Council on Environmental Quality 1980; Dunlap 1989; and Scarce and Dunlap 1991). Public concern on economics and environmental issues leveled off as reported in polls by Cambridge Research International, National Opinion Research Center (NORC), and the Roper Organization (Allen and Sekscienski 1992; Dunlap 1989; Jones and Dunlap 1992; and Scarce and Dunlap 1991). Public perception of environmental problems and threat declined. Regarding environmental problem perceptions, the Roper survey samples indicated a leveling off of concern, but the CEQ, and Harris surveys showed a decrease in public concern (CEQ 1980; Dunlap 1989; and Scarce and Dunlap 1991). As presented by Dunlap, these trends seemed to support Down's "issue-attention cycle" theory which forecasts that public interest on an issue progresses through stages from "pre-problem," through "alarmed discovery" then "decline" and finally to a "post-problem stage" (Dunlap 1989).

## The Eighties

According to Down's theory that was presented by Dunlap, public concern for the environment should have reached the "post-problem stage" during the 1980s. Despite this prediction, public concern increased during the 1980s on issues like government support for environmental action, individual environmental action, economics and the environment, and perception of

environmental problems and threat. On the issue of government support for action, Cambridge Research International, CBS/New York Times, and Harris polls indicated extreme increases of public concern supporting government actions. Additionally, Business Week, and Roper Polls indicated increases in public concern supporting government action. On individual environmental action issues, CEQ and Resources for the future indicated increases of public concern. On issues of economics and environmental interaction, the CBS/New York Times, and Cambridge Research International polls indicated an extreme increase in public concern for the environment. Also, the CEQ and NORC polls indicated an increase of public concern for the environment. Only the USEPA/Roper survey sample found a leveling off of public concern. Generally, the common denominator of these survey questions ask the respondent, which are they willing to sacrifice more, the economy or the environment. Other questions related to raising taxes to protect and improve the environment. Regarding environmental problem and threat perceptions, the Cambridge and Roper polls indicated increases in public concern, but an ABC/Washington Post Poll indicated a relative leveling off of public concern (CEQ 1980; Dunlap 1987; Dunlap 1989; Jones and Dunlap 1992; and Scarce and Dunlap 1991). Some have argued that increases during the 1980s were the result of public reaction to President Reagan's anti-environmental actions from his appointments of James Watt, Secretary of the Interior, and Anne Burford, Head of the USEPA, to his speech that trees are a major source of air pollution (Dunlap 1991; Kraft and Vig 1990; and Vig 1990). Others have argued that Reagan was successful at lowering the environment from a major to a minor public concern by emphasizing the cost-benefit analysis in environmental matters (Edley 1990; and Glicksman 1991).

## The Nineties

During the early 1990s, there were increases in public concern on issues

like government support for environmental action, individual environmental action, economics and the environment, and perception of environmental problems and threat. The Ford Motor company and Krause survey indicated an increase of public concern on government support issues (Shell 1990). American Demographics, USEPA/Roper, Gallup, and Krause polls indicated an extreme to marked increase in public concern on issues of individual environmental action (Dunlap, Gallup and Gallup 1992; Krause 1993; List 1993; and Saad 1992 and 1993). The Environmental Opinion Studies reported only a leveling off on issues of individual environmental action (Dunlap 1991). On the economics and the environment issues, American Demographics, USEPA/Roper, Ford Motor company, and Krause polls indicated increases in public concern in favor of environmental protection (Allen and Sekscienski 1992; List 1993; and Shell 1990). The Gallup polls in 1991 and 1992 indicated a decrease in public concern (Dunlap 1991; and Saad 1992). On the perception of environmental problems and threat, there was a leveling off of public concern. A Ford Motor Company survey indicated an extreme increase in concern. The Gallup polls in 1990, 1992 and 1993 had mixed results of increase, leveling off, and decreases respectively (Allen and Sekscienski 1992; Dunlap 1991; Dunlap, Gallup and Gallup 1992; List 1993; Saad 1992 and 1993; Scarce and Dunlap 1991; and Shell 1990). These mixed results are probably the result of the subjective answering to a "most important problem" question in their nation-wide problem survey.

## Summary of Dependent Variable Trends

First, public support for government environmental action indicated extreme increases during the 1960s, a leveling off during the 1970s, marked increases during the 1980s, and stable increases during the 1990s. Although, individual citizen environmental action was not measured during the 1960s and 1970s, the 1980s indicated a marked increase in individual actions, and small

increases were demonstrated during the 1990s. Third, public opinion in favor of environmental protection over economic considerations increased during the 1960s, leveled off during the 1970s, demonstrated marked increases during the 1980s, and small increases during the 1990s. Fourth, public perception of environmental problems and threat indicated marked increases during the 1960s, decreased during the 1970s, leveled off during the 1980s, and remained stable during the 1990s.

## Demographic Characteristics

An investigation of demographic characteristics as independent variables indicated that pro-environment people are more likely to be female, young to pre-middle age with children, employed in a non-industry related occupation, middle income, and more educated. As many as eight sources support the view that women are more pro-environment (CEQ 1980; Jones and Dunlap 1992; and League of Conservation Voters 1992). Krause concluded that there is no variation in gender pro or con on the environment (Krause 1993). The Gallup organization reported that men are slightly more pro-environment (Dunlap, Gallup and Gallup 1992). Three surveys support the view that young adults between the ages 25-34 are more pro-environment (CEQ 1980; Jones and Dunlap 1992). Krause concluded that middle age people are more environmentally minded (Krause 1993). The Gallup organization reported no significant relationship between environmental concern and age. The Gallup organization reported that individuals are worried about their children when considering environmental issues (Dunlap, Gallup and Gallup 1992). Other researchers have indicated a correlation between children in the home and a pro-environment attitude (Warde 1993). The relationship between occupation and a pro-environment opinion was investigated during the 1980s. Not surprisingly, there was a positive relationship between non-industry occupation and a pro-

environment opinion (Jones and Dunlap 1992). Income and pro-environment opinions have shown strong positive correlations. The results were a unanimous middle class to upper-middle class income (CEQ 1980; Dunlap, Gallup and Gallup 1992; Jones and Dunlap 1992; and Tucker 1989). In the Resources for the Future and CEQ surveys, increased education and pro-environmental opinions have shown a strong positive relationship (CEQ 1980; and Jones and Dunlap 1992).

## Historical Multiple Independent Variable Interactions

From the 1970s to the 1990s, there was statistical testing of different combinations of independent variables which includes age, race, education, income, and occupation. In an analysis of a two-way independent variable interactions, age and race was shown not to be significant for environmental concern (Focht 1992). Also, Bachrach and Zautra (1985) reported that age and race was not significant when testing for environmental concern, but they did find that age was significant as an individual variable. Education and income was reported to have a significant correlation supporting environmental concern (Buttel and Flinn 1978). Also, Education and occupation was reported to have a significant correlation supporting environmental concern (Van Liere and Dunlap 1980).

Some results indicate a three-way independent variable interaction favoring environmental concern. During the 1970s, it was shown that if income, education, and occupation levels increase, so does the level of environmental concern. These correlations support an "elitist theory" of public environmental concern (Buttel and Flinn 1974; Grossman and Potter 1977; and Tucker 1989). During the 1980s, Maslow and Frager (1987) reported a significant correlation in favor of environmental concern when income, education, and occupation levels increase. They emphasized that the strongest variable was income in the three-

way interaction (Maslow and Frager 1987). Increasing income, education, and occupation levels were shown to significant in favor of environment concern during the 1990s (Focht 1992). But earlier, income, education, and occupation interactions were shown not to be significant (Van Liere and Dunlap 1980).

The literature, to date, shows the importance of the foregoing influences in national surveys. Whether or not these relationships hold for the states of USEPA Region VI will be considered in the present study.

# CHAPTER III

# METHODS

This chapter begins with a brief view of the thesis project phases, and independent and dependent variable definitions. Next, the data collection and sampling method are discussed. Continuing, the chapter briefly discusses survey frame, and the target and survey populations. Next, there is a discussion on the survey design disadvantages and advantages. Finally, the mailing and questionnaire design is presented.

## The Project Phases

There were four major overlapping phases of research for this thesis project. The first phase was a comprehensive literature review. This phase began in May of 1993 and continued until late February of 1994. Second, the planning phase involved survey design, questionnaire construction, and survey correction for bias and non-response. Also, the planning phases included a pre-testing of the survey questionnaire by undergraduates and graduate students, and faulty in the Geology, Political Science, Statistics, and Zoology departments of Oklahoma State University (OSU). The pre-testing of the survey lead to error identification, clearer wording, improved instructions and general appearance of the instrument. The planning phase began in August of 1993 and lasted until November 9 of 1993. The survey mailing dates were October 29 of 1993 for Arkansas, November 2 of 1993 for Louisiana, October 28 of 1993 for New Mexico, November 1 of 1993 for Oklahoma, and November 5 through November 9 of 1993 for Texas. The third phase of the project was data collection. This phase began

earlier in November and ended December 15 of 1993. The survey response deadline was actually November 25 of 1993, Thanksgiving day. But, late responses were accepted because of the possible holiday mail delays. The fourth phase of the project was the analysis and results. The analysis phase consisted of activities such as organizing the data, quality control to verify responses, and conducting statistical tests on the data. A Chi-squared test was utilized to measure the significance of individual independent variables against survey questions in dependent variable groups. A Logistical Regression was utilized to measure the significance of two-way and three-way interactions of independent variables against survey questions in dependent variable groups. The thesis information will be provided to officials at the USEPA in Dallas, Texas as well as Washington, D.C. Appendix A illustrates the thesis activity schedule of the four phases.

## Independent and Dependent Variables

In the survey, there were four groups of dependent variable questions. Appendix E contains the survey questionnaire, and can be used when questions are referred too. First, questions 5 to 10 focused on public support for government and USEPA environmental action. Second, questions 12, 13, and 20 A-G focused on the public's individual environmental action. Third, questions 14, 15 and 17 focused on the public's perception of economic and environmental relationships. Fourth, questions 18, 19, and 21 A-K focused on the public perception of environmental problems and threat

There were six different questions, demographic in nature, that were used as the independent variables in the survey analysis. The independent variables were gender (question 1), age (question 2), children in the home (question 3), occupation (question 4), education level (question 11), and income level (question

16).

## Data Collection and Sampling Method

The data collection method used was a self-administered mail questionnaire. The public opinion data collection was by the selected individual's completion of the returned survey questionnaire. The sampling method was a stratified random sampling of 1,543 adult respondents in the USEPA Region VI. The five Region VI states were used as the strata, and the random sampling was conducted within each state in proportion to the population of that state.

## Frame

The frame used for potential survey individuals was the most current and most convenient telephone book for a selected town or city in a Region VI state. All of the telephone books used for the survey selection were in the Stillwater Public Library (hard copy on the shelf and nation-wide computer system), and OSU's Edmond Low Library. I selected the available telephone books in these libraries because they were the quickest and most convenient way to represent a survey frame. The proper random number tables were generated by inputing programs into the Statistical Analysis System (SAS) and SAS-XA1 statistical software package in OSU's statistics lab. Consulting on the statistical computer programs was performed by Monica Groves, a graduate teaching assistant in OSU's Statistics department.

## Target and Survey Populations

The target population consisted of any adult resident in the USEPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas). The survey

population consisted of adult residents in cities and towns in the USEPA Region VI states that had a telephone and address listed in the most current telephone book. Appendix B contains a list of the cities, and Region VI states that were surveyed.

## Survey Design Disadvantages and Advantages

When compared to the other survey methods (personal interview, telephone interview, and analysing available data), the mail questionnaire has its disadvantages and advantages. The disadvantages are that it normally has a higher non-response rate, contains some wording bias, and takes the most amount of time to administer. In this survey, the advantages are that it decreased expense, enabled me to increase n (sample size) closer to N (actual population size), and enabled me to be the only interviewer, thus decreasing interviewer coding errors and inconsistency (Warde 1990 and Warde 1993).

In terms of the frame, the disadvantages are that problems occurred such as clusters, duplicates, foreign elements, missing elements, and male bias in telephone books. The cluster and missing element problems were ignored. A couple of advantages were that the duplicate listings and foreign elements were properly handled during the random selection process by an elimination technique when confronted with their appearance. Examples of duplication listings were a teenager's phone or business listing. An example of a foreign element was a "north of city" listing for an address. Additionally, these problems were expected and a *Pre-Correction formula* was utilized to increase the selection in order to achieve the desired sample size, n (Warde 1990). As mentioned, there is normally a male bias when using telephone books, but this problem was handled by selecting the "Mrs." listing when confronted with a "Mr. and Mrs." double listing. For this sampling, this technique appeared to work, since more respondents were female than male.

## Mailing and Questionnaire Design

In the mailing and questionnaire design section, the general survey design will be discussed. Next, the question development and origin are explained. Finally, the survey pre-test is briefly discussed.

### General Design

Generally, the overall mailing and questionnaire appearance was important so the following ten actions were executed during the survey design in the hopes of getting a good response rate. First, white business envelopes with OSU's Graduate College letterhead were used to encourage response and indicate some sponsorship support. Second, computer printed labels with the names and addresses of the randomly selected individuals in USEPA Region VI were used. Third, first class 29 cent stamps of the American flag or a Country and Western singers commemorative were used. Fourth, the survey instrument or questionnaire was a white legal size (8 1/2" X 14") tri-folded piece of paper. The length of the paper allowed for the cover letter and survey questions to only be on one piece of paper, back and front. Fifth, the cover letter contained a plea for responses to encourage public opinion and the importance of it. Sixth, a postage paid business reply letter was provided, so the respondents would not incur any costs. Seventh, the cover letter included my signature to indicate a personal touch. Eighth, a Thanksgiving holiday deadline was used for memory association. Ninth, color coding of the business reply envelopes and surveys aided in tracking which state responded. Arkansas was white; Louisiana was yellow; New Mexico was blue; Oklahoma was red; and Texas was green. Tenth, a confidentiality statement was included in the cover letter to increase responses and satisfy OSU's Institutional Review Board requirements.

## Question Development: Independent and Dependent Variables

There were two different kinds of questions on the survey instrument. The first kind of questions were demographic in nature, and used as the independent variables for statistical measurement. Also, the questions involved the use of Likert scales for the answer selections. Dr. Warde and other sources were consulted to decide which demographics to use as the independent variable questions. The demographics chosen to use as independent variables were gender (question 1), age (question 2), children in the home (question 3), occupation (question 4), education (question 11), and income (question 16). The origin of the independent variable questions are presented in Table I.

The second kind of questions were non-demographic in nature, and used as the dependent variables for statistical measurement. Also, the questions involved the use of Likert scales for the answer selections. Multiple sources were consulted to decide which environmental areas to cover with the survey. Survey questions five (5) to ten (10) focus on public support for government and USEPA environmental action and efforts. Survey questions twelve (12), thirteen (13), and twenty (20A-G) focus on the public's individual environmental action. Questions fourteen (14), fifteen (15), and seventeen (17) focus on the public perception of connections between economics and the environment. Questions eighteen (18), nineteen (19), and twenty-one (21A-K) focus on the public perception of environmental problems and threat. The origin of the dependent variable questions are presented in Table II. The Nomenclature towards the beginning of this report includes the abbreviations and terms found in Table II.

## Survey Pre-test

A pre-test of the questionnaire was conducted to identify problems and or

**errors with the instrument. Some problems identified and corrected were confused wording, bias wording, and vague instructions. Overall, the survey instrument benefitted from the criticism, and improved the final copy of the survey instrument. At various times during the planning phase, I administered pre-tests to 20 individuals from a variety of education levels and departments of OSU. The pre-test individuals are tabularly presented in Table III.**

**TABLE 1**

**THE DEMOGRAPHIC CHARACTERISTIC QUESTIONS OR INDEPENDENT VARIABLE QUESTIONS BY NUMBER AND ORIGIN SOURCE USED IN THE PUBLIC OPINION POLL**

| Question Number | (trait) | Source of Origin | | | | |
|---|---|---|---|---|---|---|
| | | Krause | Saad | Jones/Dunlap | CEQ | Warde |
| 1 | (gender) | X | X | X | X | X |
| 2 | (age) | X | X | X | X | X |
| 3 | (children) | | | | | X |
| 4 | (occupation) | | | X | | X |
| 11 | (education) | X | X | X | X | X |
| 16 | (income) | X | X | | X | X |

Sources: CEQ 1980, Jones and Dunlap 1992, Krause 1993, Saad 1993, Warde 1990, and Warde 1993.

**TABLE II**

**THE DEPENDENT VARIABLE QUESTIONS' SOURCE OF ORIGIN TABULARLY INDICATED BY SURVEY ORGANIZATION AND SURVEY QUESTION NUMBER**

| Origin | Survey Question Number | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Survey Organization | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 13 | 14 | 15 | 17 | 18 | 19 | 20A-G | 21A-K |
| ABC/WP | | | | | | | | | | | | X | X | | |
| AmDm | | | | | | | | | | | X | | | | |
| Bwk/Hrrs | | | | | | | | | | | | | | | X |
| CBS/NYT | | X | | | | | | | | | | | | | |
| Cambridge | X | | | | | | | | | X | X | X | X | | X |
| CEQ | X | X | | | | | | | | | | | | | X |
| CEQ/RFF | X | | | | | | | | | | | | | | X |
| EPA/Rpr | | | | | | | | | | X | X | | | X | |
| Ford/HRN | X | | | | | | | | X | | | X | X | | X |
| Gallup | | | | | | | | | | | X | | | | X |
| Harris | X | | | | X | | | | | | | | | X | |
| Krause | X | X | X | | X | | X | X | | | | | | | |
| MNES | | | | | | | | | | | | | | | X |
| NORC | | X | | | | | | | | | | | | | |
| ORC | X | | | | | | | | | | | X | X | | |
| Roper | X | X | | | | | | | | | | | | | X |

**Note: Questions 7, 8, and 10 were predominantly constructed by myself after conducting a literature review of surveys from 1965 to 1993; the questions are a combination of the information obtained from that review.**

TABLE III

THE OSU INDIVIDUALS BY EDUCATION LEVEL AND DEPARTMENT THAT PARTICIPATED IN THE PRE-TEST OF THE SURVEY INSTRUMENT

| | Oklahoma State University Department | | | | |
|---|---|---|---|---|---|
| Education Level | Geology | Political Science | Statistics | Zoology | Environmental Sciences |
| Undergraduate | - | - | - | 2 | - |
| Graduate | 1 | 1 | 7 | 1 | 3 |
| OSU Faculty | 1 | 1* | 1* | 2* | - |

* indicates that one individual was a committee member.

# CHAPTER IV

# RESULTS AND ANALYSIS

## Response Rate

The overall survey response was fairly good, given the survey method. Using a statistically liberal interpretation, the response rate was 22.3 percent. A statistically liberal interpretation of response rate only compares the respondents and the non-respondents; it does not include the missing elements such as return to senders (Warde 1993). Warde (1993) indicated that self-administered mail questionaires average response rates of 25 percent. The lack of incentive or bribe could have played a major role in lowering the response rate. Table IV indicates the overall and state response rates.

## Simple Response Percentages to Dependent Variable Questions

This section covers the simple response percentages of the individuals in the survey. In the survey, there were four groups of dependent variable questions. First, questions 5 to 10 focused on public support government and USEPA environmental action. Second, questions 12, 13, and 20 A-G focused on the public's individual environmental action. Third, questions 14, 15 and 17 focused on the public's perception of economic and environmental relationships. Fourth, questions 18, 19, and 21A-K focused on the public perception of environmental problems and threat. All of the response percentages to the questions in the four groups are provided in Tables V and VI. A copy of the survey questionnaire is provided in Appendix E.

**TABLE IV**

**USEPA REGION VI OVERALL AND STATE SURVEY RESPONSE RATES**

| State | Surveys Mailed | Respondents | Non-Respondents | Response Rate (%) |
|---|---|---|---|---|
| Arkansas | 114 | 28 | 86 | 24.56 |
| Louisiana | 234 | 40 | 194 | 17.09 |
| New Mexico | 59 | 14 | 45 | 23.73 |
| Oklahoma | 180 | 53 | 127 | 29.44 |
| Texas | 956 | 209 | 747 | 21.86 |
| Total | 1543 | 344 | 1199 | 22.30 |

**TABLE V**

**QUESTION-ANSWER RESPONSE PRECENTAGES OF THE DEPENDENT VARIABLE GROUPS ONE AND TWO**

| Question Number | Answers and Response Percentages | | | | |
|---|---|---|---|---|---|
| ***Dependent Variable Group One*** | | | | | |
| | Don't Know | Too Much | About Right | Too Little | |
| 5 | 07.27 | 20.64 | 27.62 | 44.48 | |
| 6 | 13.66 | 18.31 | 23.26 | 44.77 | |
| | Don't Know | No Improvements | Moderate Improvements | Definite Improvements | |
| 7 | 25.00 | 08.43 | 54.94 | 11.63 | |
| | No | Yes | | | |
| 8 | 22.09 | 77.91 | | | |
| 9 | 46.80 | 53.20 | | | |
| | Don' t Know | Disagree | Moderately Agree | Strongly Agree | |
| 10 | 00.58 | 02.62 | 15.99 | 80.81 | |
| ***Dependent Variable Group Two*** | | | | | |
| | Unsympathethic | Neutral | Moderate Supporter | Strong Supporter | |
| 12 | 03.78 | 31.78 | 54.36 | 09.88 | |
| | No | Yes | | | |
| 13 | 81.40 | 18.6 | | | |
| | Never | Sometimes | Frequently | | |
| 20A | 29.94 | 24.71 | 45.35 | | |
| 20B | 07.85 | 24.13 | 68.02 | | |
| 20C | 19.77 | 24.71 | 55.52 | | |
| 20D | 40.41 | 12.50 | 46.51 | | |
| 20E | 60.17 | 25.58 | 14.24 | | |
| 20F | 43.02 | 41.68 | 15.12 | | |
| 20G | 41.28 | 22.09 | 36.63 | | |

TABLE VI

QUESTION-ANSWER RESPONSE PERCENTAGES OF THE DEPENDENT VARIABLE GROUPS THREE AND FOUR

| Question Number | Answer and Response Percentages | | | | |
|---|---|---|---|---|---|
| ***Dependent Variable Group Three*** | | | | | |
| | No | Yes | | | |
| 14 | 79.07 | 20.93 | | | |
| | Sacrifice Environment | | Sacrifice Economy | Both can Improve | |
| 15 | 00.00 | | 11.05 | 88.95 | |
| | Never | Sometimes | | Most of the Time | |
| 17 | 02.62 | 53.49 | | 43.90 | |
| ***Dependent Variable Group Four*** | | | | | |
| | Don't Know | Better | Same | Worse | |
| 18 | 11.92 | 33.72 | 18.02 | 36.34 | |
| 19 | 20.35 | 17.15 | 42.73 | 19.77 | |
| | Don't Know | No Threat | Not Much Threat | Moderately Serious Threat | Very Serious Threat |
| 21A | 06.98 | 06.40 | 23.26 | 36.92 | 26.45 |
| 21B | 00.87 | 02.33 | 06.69 | 32.85 | 57.27 |
| 21C | 01.45 | 02.33 | 02.91 | 21.80 | 71.51 |
| 21D | 04.95 | 08.72 | 12.21 | 29.07 | 45.06 |
| 21E | 16.98 | 02.91 | 21.80 | 30.52 | 27.91 |
| 21F | 23.26 | 07.27 | 25.29 | 29.65 | 14.53 |
| 21G | 00.29 | 01.16 | 03.78 | 26.16 | 68.60 |
| 21H | 02.91 | 03.20 | 09.59 | 36.05 | 48.26 |
| 21I | 00.58 | 02.03 | 09.59 | 30.81 | 56.98 |
| 21J | 01.74 | 01.45 | 05.52 | 23.26 | 68.02 |
| 21K | 04.09 | 04.09 | 09.59 | 32.56 | 49.71 |

Group One

Question 5 asked for the public's opinion on the "amount of government regulation in the area of environmental protection and improvement." Question 6 asked for the public opinion on the "amount of government spending in the area of environmental protection and improvement. Almost 45 percent of the respondents felt there is "too little" government spending and regulation in the area of the environmental protection.

Question 7 asked for the public's opinion on the USEPA's degree of improvements in recent years. About 67 percent of the respondents felt that the USEPA has made moderate to definite improvements in environmental protection. Only 8.43 percent of the respondents felt that the USEPA made no improvements.

Question 8 asked for the public's opinion on whether to increase resources to the USEPA without increasing taxes. Almost 78 percent of the respondents answered "yes", supporting resource increases to the USEPA without increasing taxes.

Question 9 asked for the public's opinion on whether they would be willing to pay $10 more per year in taxes if the money went exclusively for environmental clean-up of contaminated areas. Over 53 percent of the respondents answered "yes," supporting an increase in taxes $10 per year.

Question 10 asked for the public's opinion and to what degree they supported the USEPA's policy of re-use and recycle. A high 80.81 percent of the respondents "strongly agreed with the policy. Only 2.62 percent of the respondents disagreed with the policy.

Group Two

Question 12 asked for the public's opinion on individual participation in environmental issues. Slightly more than 64 percent of the respondents are moderate to strong supporters of personal environmental action. Only 3.78 percent of the respondents are "unsympathetic to personal environmental action.

Question 13 asked the respondents whether they were a member of an environmental organization. An overwhelming 81.40 percent of the respondents were not members of any such organizations. Only 18.6 percent of the respondents were in an environmental organization.

Question 20A-K asked for the survey individuals to express the degree of effort they perform in environmental activities. The percentages indicate that the respondents recycle cans and newspaper more often than motor oil and bottles, respectively. For the highest percentage reported, over 68 percent of the respondents indicated they recycle cans "frequently." For the most disappointing percentage reported, over 60 percent of the respondents indicated that they never car-pool. This percentage may be high due to the fact that all of the survey states are located in the south-west United States, thus having less of an urban influence. Additionally, only 37 percent of the respondents compost their house and yard waste frequently, but this figure is higher than the 18 percent reported in a 1992 survey by Allen and Sekscienski (1992).

Group Three

Question 14 asked for the public's opinion on whether they think business and industry will voluntarily take steps to protect and improve the environment. A high 79 percent of the respondents answered "no," indicating they don't believe business and industry will volunteer. This figure is higher than the reported 70

percent in a Ford Motor Company survey in 1990 (Shell 1990).

Question 15 asked for the respondents to choose between sacrificing the economy, the environment, or not sacrificing either. An astonishing 89 percent of the respondents answered that "both the economy and the environment can improve."

Question 17 asked for the public's opinion on the frequency to which they purchase so called environmentally friendly products. Only 44 percent of the respondents reported purchasing environmentally friendly products "most of the time," and 54 percent of the respondents reported purchasing environmentally friendly products "sometimes."

Group Four

Question 18 asked for the public's opinion on the national, overall United States, environmental quality since 1983. In mixed responses, 36 percent of the respondents believe the environment has gotten "worse," but 34 percent believe its gotten "better." Also, 18 percent believe it stayed the "same," and 12 percent didn't know.

Question 19 asked for the public's opinion on their local environmental quality since 1983. A high 43 percent believe their area has stayed the "same." Also, 20 percent believe the environment has gotten "worse," and 17 percent believe it has gotten "better." Finally, 20 percent of the respondents didn't know. This large of a "don't know" response percent could be explained by the states location nationally. Since the south-west is one of the fastest growing areas in the nation, then many of the respondents probably immigrated into the area from other places after 1983.

Question 21A asked for the public's opinion on the degree of threat posed by asbestos. Most of the respondents considered asbestos to be a "moderately

serious threat," but 26 percent believed it to be a "very serious threat."

Question 21B asked for the public's opinion on the degree of threat posed by air pollution. Only 57 percent of the respondents considered air pollution to be a "very serious threat," and 33 percent consider it to be a "moderately serious threat."

Question 21C asked for the public's opinion on the degree of threat posed by the treatment, storage and disposal (TSD) of hazardous waste (HW). A high 72 percent of the respondents considered the TSD of HW to be a "very serious threat," and 22 percent believe it to be a "moderately serious threat."

Question 21D asked for the public's opinion on the degree of threat posed by the depletion of the Ozone layer. Only 45 percent of the respondents believe depletion of the Ozone layer is a "very serious threat." Also, 29 percent believe it to be a "moderately serious threat."

Question 21E asked for the public's opinion on the degree of threat posed by newly introduced chemicals. The responses were relatively balanced among the upper threat answer choices. Slightly over 30 percent of the respondents believe newly introduced chemicals are a "moderately serious threat," and almost 28 percent believe them to be a "very serious threat." Also, 22 percent of the respondents believe there is not much threat. Most interesting is that 17 percent of the respondents didn't know there was a threat. A high "don't know" response percentage could be because the respondents are lacking information, or the question was poorly presented.

Question 21F asked for the public's opinion on the degree of threat posed by indoor radon. Only 30 percent of the respondents believe that indoor radon is a "moderately serious threat," and 15 percent believe it is a "very serious threat." Also, 25 percent believe it poses little or "not much threat." A high number of the respondents didn't know whether indoor radon posed a threat. These 23 percent probably didn't know enough to form an opinion on the problem because there is little publicity and media coverage on the problem, though many scientist

consider it to be very serious.

Question 21G asked for the public's opinion on the degree of threat posed by water pollution in the rivers, lakes, and oceans. Over 68 percent consider water pollution to be a "very serious threat," and 26 percent consider it to be a "moderately serious threat."

Question 21H asked for the public's opinion on the degree of threat posed by the generation and transport of HW. Only 48 percent of the respondents believe that the generation and transport of HW is a "very serious threat." Also, 36 percent of the respondents believe it to be a "moderately serious threat."

Question 21I asked for the public's opinion on the degree of threat posed by oil spills. A high 56 percent of the respondents believe that oil spills pose a "very serious threat, " and 31 percent believe that it poses a "moderately serious threat."

Question 21J asked for the public's opinion on the degree of threat posed by the contamination of underground water supplies. A very high 68 percent of the respondents believe that contamination of the underground water supplies poses a "very serious threat." And, 23 percent believe that it poses a "moderately serious threat."

Question 21K asked for the public's opinion on the degree of threat posed by the decline in wetlands. Only 50 percent of the respondents believe that the decline in wetlands is a "very serious threat."

Summary of the Responses

In group one, the public opinion data indicates that most respondents think there is "too little" government regulation and spending in the area of environmental protection and improvement. Also, a majority of the respondents feel that the USEPA in recent years has made moderate to definite improvements

in protecting the environment. Also, The public opinion data indicates that most respondents think the USEPA should have resources increased without raising taxes on the public, and that the respondents are willing to have their taxes raised up to $10 per year, if the money goes exclusively for environmental clean-up of contaminated areas (see Table V).

In group two, the public opinion data indicates that the respondents are moderately active supporters of environmental issues. Also, the respondents indicated that they were not members of environmental organizations. Additionally, the respondents indicated that they "frequently" recycle cans, newspapers, motor oil, and bottles, respectively (see Table V).

In group three, the public opinion data indicates that a majority of the respondents think business and industry will not volunteer to protect the environment, and that we need not sacrifice the economy or environment, because both can improve. Also, the respondents indicated they only "sometimes" purchase environmentally friendly products (see Table VI).

In group four, the public opinion is that the national environmental quality has gotten worse since 1983, but in their local areas environmental quality has stayed the same since 1983. Of the eleven environmental problems considered to be a very serious threat, the top three problems with the highest percentages were the TSD of HW, water pollution, and the contamination of underground water supplies; the last three were asbestos, indoor radon , and newly introduced chemicals (see Table VI).

## Individual Independent Variable Analysis

There were six different questions, demographic in nature, that were used as the independent variables in the survey analysis. The independent variables were gender (question 1), age (question 2), children in the home (question 3),

occupation (question 4), education level (question 11), and income level (question 16).

A Chi-squared analysis was performed on the individual independent variable associations with the questions in the dependent variable groups. In general, the Chi-squared analysis is commonly used to test the independence and dependence of the data. In my analysis, I chose my alpha level to be .05, which I compared to the probability values (p-values) resulting from the Chi-squared analyses to identify any significant relationships in the variables (Ott 1988). The p-values and results of the Chi-squared analyses on the individual independent variables by the dependent variable question groups are provided in Table VII.

Gender

In group one, a significant dependence was shown with the independent variable gender. The Chi-squared p-values indicated that gender was significant in questions 5 to 9, but not in question 10. The p-values were significant in questions 5 and 6 because of the weighted proportion of females that believe there is "too little" government regulation and spending in the area of environmental protection. The p-values indicated significance in question 7 due to the heavily weighted proportion of females that believe the USEPA has in recent years made moderate improvements in environmental protection. The p-values indicate significance in question 8 because of the heavily weighted proportion of females that support increasing resources to the USEPA without increasing taxes. The p-values indicate significance in question 9 because of the heavily weighted proportion of females that support raising their taxes up to $10 a year, if it goes exclusively towards environmental clean-up and improvement of contaminated areas.

In group two, a few significant dependences were shown with the

TABLE VII

PROBABILITY VALUES AND RESULTS OF A CHI-SQUARED ANALYSIS ON THE INDIVIDUAL INDEPENDENT VARIABLES BY THE DEPENDENT VARIABLE QUESTION GROUPS

| Survey Question Number | Independent Variables | | | | | |
|---|---|---|---|---|---|---|
| | Gender | Age | Children in Home | Occupation | Education | Income |
| 5 | .000 s | .002 s | .623 n | .003 s | .839 n | .018 s |
| 6 | .000 s | .000 s | .461 n | .000 s | .334 n | .001 s |
| 7 | .001 s | .001 s | .568 n | .294 n | .837 n | .050 s |
| 8 | .000 s | .244 n | .887 n | .265 n | .642 n | .023 s |
| 9 | .000 s | .001 s | .486 n | .009 s | .495 n | .936 n |
| 10 | .181 n | .386 n | .158 n | .101 n | .398 n | .013 s |
| 12 | .004 s | .544 n | .261 n | .306 n | .017 s | .167 n |
| 13 | .857 n | .065 *n | .523 n | .377 n | .004 s | .028 s |
| 20A | .025 s | .067 *n | .643 n | .175 n | .175 s | .038 s |
| 20B | .269 n | .056 *n | .453 n | .309 n | .603 n | .806 n |
| 20C | .523 n | .305 n | .956 n | .262 n | .015 s | .137 n |
| 20D | .188 n | .000 s | .206 n | .002 s | .378 n | .493 n |
| 20E | .001 s | .057 *n | .001 s | .000 s | .276 n | .013 s |
| 20F | .003 s | .929 n | .825 n | .002 s | .022 s | .021 s |
| 20G | .797 n | .251 n | .352 n | .847 n | .690 n | .847 n |
| 14 | .000 s | .521 n | .358 n | .327 n | .898 n | .722 n |
| 15 | .151 n | .326 n | .542 n | .898 n | .324 n | .132 n |
| 17 | .008 n | .279 n | .736 n | .622 n | .064 *n | .767 n |
| 18 | .033 s | .003 s | .018 s | .138 n | .503 n | .084*n |
| 19 | .004 s | .469 n | .298 n | .024 s | .703 n | .006 s |
| 21A | .000 s | .345 n | .977 n | .066 *n | .028 s | .072*n |
| 21B | .000 s | .009 s | .575 n | .067 *n | .412 n | .006 s |
| 21C | .000 s | .258 n | .125 n | .010 s | .124 n | .194 n |
| 21D | .000 s | .000 s | .883 n | .001 s | .930 n | .185 s |
| 21E | .000 s | .010 s | .031 s | .001 s | .136 n | .214 n |
| 21F | .000 s | .416 n | .155 n | .009 s | .041 s | .057*n |
| 21G | .000 s | .336 n | .596 n | .656 n | .210 n | .174 n |
| 21H | .000 s | .623 n | .540 n | .038 s | .192 n | .004 s |
| 21I | .000 s | .031 s | .150 n | .003 s | .131 n | .000 s |
| 21J | .000 s | .273 n | .400 n | .817 n | .108 n | .015 s |
| 21K | .001 s | .055 s | .774 n | .028 s | .407 n | .300 n |

s = significant at alpha .05 level, $p \leq .05$
n = not significant at alpha .10 level, $p > .10$
*n = significant at alpha .10 level, $.05 < p \leq .10$

independent variable gender. The p-values indicate significance in question 12. It was significant because the females responses heavily favored answers such as "strongly active supporter" and "moderately active supporter" or environmental issues, and the male responses heavily favored answering a "neutral" or "unsympathetic" on environmental issues. In question 20A, the p-value indicated significance because the female responses on recycling bottles heavily favored answers such as "frequently" and "sometimes," where the male responses heavily favored answering "never." Questions 20E and 20F asked for the public's degree of environmental actions such as car-pooling and cutting back on auto use. The p value for these questions indicated significance because female responses heavily favored answering "frequently," and the male responses favored answering "never." All other questions in group two were found to be not significant in the Chi-squared analysis.

In group three, only one significant dependence was shown by the independent variable gender. The p-value was significant in question 14 because the female respondents believed that business and industry would not volunteer to take steps to protect and improve the environment, but males did believe that business and industry would volunteer.

All dependent variable questions in group four resulted in significant findings by the independent variable gender. In question 18, the p-value was significant because female responses heavily favored the belief that since 1983 the national environmental quality has gotten "worse." In question 19, the p-value was significant because male responses heavily favored the belief that since 1983 their local environmental quality has stayed the "same." In questions 21B, 21C, 21D, and 21G to 21K, the p-values were significant because female responses heavily supported the position that selected environmental problems were a "very serious threat." In these questions, the environmental problems were air pollution (21B), TSD of HW (21C), Ozone layer depletion (21D), water pollution (21G), Generation and transportation of HW (21H), oil spills (21I,

contamination of underground water supplies (21J), and the decline in wetlands (21K). In questions 21A, 21E, and 21F, the p-values indicated significance because female responses heavily weighted the position that these selected environmental problems were a "moderately serious threat." In these questions, the environmental problems were asbestos (21A), newly introduced chemicals (21E), and indoor radon (21F).

## Age

The survey sample was organized into five different age classes: 18 to 24 years old, 25 to 34 years old, 35 to 44 years old, 45 to 54 years old, and 55 plus years old. In group one, four significant associations were noted because of the independent variable age. The p-values indicated significance questions 5, 6, 7 and 9. Questions 5 and 6 asked for public opinion on government regulation and spending on the environment. In questions 5 and 6, the p-values indicated significance because of the high proportion of "too little" responses by individuals in the 25 to 34 and 35 to 44 age classes. Question 7 asked for public opinion on the USEPA improvements in recent years. In question 7, the p-value indicated significance because of the high proportion of "moderate improvements" responses by individuals in the 35 to 44 age class. Question 9 asked for public opinion on raising taxes $10 a year to go exclusively for environmental clean-up. In question 9, the p-values indicated significance because of the high proportion of "yes" responses by individuals in the 35 to 44 age class.

In group two, only one significant association was noted because of the independent variable age. Question 20D asked for the respondents personal participation in environmental activity of recycling motor oil. In question 20D, the p-value indicated significance because of the high proportion of "frequently" responses from the 35 to 44 age class, and the high proportion of "never"

responses from the 55 plus age class.

In group three, no significant associations were noted because of the independent variable age. In group four, six significant associations were noted because of the independent variable age. Question 18 asked for public opinion on the national environmental quality since 1983. In question 18, the p-value indicated significance because of the high proportion of "worse" responses by individuals in the 25 to 34 age class, and the high proportion of "better" responses by individuals in the 35 to 44 age class. Question 21B asked for respondents opinion on the degree threat posed by the air pollution problem. question 21B, the p-value indicated significance because of the high propor of "very serious threat" responses by individuals in the 25 to 34 age class, ar high proportion of "moderately serious threat" responses by individuals in tl plus age class. Question 21D asked for the respondents opinion on the degr threat posed by the Ozone layer depletion problem. In question 21D, the p- indicated significance because of the high proportion of "very serious threa responses by the 25 to 34 age class, and the high proportion of "moderately serious threat" responses by individuals in the 35 to 44 age class. Question asked for the respondents opinion on the degree of threat posed by the introduction of new chemicals. In question 21E, the p-value indicated significance because of the high proportion of "very serious threat" respons individuals in the 34 to 44 age class, and the high proportion of "moderatel serious threat" responses by individuals in the 55 plus age class. Question asked for the respondents opinion on the degree of threat posed by oil spill problems. In question 21I, the p-value indicated significance because of th h proportion of "very serious threat" responses by individuals in the 25 to 34 class, and the high proportion of "moderately serious threat" responses by individuals in the 35 to 44 age class. Question 21K asked for the respondents opinion on the degree of threat posed by the decline in wetlands. In question 21K, the p-value indicated significance because of the high proportion of "very

serious threat" responses by individuals in the 35 to 44 age class.

## Children in the Home

The survey data was organized into two home classes: individuals that have children living in the home, and individuals that do not have children living in the home. The Chi-squared analysis revealed significance in only three questions out of the four groups of dependent variable questions. Question 20E asked for the respondents personal environmental activity of car-pooling. In question 20E, the p-value indicated significance because of the high proportion of "never" responses by individuals that don't have children living in the home. Question 18 asked for public opinion on the national environmental quality since 1983. In question 18, the p-value indicated significance because of the high proportion of "better" responses by individuals that do have children living in the home. Question 21E asks for the respondents opinion on the degree of threat posed by newly introduced chemicals. In question 21E, the p-value indicated significance because of the high proportion of "moderately serious threat" responses by individuals that do not have children in the home.

## Occupation

The survey data was organized into six different occupation classes. The first class is Managerial and Professional which covers lawyers, executive managers, engineers, scientists, and health related occupations. The second class is Technical and Administrative support which covers communications, banking, insurance, real estate, retail sales, clerical and secretarial occupations. The third class is Agricultural and Recreational which covers farming, forestry, fishing, travel, and entertainment occupations. The fourth class is Production,

Operations, and Labor which covers construction, mining, manufacturing, transportation, utilities, housewives and durable good repairers. The fifth class is Education which covers teachers, instructors, and professors at elementary, secondary, and college levels. The sixth class is Retired which covers those individuals who left their occupations after years of service. The six classes are a hybrid construction of the occupational groups from the Census (Famigetti 1994) and the occupational groups in the Standard Industrial Classification codes (Lea 1988).

In group one, there were three questions that indicated significance. Questions 5 and 6 asked for the public's opinion on the amount of government regulation and spending in the area of environmental protection and improvement. In Questions 5 and 6, the p-value indicated significance because a high proportion of individuals in the Technical/Administrative and Educational occupations answered the questions as "too little." Question 9 asked the public whether they were willing to have taxes raised $10 if the money went exclusively for environmental clean-up. In Question 9, the p-value indicated significance because a high proportional of the individuals in the Educational occupations answered "yes."

In group two, there were three questions that indicated significance. Question 20D asked for the respondents personal environmental activity of recycling motor oil. In Question 20D, the p-value indicated significance because a high proportion of the respondents with a Managerial/Professional occupation answered "frequently," and the respondents in Retired status answered "never." Question 20E asked for the respondents personal environmental activity of car-pooling. In question 20E, the p-value indicated significance because a high proportion of the respondents with a Managerial/Professional occupation answered "never." Question 20F asked the respondents personal activity of cutting back on auto usage. In question 20F, the p-value indicated significance because a high number of the respondents with a Managerial/Professional

occupation answered "never," and respondents with a Technical/Administrative occupation answered "sometimes."

No significant p-values were indicated in dependent variable questions for group three. However in group four, there were eight questions that showed significance. Question 19 asked for the respondents opinion on their local environmental quality since 1983. In question 19, the p-value indicated significance because a high proportion of the respondents with a Agricultural/Recreational occupation answered "same." Question 21C asked for the respondents opinion the degree of threat posed by the TSD of HW problem. In question 21C, the p-value indicated significance because a high proportion of the respondents with an Educational occupation answered "very serious threat." Question 21D asked for the respondent's opinion on the degree of threat posed by the depletion of the Ozone layer. In question 21D, the p-value indicated significance because a high proportion of the respondents with Technical/Administrative and Educational occupations answered "very serious threat." Question 21E asked for the respondent's opinion on the degree of threat posed by newly introduced chemicals. In question 21E dealing, the p-value indicated significance because there was a lack of responses in the "no threat" answer when all other choices were somewhat balanced. Question 21F asked for the respondent's opinion of the degree of threat posed by indoor radon. In question 21F, the p-value indicated significance because the respondents with a Managerial/Professional occupation answered either "not much threat" or "moderately serious threat." Questions 21H and 21I asked for the respondent's opinion on the degree of threat posed by the generation and transport of HW , and oil spill problem. In questions 21H and 21I, the p-values indicated significance because the respondents with Technical/Administrative and Educational occupations answered "very serious threat." Question 21K asked for the respondent's opinion on the degree of threat posed by decline in wetlands. In question 21K , the p-value indicated significance because respondents with

Technical/Administrative occupations answered "very serious threat."

## Education Level

The survey data on education level (question 11) was organized into three levels: High School and below, some College and Bachelors, and Graduate and Doctoral. There were only seven questions that showed significance with education level. No significant p-values were indicated in dependent variables questions group one and three.

In group two, there were five questions that showed significance. Question 12 asked for the respondents degree of support in environment action. In question 12, the p-value indicated significance because a high proportion of the respondents with a College/Bachelors education level answered as "moderately active supporters." Question 13 asked whether the respondents were a member of an environmental organization. In question 13, the p-value indicated significance because a high proportion of the respondents with a College/Bachelors education level answered "no." Questions 20A, 20C, and 20F asked for the respondent's degree of environmental actions such as recycling cans, recycling newspapers, and cutting back on auto usage. In question 20A, 20C, and 20F, the p-value indicated significance because a high proportion of the respondents with a College/Bachelors education level answered "sometimes."

In group four, there were two questions that showed significance. Questions 21A and 21F asked for the respondent's opinion on the degree of threat posed by asbestos and indoor radon. In questions 21A and 21F, the p-value indicated significance because a high proportion of the respondents with a College/Bachelors education level answered "moderately serious threat."

Income Level

The survey data on income level were organized into four different income classes. The first class is $19,999 a year and below. The second class is $20,000 to $39,999 a year. The third class is $40,000 to $74,999 a year. And finally, the fourth class is $75,000 a year and above. Numerous questions were showed to be significant in all the dependent variable groups except group three.

In group one, there were five questions that were significant. Questions 5 and 6 asked for the public's opinion on government regulation and spending on environmental protection and improvement. In questions 5 and 6, the p-value indicated significance because a high number of the respondents in the $20,000 to $39,999 income class answered "too little." Question 7 asked for the public's opinion of the USEPA improvements in recent years. In question 7, the p-value indicated significance because a high number of the respondents in the $20,000 to $39,999 and $40,000 to $74,999 income classes answered "moderate improvements." Question 8 asked whether the respondents support increasing resources to the USEPA without raising taxes. In question 8, the p-value indicated significance because a high number of the respondents in the $20,000 to $39,999 income class answered "yes." Question 10 asked for the public's opinion on the degree to which they support the USEPA's policy of re-use and recycle. In question 10, the p-value indicated significance because a high number of the respondents in the $75,000 plus income class answered "strongly agree."

In group two, there were four questions that showed significance. Question 13 asked whether the respondents were a member of environmental organization. In question 13, the p-value indicated significance because a high number of the respondents in the $40,000 to $74,999 income class answered "no." Questions 20A, 20E, and 20F asked for the respondents frequency of performing environmental activities such recycling cans, car-pooling, and

cutting back on auto use. In questions 20A, 20E, and 20F, the p-values indicated significance because a high number of the respondents in the $40,000 to $74,999 income class answered "never."

In group four, there were six questions that showed significance. Question 19 asked the respondents opinion of their local environmental quality since 1983. In question 19, the p-value indicated significance because a high number of the respondents in the $40,000 to $74,999 income class answered "moderately serious threat." Question 21B asked for respondents opinion of the degree of threat posed by the air pollution problem. In question 21B, the p-value indicated significance because a high number of the respondents in the $19,999 below income class, and the $20,000 to $39,999 income class answered "very serious threat." Question 21D asked for the respondents opinion on the degree of threat posed by Ozone Layer depletion problem. In question 21D, the p-value indicated significance because a high number of the respondents in the $20,000 to $39,999 income class answered " very serious threat." Question 21H asked for the respondents opinion on the degree of threat posed by the generation and transport of HW. In question 21H, the p-value indicated significance because a high number of the respondents in the $19,999 and below income class answered "very serious threat." Question 21I asked for the respondents opinion on the degree of threat posed by oil spill problems. In question 21I, the p-value indicated significance because a high number of the respondents in the $19,999 and below income class and the $20,000 to $39,999 income class answered "very serious threat." Question 21J asked for the respondents opinion on the degree of threat posed by the contamination of underground water supplies. In question 21J, the p-value indicated significance because a high number of respondents in the $20,000 to $39,999 income class answered "very serious threat."

## Two-way Independent Variable Interactions in Dependent Variable Groups

This section covers the two-way independent variable interactions in the four dependent variable groups. A categorical data analysis was conducted on the survey data. The analysis was a Logistical regression which indicates trends in categorical data. There are three kinds of categorical variables. First, nominal variables don't have a natural order. Second, ordinal variables do have a natural order. Third, interval variables have an exact number that has a definite numerical distance. For example, blood pressure is frequently used as an interval variable by the medical field (Agresti 1990). In this survey, four of the independent variables (age class, children in the home, education level, and income class) are ordinal categorical variables. Normally, gender is a nominal variable, but it was included as a ordinal variable for this survey because it has a two point distinction thus not a statistical violation. Occupation has multiple distinctions, and cannot be justifiably used as an ordinal variable for this analysis (Payton 1994).

In summary, the significant interactions between the various independent variables will be discussed in the four dependent question group. The results of the Logistical regression analysis on the two-way and three-way independent variable interactions by dependent variable groups are provided in Appendix C. A summary of the significant two-way and three-way independent variable interactions in the dependent variable question groups are provided in Appendix D.

### Group One

Questions on government and USEPA support of environment action are in group one. Question 5 asked for public opinion on the amount of government

regulation on environmental protection and improvement. Question 6 asked for the public's opinion on the amount of government spending on environmental protection and improvement. Question 7 asked for the public's opinion on the degree of the USEPA's environmental improvements. Question 8 asked the respondents whether they supported increasing resources to the USEPA without increasing taxes. Question 9 asked the respondents whether they support raising taxes $10 a year to go exclusively for environmental cleanup and improvement of contaminated areas. Question 10 asked the respondents to what degree they agree with the USEPA's policy of re-use and recycle.

Question 5. The two-way interactions of gender and children in the home was significant because females with children in the home indicated a higher chance of answering "too little" on the amount of government regulation on the environment. However, males with or without children in the home responded in relatively equal proportion across the Likert scale of answer choices. The two-way interactions of age class and income class was significant because as the respondents increase in income and in age, then the probability of a "too little" response increases until it reaches the 55 years old and above class. The two-way interactions of age class and children in the home was significant because as age increases in the respondents with children in the home, then the probability of a "too little" response increases until it reaches the 45 years old and above age classes. The two-way interactions of data income class and children in the home variables was significant because individuals with a income of $39,999 and below with or without children in the home have a strong probability of a " too little" response. Individuals with an income between $40,000 to $74,999 that have children in the home have a strong probability of a "too little" responses (see Appendix F).

Question 6. The two-way interactions of gender and children in the home were significant because females with or without children in the home were more likely to answer "too little." However, the males with or without children in the

home responded "too little" and "too much" on a relatively equal frequency which indicated a bimodal distribution trend. The two-way interactions of age class and income class was significant because as age increases and income increases, then the probability of a "too little" response increases until reaching the 45 years old and above age classes. The two-way interactions of age and children in the home was significant because as age increases with individuals that have children in the home, the probability of a "too little" response increase until the 45 years old age class then the "too little" responses decrease. The two-way interactions of income and children in the home was significant because if individuals with children in the home that income increases, then the probability of a "too little" response increases (see Appendix G).

Question 7. The two-way interactions of gender and children in the home were significant because females without children in the home indicated a higher chance of answering "moderate improvements." The two-way interactions of gender and education level were significant because females without children in the home and with increased education levels indicated a higher chance of answering "moderate improvement." The two-way interactions of age and income were significant because if age increases and income level increases, then there was a higher probability of answering "moderate improvements." The two-way interactions of age and children in the home were significant because if age increases in the respondents with children, then the probability of a "moderate improvement" response increases until the it reaches the 45 years old and above age classes. The two-way interactions of income and children in the home were significant because at the $40,000 and above income levels, the probability of a "moderate improvement" responses increases. The two-way interactions of income and education level were significant because as income increases and education level increases, then the probability of a "moderate improvement" and "definite improvement" responses increase (see Appendix H).

Question 8. The two-way interactions of gender and income level were significant because females at the $20,000 to $39,999 income level have an increased chance of answering "yes." The two-way interactions of gender and children in the home were significant because females with children in the home indicated an increased probability of answering "yes." The two-way interactions of age class and income class were significant. They were significant because as age increased and income increased, the "yes" responses increased until they reached the 45 years old and above age classes. The two-way interactions of age class and children in the home were significant. They were significant because age increases in individuals with children indicated an increase in "yes" responses. The two-way interactions of age class and education level were significant because as age increased and education increased, then "yes" responses increased until reaching the 45 years old and above age classes (see Appendix I).

Question 9. The two-way interactions of age class and income level were significant because age increases and income increases resulted in increased "yes" responses until reaching the 44 years old and above age classes, and $75,000 and above income level. The two-way interactions of age class and children in the home were significant. They were significant because age increases in the individuals with children in the home resulted in the increased probability of answering "yes" until the 45 years old and above age classes. The two-way interactions of age class and education level were significant because as education level and age increases then "yes" responses increase until the 44 years old and above age classes. The two-way interactions of income level and children in the home were significant. They were significant because respondents with children in the home and a $39,999 and below income level showed an increases probability of a "yes" response. The two-way interactions of income level and education level were significant because increases in income and education level indicated an increased frequency of "yes" responses. The two-way interactions of

education level and children in the home were significant because respondents with children in the home and a college and/or bachelor level of education indicated increases in "yes" responses (see Appendix J).

Question 10. The two-way interactions of gender and education level were significant because females a with college and/or bachelor education showed a increased probability of "strongly agree" responses. The two-way interactions of age class and income level were significant. They were significant because as age increased and income increased then the frequency of "strongly agree" responses increased. The two-way interactions of income level and children in the home were significant because as income increased for individuals with children in the home, then "strongly agree" responses increased. The two-way interactions of income level and education level were significant. They were significant because as income increased and education level increased, then the "strongly agree" responses increased (see Appendix K).

Group Two

Question 12. The two-way interactions of age class and income level were significant. They were significant because if age increased and income increased, then moderate supporter responses increased until the 45 years and above age classes. The two-way interactions of age class and children in the home were significant because age increases in respondents with children in the home resulted in increases in moderate supporter responses until the 45 years old and above age classes. The two-way interactions of age class and education level were significant. They were significant because increased age and education resulted in an increase in moderate supporter responses. The two-way interactions of income level and children in the home were significant. They were significant because moderate supporter responses increased when individuals with children in the home had income levels of $40,000 and above. The two-way interactions

of income level and education level were significant because increases in income and education resulted in an increased frequency of moderate supporter responses (see Appendix L).

Question 13. The two-way interactions of age class and children in the home were significant. They were significant because individuals in the age groups 18 to 24, 45 to 54, and 55 plus year of age that do not have children in the home answered "no" with relatively high probability. The two-way interactions of income level and children in the home were significant because individuals with lower income levels and without children in the home indicated a skewed proportion of "no" responses. The two-way interactions of income level and education level were significant. They were significant because individuals with increased education and income levels responded "no" with a relatively high probability (see Appendix M).

Question 20A. The two-way interactions of gender and age class were significant because as female ages increased, the number of "frequently" responses increased. The two-way interactions of gender and education level were significant. They were significant because as males increased in education level, the more they responded "never," and as females increased in education level, the more likely they responded "frequently" (see Appendix N).

Question 20B. The two-way interactions of age class and income level were significant. They were significant because as age increased and income level increased, then the probability of a "frequently" response increased until the 55 and above age class and the $75,000 and above income level. The two-way interactions of age class and children in the home were significant because as age increased in the individuals with children in the home, the probability of a "frequently" responses increased until the 45 years old and above age classes. The two-way interactions of age class and education level were significant because as age increased in individuals with college and or bachelor's education level, then the probability of a "frequently" response increased. The two-way interactions of

income class and children in the home were significant. They were significant because individuals with incomes of $20,000 and more that do not have children in the home indicated a high probability of answering "frequently." The two-way interactions of income level and education level were significant because as education level increased and income level increased, then the probability of a "frequently" responses increased (see Appendix O).

Question 20C. The two-way interactions of gender and age class were significant because as females age increased, the probability of a "frequently" response increased until reaching the 55 and above age class. The two-way interactions of gender and education level significant because females with a college and/or bachelors education level indicated a higher probability of a "frequently" response. The two-way interactions of age class and children in the home were significant. They were significant because as age increased in the individuals with children in the home, the probability of a "frequently" response increased until the 45 years old and above age classes (see Appendix P).

Question 20D. The two-way interactions of gender and income level were significant because as income level increased in males, then the probability of a "frequently" response increased until reaching the $75,000 and above income level. The two-way interactions of gender and education level were significant because males with a college and/or bachelors education level showed a higher probability of "frequently" responses. The two-way interactions of age class and education level were significant. They were significant because a high proportion of individuals in the 35 to 44 years old class with a college and/or bachelors education level answered "frequently." Also, a high proportion of individuals in the 55 years old and above age class with a college and/or bachelors education level answered "never" (see Appendix Q).

Question 20E. The two-way interactions of age class and education were significant. They were significant because as age increases and income level increases, then the probability of a "never" response increased (see Appendix R).

Group Three

Question 14. The two-way interactions of age class and children in the home were significant. They were significant because individuals in the age class 35 to 44 with children in the home, and individuals in the 55 years old and above age class indicated a high probability of a "no" response. The two-way interactions of gender and children in the home were significant. They were significant because males without children in the home indicated an increased probability of answering "no," and females with children in the home indicated an increased probability of answering "no" (see Appendix S).

Question 17. The two-way interactions of gender and age class were significant because as males increased in age, the probability of a "same" response increased. The two-way interactions of gender and income level were significant because the probability of a "same" response increases with males that have an income of $40,000 to $74,999. The two-way interactions of age class and education level were significant because individuals in the 35 to 44 years old age class that have an college and/or bachelors education level responded "most of the time" (see Appendix T).

Group Four

Question 18. The two-way interactions of gender and age class were significant because females in the 25 to 34 and 45 to 54 age classes indicated a high number of "most of the time" responses. The two-way interactions of income level and education level were significant. They were significant because individuals with an income level of $40,000 to $74,999, and college and/or bachelors to Graduate and/or Doctoral education levels indicated a high number

of "better" responses (see Appendix U).

Question 19. The two-way interactions of gender and income level were significant. They were significant because males in the higher income levels indicated increased responses of "better" or "same." Also, females at the lower income levels responded with "worse" or "same." The two-way interactions of income level and education level were significant. They were significant because individuals with $19,999 and below income and have a college and/or bachelors education level (see Appendix V).

Question 21A. The two-way interactions of age class and education level were significant. They were significant because as age increased and education level increased, then "moderate" to "very serious threat" responses increased until reaching the 45 years old and above age classes and Graduate and/or Doctoral education level (see Appendix W).

Question 21D. The two-way interactions of gender and children in the home were significant because males without children in the home indicated a higher probability of a "very serious threat responses. The two-way interactions of age class and children in the home were significant because individuals in the 35 to 44 years old age class that have children in the home indicated a high frequency of "moderate" to "very serious threat" responses (see Appendix X).

Question 21E. The two-way interactions of gender and income level were significant because females at the lower income levels indicated a high probability of "moderate" to "very serious threat" responses. Also, males at the higher levels of income indicated a high probability of "not much" to "moderately serious threat" responses. The two-way interactions of income level and education level were significant. They were significant because individuals with an income of $20,000 to $39,999 and an education level of college and/or bachelor more frequently indicated "moderately serious" responses (see Appendix Y).

Question 21F. The two-way interactions of gender and income level were

significant because males with higher incomes showed increased "not much threat" responses. The two-way interactions of age class and income level were significant. They were significant because individuals ages 35 to 44 with $20,000 to $39,999 indicated a higher probability of "moderately serious threat" responses. The two-way interactions of age class and education level were significant. They were significant because individuals in the age class 35 to 44 with college and/or bachelors educations indicated a high probability of "not much" to "very serious threat" responses (see Appendix Z).

Question 21G. The two-way interactions of age class and education level were significant because as age increasing in the individuals with a college and/or bachelors education level, then the probability of "very serious threat" responses increased until reaching the 45 years old and above age classes. The two-way interactions of education level and children in the home were significant because individuals with children in the home that have an increased level of education indicated a higher probability of "moderate" to "very serious threat" responses (see Appendix AA).

Question 21H. The two-way interactions of income level and education were significant. They were significant because as education and income levels increased, so did the probability of "very serious threat" responses until the Graduate and/or Doctoral level and $75,000 plus income level (Appendix BB) .

Question 21I. The two-way interactions of education level and children in the home were significant. They were significant because individuals without children in home and upper education level indicated a higher probability of "moderate" to "very serious threat" responses (see Appendix CC).

Question 21J. The two-way interactions of income level and children in the home were significant because as income level increased with individuals that have children in the home, so did the probability of a "very serious threat" response until the $75,000 plus income level (see Appendix DD).

Question 21K. The two-way interactions of gender and income level were

**significant. They were significant because males with an income of $40,000 to $74,999 indicated an increased probability of "very serious threat" responses, and females with an income of $20,000 to $39,999 indicated an increased probability of "very serious threat" responses. The two-way interactions of gender and education level were significant because females with increased education levels indicated a high probability of "very serious threat" responses. The two-way interactions of age class and education level were significant. They were significant because college and/or bachelors educated individuals indicated increased "very serious threat" responses as age increased until the 55 year old and above age class. The two-way interactions of income level and education level were significant because as education and income increased, so did the probability of "very serious threat" responses (see Appendix EE).**

# CHAPTER V

# CONCLUSIONS

In this chapter, the results of this public opinion survey are discussed in comparison to the continuous survey studies conducted since 1965. The conclusions about the simple response percentages will be discussed. Then, the conclusions about the individual independent variable interactions of demographic characteristics are discussed in relation to environmental concern. Finally, the conclusions about the two-way independent variable interactions of demographic characteristics are discussed in relation to environmental concern.

## The Simple Response Percentages

In general, the simple response percentages are encouraging and support the conclusion that pro-environmental concern is increasing. The survey questions that deal with government and USEPA's environmental actions (Group 1) demonstrate an increasing pro-environment concern. Evidence from this research is consistent with the earlier 1990s trends discussed in the Literature Review, Chapter II (Dunlap 1991; Krause 1993; and Shell 1990).

When compared to earlier studies, the survey questions that dealt with individual environmental action (Group 2) indicate that environmental concern is increasing. Also, this survey's results are consistent with prior survey findings (Allen and Sekscienski 1992; CEQ 1980; Dunlap 1991; Dunlap, Gallup and Gallup 1992; Krause 1993; and List 1993). Responses to questions on recycling may have been influenced by the existence of mandatory curb-side recycling in some selected cities. Some of the respondents commented that they didn't recycle

that frequently until the mandatory recycling was implemented.

Public perception of economic and environmental relationships also seem to demonstrate a pro-environment concern. Evidence from this survey suggests that people are purchasing more "environmentally friendly" products than in the past, and that the environment and economy can both improve without sacrificing either. This is consistent with the findings of prior studies that pro-environment concern is increasing in the area of environmental and economic relationships (Allen and Sekscienski 1992; CEQ 1980; Dunlap 1991; Dunlap, Gallup and Gallup 1992; Krause 1993; and Shell 1990).

The survey questions that deal with the public's perception of environmental problems indicate that pro-environment public concern is increasing. The evidence suggests that the public is most concerned with the treatment, storage, and disposal of hazardous waste, water pollution, and the contamination of underground water supplies. The high rate of concern on hazardous waste is consistant with Focht's study (1992). In earlier surveys, the public indicated air pollution as a leading concern (CEQ 1980; and Shell 1990). Though this survey indicated concern for air pollution, it was not one of the top three leading concerns.

Comparing public opinion conclusions is murky at best because of differences in survey design such as sampling method, geographic location, survey population, wording of questions, and statistical analytic procedures. However, the evidence resulting from this survey demonstrate with a great amount of confidence that pro-environment concern is prominent and increasing. In my opinion, this is positive news since Region VI has been shown in the past to be less environmentally pro-active than the other nine regions.

## Demographic Characteristics: Individual Independent Variables

The results of this study indicate consistency with earlier studies of the

demographic associations that may have environmental concern (Jones and Dunlap 1992; Krause 1993; Van Liere and Dunlap 1980; and Warde 1993). These studies concluded that college educated middle-age females with children in the home that worked in non-industry related occupations and had a middle class income were more likely to be environmentally concerned and give pro-environment responses on surveys.

This study confirms that females are more likely to be environmentally concerned, especially in the responses to questions about government and USEPA support for environmental action (Group 1), and the perception of environmental problems and threat (Group 4).

When examining age classes, the 35 to 44 age class is more likely to be environmentally concerned, especially in the responses to questions about government and USEPA environmental action (Group 1). This finding suggests that the baby boomers are a major force in the environmental movement.

When examining the various occupations of the respondents, there was a significant relationship between environmental concern and environmental responses from individuals working in Education and Technical/Administrative positions. People in these occupations indicated responses that are strongly significant in questions about environmental problems and threat (Group 4).

There was a significant relationship between environmental concern and pro-environment responses by individuals in the $20,000 to $39,999 a year income class. These individuals' responses are a particular influence in questions about governmental and USEPA environmental actions (Group 1).

### Demographic Characteristics: Two-way Independent Variable Interactions

In questions that focus on government and USEPA environmental actions (Group 1), there are three two-way independent variable interactions that are significant. First, the relationship of age class and income level are significant,

as age and income levels increase, the probability of a pro-environment responses increases until the age of 45 and above and the income level of $75,000. Second, the relationship between environmental concern, age class and children in the home are significant, as age increases in individuals with children in the home, the probability of a pro-environment response increases as well. Third, the relationship of environmental concern, and income level and children in the home are significant, as the income level increases by the individuals with children in the home, the probability of a pro-environment response increases.

In questions that focus on public's individual environmental action (Group 2), there are two two-way independent variable interactions that indicate a strong significance. First, the relationship between environmental concern, and age class and children in the home are significant, as age increases in individuals with children in the home, the probability of a pro-environment response increases until reaching the 55 years old and above class. Second, the relationship between environmental concern, and age class and education level are significant, as age increases in individuals with a college/bachelors education, then the probability of a pro-environment response increased.

In questions that focus on economic and environmental relationships (Group 3), there are no two-way independent variable interactions that indicate a strong significance. However, when there was a slight indication of significance, gender seemed to be strongest variable in the various combinations.

The following findings support the elitist theory on environmental concern as presented in the Literature Review, Chapter II ( Buttel and Flinn 1974; Grossman and Potter 1977; and Tucker 1989). In questions that focus on the public's perception of environmental problems and threat (Group 4), there are three two-way independent variable interactions that indicate a strong significance. First, the relationship of environmental concern, and gender and income level are significant, as female respondents income increases, the probability of a pro-environment response increases. Second, the relationship of

**environmental concern, and age class and education level are significant, as age increases in the college/bachelor's educated individuals, the probability of a pro-environment response increases until reaching the 55 and above age class. Third, the relationship of environmental concern, and income level and education level are significant, as income level increases in the college/bachelor's educated individuals, then the probability of a pro-environment response increases.**

# CHAPTER VI

## SUGGESTIONS FOR FURTHER RESEARCH

As mentioned earlier, this study provided an additional link in the chain of public opinion surveys, so it is highly probable that future surveys in various forms will cover similar issues. However, I believe further research should be conducted that concentrates on USEPA efforts in the ten regions. I have five suggestions for further research in this area.

First, this kind of research should be extended nationally, then a comparative study could be conducted to rank the degree of pro-environment public opinion trends and results in the ten USEPA regions.

Second, the dependent variable questions groups should be expanded to include more questions focused on economic and environmental relationships. Expanding research on questions about consumer behavior could develop pro-environment supply and demand theories.

Third, the data from this study should be further analyzed to include measuring the dependence of responses between the five Region VI States.

Fourth, the Logistical Regression analysis resulted in significant relationships between three-way independent variable interactions and environmental concern. However, the reasons for the significance within the variables interactions was not presented. The three-way interaction of income level, children in the home, and education level is significant in dependent variable questions that deal with government and USEPA environmental actions. Further research should explain why this interaction is significant. The three-way interaction of gender, age class, and education level is significant in dependent variable questions that deal with the individual environmental

actions, and the public's perception of environmental problems and threat. Further research should explain why this interaction is significant. The three-way interaction of age class, income level, and education level is significant in dependent variable questions that deal with the individual environment actions. Further research should explain why this interaction is significant. The results of the Logistical Regression analysis on these three-way independent variable interactions in dependent variable groups are provided in Appendix C. A summary of the significant three-way independent variable interactions in the dependent variable question groups are provided in Appendix D.

Finally, the statistical analyses that were conducted on the data might imply that a four-way independent variable interaction is significant in question 10. Question 10 asked for the degree of support by the public on the USEPA's policy of re-use and recycle. The significant four-way interactions are between age class, income level, education level, and children in the home. Further research should explain why this interaction is significant.

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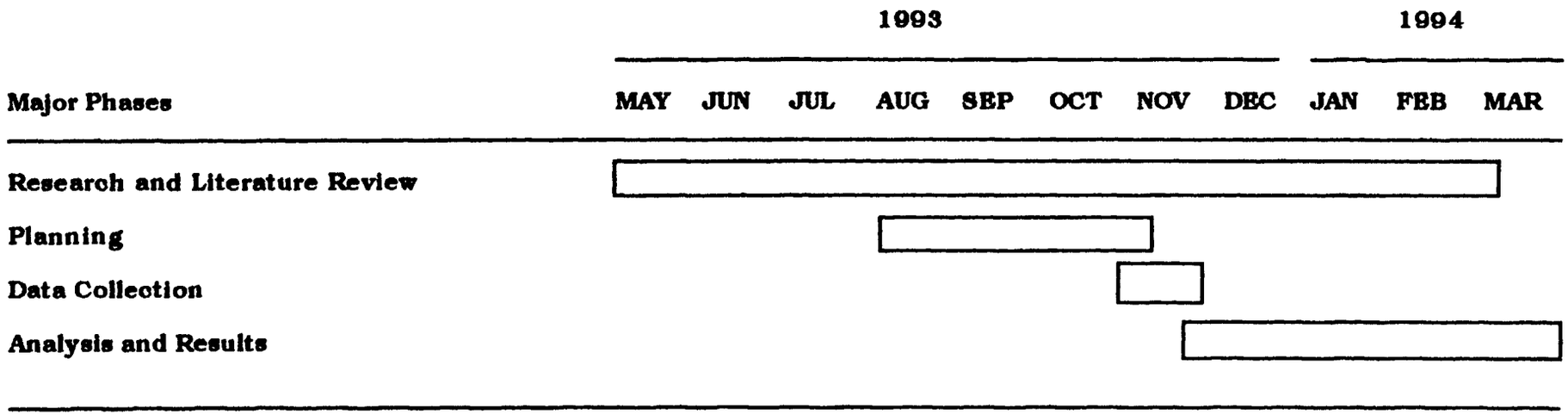
# APPENDICES

# APPENDIX A

## THESIS ACTIVITY SCHEDULE OF THE FOUR MAJOR PHASES OF RESEARCH

THESIS ACTIVITY SCHEDULE OF THE FOUR MAJOR PHASES OF RESEARCH



## APPENDIX B

## PUBLIC OPINION SURVEY POPULATION OF CITIES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**PUBLIC OPINION SURVEY POPULATION OF CITIES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

| Arkansas | Louisiana | New Mexico | Oklahoma | Texas |
|---|---|---|---|---|
| Eureka Springs | Alexandria | Albuquerque | Enid | Austin |
| Fayetteville | Baton Rouge | Las Cruses | Fort Gibson | Baytown |
| Little Rock | Boutte | Santa Fee | Lawton | Bridge City |
| Mountain View | Destrehan | | Manford | Brownsville |
| North Little Rock | Edgard | | Oklahoma City | Bryan |
| | Gramercy | | Tahlequah | Corpus Christi |
| | Hahnville | | Tulsa | Dallas |
| | Houma | | | Denison |
| | LaPlace | | | Fort Worth |
| | Metairie | | | Garland |
| | New Orleans | | | Houston |
| | New Sarpy | | | Laredo |
| | Norco | | | Midland |
| | Shreveport | | | Port Arthur |
| | | | | San Antonio |
| | | | | Tyler |
| | | | | Waco |
| | | | | Wichita Falls |

# APPENDIX C

## RESULTS OF THE LOGISTICAL REGRESSION ANALYSIS ON THE TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS BY DEPENDENT VARIABLE QUESTION GROUPS

**RESULTS OF THE LOGISTICAL REGRESSION ANALYSIS ON THE TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS BY DEPENDENT VARIABLE QUESTION GROUP ONE**

| | Survey Question Number | | | | | |
|---|---|---|---|---|---|---|
| | 5 | 6 | 7 | 8 | 9 | 10 |
| ***2-Way Independent Variable Interactions*** | | | | | | |
| Gender-Age | n | n | n | n | n | n |
| Gender-Income | n | n | n | s | n | n |
| Gender-Children | s | s | s | s | n | n |
| Gender-Education | n | n | s | n | n | s |
| Age-Income | s | s | s | s | s | s |
| Age-Children | s | s | s | s | s | n |
| Age-Education | n | n | n | s | s | n |
| Income-Children | s | s | s | n | s | s |
| Income-Education | n | n | s | n | s | s |
| Children-Education | n | n | n | n | s | n |
| ***3-Way Independent Variable Interactions*** | | | | | | |
| Gender-Age-Income | n | n | s | s | s | n |
| Gender-Age-Children | s | s | n | n | n | n |
| Gender-Age-Education | s | s | n | n | n | n |
| Age-Income-Children | n | n | n | n | n | s |
| Age-Income-Education | n | n | n | s | s | s |
| Income-Children-Education | s | s | n | n | s | s |
| Education-Income-Gender | n | n | s | n | n | s |
| Age-Children-Education | n | n | n | n | n | s |
| Children-Education-Gender | s | s | s | n | n | n |
| Children-Income-Gender | s | s | s | n | n | n |

s = significant at alpha .05 level, $p \leq .05$
n = not significant at alpha .05 level, $p > .05$

**RESULTS OF THE LOGISTICAL REGRESSION ANALYSIS ON THE TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS BY DEPENDENT VARIABLE QUESTION GROUP TWO**

| | Survey Question Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 12 | 13 | 20A | 20B | 20C | 20D | 20E | 20F | 20G |
| ***2-Way Independent Variable Interactions*** | | | | | | | | | |
| Gender-Age | n | n | s | n | s | n | n | n | n |
| Gender-Income | n | n | n | n | n | s | n | n | n |
| Gender-Children | n | n | n | n | n | n | n | n | n |
| Gender-Education | n | n | s | n | s | s | n | n | n |
| Age-Income | s | n | n | s | n | n | n | n | n |
| Age-Children | s | s | n | s | s | n | n | n | n |
| Age-Education | s | n | n | s | n | s | s | n | n |
| Income-Children | s | s | n | s | n | n | n | n | n |
| Income-Education | s | s | n | s | n | n | n | n | n |
| Children-Education | n | n | n | n | n | n | n | n | n |
| ***3-Way Independent Variable Interactions*** | | | | | | | | | |
| Gender-Age-Income | s | n | n | n | n | s | n | n | n |
| Gender-Age-Children | n | n | n | n | n | n | n | n | n |
| Gender-Age-Education | n | n | s | n | s | s | s | s | n |
| Age-Income-Children | n | n | n | s | s | n | n | n | n |
| Age-Income-Education | s | n | n | s | s | n | n | s | n |
| Income-Children-Education | s | n | n | n | n | n | n | n | n |
| Education-Income-Gender | n | n | n | n | n | n | n | n | n |
| Age-Children-Education | s | n | n | n | n | n | s | n | n |
| Children-Education-Gender | n | n | n | n | n | n | n | n | n |
| Children-Income-Gender | n | n | n | n | n | n | n | n | n |

s = significant at alpha .05 level, $p \leq .05$
n = not significant at alpha .05 level, $p > .05$

**RESULTS OF THE LOGISTICAL REGRESSION ANALYSIS ON THE TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS BY DEPENDENT VARIABLE QUESTION GROUP THREE**

| | Survey Question Number | | |
|---|---|---|---|
| | 14 | 15 | 17 |
| ***2-Way Independent Variable Interactions*** | | | |
| Gender-Age | n | n | s |
| Gender-Income | n | n | s |
| Gender-Children | s | n | n |
| Gender-Education | n | n | n |
| Age-Income | n | n | n |
| Age-Children | s | n | n |
| Age-Education | n | n | s |
| Income-Children | n | n | n |
| Income-Education | n | n | n |
| Children-Education | n | n | n |
| ***3-Way Independent Variable Interactions*** | | | |
| Gender-Age-Income | n | n | s |
| Gender-Age-Children | n | n | n |
| Gender-Age-Education | n | n | n |
| Age-Income-Children | n | n | n |
| Age-Income-Education | n | n | n |
| Income-Children-Education | n | n | n |
| Education-Income-Gender | n | n | n |
| Age-Children-Education | n | n | n |
| Children-Education-Gender | n | n | n |
| Children-Income-Gender | n | n | n |

s = significant at alpha .05 level, $p \leq .05$
n = not significant at alpha .05 level, $p > .05$

**RESULTS OF THE LOGISTICAL REGRESSION ANALYSIS ON THE TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS BY DEPENDENT VARIABLE QUESTION GROUP FOUR**

| | Survey Question Number | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 18 | 19 | 21A | 21B | 21C | 21D | 21E | 21F | 21G | 21H | 21I | 21J | 21K |
| ***2-Way Independent Variable Interactions*** | | | | | | | | | | | | | |
| Gender-Age | s | n | n | n | n | n | n | n | n | n | n | n | n |
| Gender-Income | n | s | n | n | n | n | s | s | n | n | n | n | s |
| Gender-Children | n | n | n | n | n | s | n | n | n | n | n | n | n |
| Gender-Education | n | n | n | n | n | n | n | n | n | n | n | n | s |
| Age-Income | n | n | n | n | n | n | n | s | n | n | n | n | n |
| Age-Children | n | n | n | n | n | s | n | n | n | n | n | n | n |
| Age-Education | n | n | s | n | n | n | n | s | s | n | n | n | s |
| Income-Children | n | n | n | n | n | n | n | n | n | n | n | s | n |
| Income-Education | s | s | n | n | n | n | s | n | n | s | n | n | s |
| Children-Education | n | n | n | n | n | n | n | n | s | n | s | n | n |
| ***3-Way Independent Variable Interactions*** | | | | | | | | | | | | | |
| Gender-Age-Income | n | n | n | n | n | n | n | s | n | n | n | n | s |
| Gender-Age-Children | n | n | n | n | n | s | n | n | n | n | n | n | n |
| Gender-Age-Education | s | n | s | n | n | s | n | s | s | n | n | s | s |
| Age-Income-Children | n | n | n | n | n | n | n | n | n | n | n | s | n |
| Age-Income-Education | n | n | n | n | n | n | n | n | n | s | n | s | s |
| Income-Children-Education | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Education-Income-Gender | n | s | n | n | n | n | n | n | n | n | n | n | n |
| Age-Children-Education | n | n | n | n | n | n | n | n | s | n | n | n | n |
| Children-Education-Gender | n | s | n | n | n | n | n | s | n | n | s | n | n |
| Children-Income-Gender | n | n | n | n | n | n | n | n | n | n | n | n | n |

s = significant at alpha .05 level, $p \leq .05$
n = not significant at alpha .05 level, $p > .05$

# APPENDIX D

## SUMMARY OF SIGNIFICANT TWO-WAY AND THREE-WAY INDEPENDENT VARIABLE INTERACTIONS IN THE DEPENDENT VARIABLE QUESTION GROUPS

**SUMMARY OF SIGNIFICANT TWO-WAY INDEPENDENT VARIABLE INTERACTIONS IN THE DEPENDENT VARIABLE QUESTION GROUPS**

*Dependent Variable Group One*

| Questions | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|
| | G-C | G-C | G-C | G-I | A-I | G-E |
| | A-I | A-I | G-E | G-C | A-C | A-I |
| | A-C | A-C | A-I | A-I | A-E | I-C |
| | I-C | I-C | A-C | A-C | I-C | I-E |
| | | | I-C | A-E | I-E | |
| | | | I-E | | C-E | |

*Dependent Variable Group Two*

| Questions | 12 | 13 | 20A | 20B | 20C | 20D | 20E | 20F | 20G |
|---|---|---|---|---|---|---|---|---|---|
| | A-I | A-C | G-A | A-I | G-A | G-I | A-E | None | None |
| | A-C | I-C | G-E | A-C | G-E | G-E | | | |
| | A-E | I-E | | A-E | A-C | A-E | | | |
| | I-C | | | I-C | | | | | |
| | I-E | | | I-E | | | | | |

*Dependent Variable Group Three*

| Questions | 14 | 15 | 17 |
|---|---|---|---|
| | G-C | None | G-A |
| | A-C | | G-I |
| | | | A-E |

*Dependent Variable Group Four*

| Questions | 18 | 19 | 21A | 21B | 21C | 21D | 21E | 21F | 21G | 21H | 21I | 21J | 21K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G-A | G-I | A-E | None | None | G-C | G-I | G-I | A-E | I-E | C-E | I-C | G-I |
| | I-E | I-E | | | | A-C | I-E | A-I | C-E | | | | G-E |
| | | | | | | | | A-E | | | | | A-E |
| | | | | | | | | | | | | | I-E |

A-C = Age-Children
A-E = Age-Education
A-I = Age-Income
C-E = Children-Education
G-A = Gender-Age
G-C = Gender-Children
G-E = Gender-Education
G-I = Gender-Income
I-C = Income-Children
I-E = Income-Education

**SUMMARY OF SIGNIFICANT THREE-WAY INDEPENDENT VARIABLE INTERACTIONS IN THE DEPENDENT VARIABLE QUESTION GROUPS**

*Dependent Variable Group One*

| Questions | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|
| | G-A-C | G-A-C | G-A-I | G-A-I | G-A-I | A-I-C |
| | G-A-E | G-A-E | E-I-G | A-I-E | A-I-E | A-I-E |
| | I-C-E | I-C-E | C-E-G | | I-C-E | I-C-E |
| | C-E-G | C-E-G | C-I-G | | | E-I-G |
| | C-I-G | C-I-G | | | | A-C-E |

*Dependent Variable Group Two*

| Questions | 12 | 13 | 20A | 20B | 20C | 20D | 20E | 20F | 20G |
|---|---|---|---|---|---|---|---|---|---|
| | G-A-I | None | G-A-E | A-I-C | G-A-E | G-A-I | G-A-E | G-A-E | None |
| | A-I-E | | | A-I-E | A-I-C | G-A-E | A-C-E | A-I-E | |
| | I-C-E | | | | A-I-E | | | | |
| | A-C-E | | | | | | | | |

*Dependent Variable Group Three*

| Questions | 14 | 15 | 17 |
|---|---|---|---|
| | None | None | G-A-I |

*Dependent Variable Group Four*

| Questions | 18 | 19 | 21A | 21B | 21C | 21D | 21E | 21F | 21G | 21H | 21I | 21J | 21K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G-A-E | E-I-G | G-A-E | None | None | G-A-C | None | G-A-I | G-A-E | A-I-E | C-E-G | G-A-E | G-A-I |
| | | C-E-G | | | | G-A-E | | G-A-E | A-C-E | | | A-I-C | G-A-E |
| | | | | | | | | C-E-G | | | | A-I-E | A-I-E |

A-C-E = Age-Children-Education
A-I-C = Age-Income-Children
A-I-E = Age-Income-Education
I-C-E = Income-Children-Education
C-E-G = Children-Education-Gender
C-I-G = Children-Income-Gender
E-I-G = Education-Income-Gender
G-A-C = Gender-Age-Children
G-A-E = Gender-Age-Education
G-A-I = Gender-Age-Income

# APPENDIX E

# SURVEY QUESTIONNAIRE

*Oklahoma State University*

Dear Sir/Madame

Oklahoma State University conducts a variety of research projects This project focuses on the United States Environmental Protection Agency (USEPA) in Region VI. The USEPA Region VI performs and administers activities to protect human health and the environment in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas A Graduate student has developed the enclosed survey in order to gain valuable information from the public on environmental issues, and your name was randomly selected in the Region VI area to receive a survey

Please take a moment to complete the survey for us All responses are kept confidential and are color coded only to determine which state responded After completing the survey, please return the survey, at no cost to you, by placing it in the enclosed business reply envelope and mail it to the researcher Because of deadlines and the importance of the survey, they need to be returned no later than November 25, 1993 just before the Thanksgiving holiday

We welcome and thank you for your opinion, support, and participation!

Sincerely,

Bradley N Cox
Oklahoma State University
Environmental Sciences Researcher

Please check the appropriate box

1 Are you ☐ male ☐ female

2 Your age
☐ 18-24yrs ☐ 25-34yrs
☐ 35-44yrs ☐ 45-54yrs
☐ 55 and over

3 How many children live with you
☐ 0
☐ 1
☐ 2
☐ 3
☐ more than 3

4 What is your primary business or profession?
☐ Agriculture/Forestry
☐ Communication/Advertising
☐ Construction/Mining
☐ Education
☐ Finance/Banking
☐ Government
☐ Insurance/Real Estate
☐ Manufactoring
☐ Military (active not reserve)
☐ Professional (CPA, MD, Atty)
☐ Retired
☐ Services to business
☐ Transportation/Public Utilities
☐ Travel/Entertainment
☐ Wholesale/Retail
☐ other (please specify) _____

5 In general, do you think there is too much, too little, or about the right amount of government regulation in the area of environmental protection and improvement?

☐ Too little
☐ About the right amount
☐ Too much
☐ Don't know

6 In general, do you think there is too much, too little, or about the right amount of government spending in the area of environmental protection and improvement?

☐ Too little
☐ About the right amount
☐ Too much
☐ Don't know

7 In the past few years, the USEPA has been hampered in some areas of environmental protection and improvement, and has made great strides in other areas of environmental protection and improvement In general, do you think the USEPA has made definite improvements, moderate improvements or no improvements?

☐ Definite improvements
☐ Moderate improvements
☐ No improvements
☐ Don't know

8 Do you support increasing resources to USEPA without increasing your taxes?

☐ Yes
☐ No

9 Do you support raising your taxes $10 a year to go exclusively towards environmental cleanup and improvement of contaminated areas?

☐ Yes
☐ No

10 The USEPA supports and encourages a policy of re-use and recycle To what degree do you agree with this policy?

☐ Strongly agree
☐ Moderately agree
☐ Disagree
☐ Don't know

11 What is your educational background?

☐ Below High School
☐ High School Degree or GED
☐ Some College or Assoc Degree
☐ College Graduate (BA, BS etc )
☐ Masters (MA, MBA, MS etc )
☐ Doctoral (PhD, JD, MD etc )

Please check the appropriate box

12 How do you think of yourself in participation on issues on the environment?

- ☐ Strongly active supporter
- ☐ Moderately active supporter
- ☐ Neutral
- ☐ Unsympathethic

13 Are you a member of an environmental organization such as Sierra Club, Audubon Society, Nature Conservancy, etc.?

- ☐ Yes
- ☐ No

14 Do you think that business and industry will voluntarily take steps to protect and improve the environment?

- ☐ Yes
- ☐ No

15 Since there is some relationship between business and the environment, do you think we should sacrifice the economy, sacrifice the environment, or both can go hand and hand, we don't have to sacrifice either?

- ☐ Sacrifice economic growth
- ☐ Sacrifice the environment
- ☐ Both the economy and environment can improve

16 What is your individual estimated annual income?

- ☐ below $10,000
- ☐ $10,000 to $19,999
- ☐ $20,000 to $29,999
- ☐ $30,000 to $39,999
- ☐ $40,000 to $49,999
- ☐ $50,000 to $74,999
- ☐ $75,000 plus

17 How often do you purchase "environmentally friendly" products?

- ☐ Most of the time
- ☐ Sometimes
- ☐ Never

18 Overall, do you think the environment in the United States has gotten better, stayed the same, or gotten worse since 1983?

- ☐ Worse
- ☐ Same
- ☐ Better
- ☐ Don't know

19 In your area, do you think environmental quality is much better, much worse, or the same since 1983?

- ☐ Much worse
- ☐ Same
- ☐ Much better
- ☐ Don't know

20 Below are seven efforts that people personally do for the environment, what activities and how often do you do these activities?

| | Frequently | Some-times | Never |
|---|---|---|---|
| Recycle Bottles | ☐ | ☐ | ☐ |
| Recycle Cans | ☐ | ☐ | ☐ |
| Recycle Newspaper | ☐ | ☐ | ☐ |
| Recycle used motor oil | ☐ | ☐ | ☐ |
| Car pool | ☐ | ☐ | ☐ |
| Cut back on Auto use | ☐ | ☐ | ☐ |
| Compost house/yard waste | ☐ | ☐ | ☐ |

21 Listed below are eleven environmental problems, how serious of a threat do you think each one is?

| | Very Serious | Moderately Serious | Not Much | No Threat | Don't know |
|---|---|---|---|---|---|
| Asbestos | ☐ | ☐ | ☐ | ☐ | ☐ |
| Air pollution | ☐ | ☐ | ☐ | ☐ | ☐ |
| Treatment, storage & disposal of Hazardous Waste | ☐ | ☐ | ☐ | ☐ | ☐ |
| Depletion of the Ozone layer | ☐ | ☐ | ☐ | ☐ | ☐ |
| Newly introduced chemicals | ☐ | ☐ | ☐ | ☐ | ☐ |
| Indoor Radon | ☐ | ☐ | ☐ | ☐ | ☐ |
| Water pollution of rivers, lakes & oceans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Generation & Transport of Hazardous Waste | ☐ | ☐ | ☐ | ☐ | ☐ |
| Oil spills | ☐ | ☐ | ☐ | ☐ | ☐ |
| Contamination of underground water supplies | ☐ | ☐ | ☐ | ☐ | ☐ |
| Decline in Wetlands (swamps, bogs & marshes) | ☐ | ☐ | ☐ | ☐ | ☐ |

# APPENDIX F

## QUESTION 5 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 5 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 21 | 16 | 26 | 63 |
| with children | 24 | 17 | 16 | 57 |
| totals | 45 | 33 | 42 | 120 |

**Females**

| | Rsponses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 17 | 32 | 51 | 100 |
| with children | 9 | 30 | 60 | 99 |
| totals | 26 | 62 | 111 | 199 |

## QUESTION FIVE FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | too much | about right | too little | totals |
| 19999 & below | 2 | 7 | 7 | 16 |
| 20000 to 39999 | 1 | 3 | 4 | 8 |
| 40000 to 74999 | 0 | 0 | 0 | 0 |
| 75000 plus | 1 | 0 | 1 | 2 |
| totals | 4 | 10 | 12 | 26 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | too much | about right | too little | totals |
| 19999 & below | 2 | 4 | 13 | 19 |
| 20000 to 39999 | 0 | 5 | 15 | 20 |
| 40000 to 74999 | 4 | 3 | 8 | 15 |
| 75000 plus | 1 | 0 | 7 | 8 |
| totals | 7 | 12 | 43 | 62 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| Income | too much | about right | too little | totals |
| 19999 below | 1 | 3 | 4 | 8 |
| 20000 to 39999 | 3 | 13 | 20 | 36 |
| 40000 to 74999 | 13 | 14 | 24 | 51 |
| 75000 plus | 5 | 4 | 2 | 11 |
| totals | 22 | 34 | 50 | 106 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| Income | too much | about right | too little | totals |
| 19999 & below | 6 | 2 | 5 | 13 |
| 20000 to 39999 | 2 | 6 | 8 | 16 |
| 40000 to 74999 | 1 | 1 | 11 | 13 |
| 75000 plus | 3 | 3 | 4 | 10 |
| totals | 12 | 12 | 28 | 52 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| Income | too much | about right | too little | totals |
| below | 6 | 5 | 6 | 17 |
| 39999 | 7 | 7 | 10 | 24 |
| 74999 | 8 | 9 | 2 | 19 |
| 75000 plus | 5 | 6 | 2 | 13 |
| totals | 26 | 27 | 20 | 73 |

## QUESTION 5 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 3 | 9 | 9 | 21 |
| with children | 1 | 1 | 3 | 5 |
| totals | 4 | 10 | 12 | 26 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 1 | 8 | 20 | 29 |
| with children | 6 | 4 | 23 | 33 |
| totals | 7 | 12 | 43 | 62 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 4 | 5 | 15 | 24 |
| with children | 18 | 29 | 35 | 82 |
| totals | 22 | 34 | 50 | 106 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 9 | 4 | 14 | 27 |
| with children | 3 | 8 | 14 | 25 |
| totals | 12 | 12 | 28 | 52 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 21 | 22 | 19 | 62 |
| with children | 5 | 5 | 1 | 11 |
| totals | 26 | 27 | 20 | 73 |

## QUESTION 5 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

Income $19999 and below

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 12 | 13 | 20 | 45 |
| with children | 5 | 8 | 15 | 28 |
| totals | 17 | 21 | 35 | 73 |

Income $20000 to $39999

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 10 | 18 | 30 | 58 |
| with children | 3 | 16 | 27 | 46 |
| totals | 13 | 34 | 57 | 104 |

Income $40000 to $74999

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 12 | 13 | 19 | 44 |
| with children | 14 | 14 | 26 | 54 |
| totals | 26 | 27 | 45 | 98 |

Income $75000 plus

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 4 | 4 | 8 | 16 |
| with children | 11 | 9 | 8 | 28 |
| totals | 15 | 13 | 16 | 44 |

# APPENDIX G

## QUESTION 6 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 6 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME REPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 20 | 17 | 20 | 57 |
| with children | 26 | 7 | 21 | 54 |
| Totals | 46 | 24 | 41 | 57 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 12 | 26 | 55 | 93 |
| with children | 5 | 30 | 58 | 93 |
| totals | 17 | 56 | 113 | 186 |

## QUESTION 6 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE AND INCOME CLASS RESPONSES

**Age Class 18 to 24**

| ($) Income | Responses: too much | about right | too little | totals |
|---|---|---|---|---|
| 19999 & below | 1 | 1 | 2 | 11 |
| 20000 to 39999 | 0 | 5 | 3 | 8 |
| 40000 to 74999 | 0 | 0 | 0 | 0 |
| 75000 plus | 1 | 0 | 1 | 2 |
| totals | 2 | 7 | 15 | 24 |

**Age Class 25 to 34**

| ($) income | Responses: too much | about right | too little | totals |
|---|---|---|---|---|
| 19999 & below | 1 | 4 | 13 | 18 |
| 20000 to 39999 | 1 | 3 | 13 | 17 |
| 40000 to 74999 | 3 | 4 | 7 | 14 |
| 75000 plus | 1 | 1 | 6 | 8 |
| totals | 6 | 12 | 39 | 57 |

**Age Class 35 to 44**

| ($) Income | Responses: too much | about right | too little | totals |
|---|---|---|---|---|
| 19999 & below | 0 | 3 | 6 | 9 |
| 20000 to 39999 | 1 | 8 | 25 | 34 |
| 40000 74999 | 14 | 11 | 22 | 47 |
| 75000 plus | 4 | 4 | 4 | 12 |
| totals | 19 | 26 | 57 | 102 |

**Age Class 45 to 54**

| ($) income | Responses: too much | about right | too little | totals |
|---|---|---|---|---|
| 19999 & below | 5 | 2 | 6 | 13 |
| 20000 to 39999 | 1 | 6 | 9 | 16 |
| 40000 to 74999 | 1 | 2 | 9 | 12 |
| 75000 plus | 5 | 1 | 4 | 10 |
| totals | 12 | 11 | 28 | 51 |

**Age Class 55 plus**

| ($) income | Responses: too much | about right | too little | totals |
|---|---|---|---|---|
| 19999 & below | 2 | 5 | 3 | 10 |
| 20000 to 39999 | 7 | 9 | 7 | 23 |
| 40000 to 74999 | 8 | 7 | 2 | 17 |
| 75000 plus | 7 | 3 | 3 | 13 |
| totals | 24 | 24 | 15 | 63 |

## QUESTION 6 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 1 | 5 | 13 | 19 |
| with children | 1 | 2 | 2 | 5 |
| totals | 2 | 7 | 15 | 24 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 0 | 7 | 19 | 26 |
| with children | 6 | 5 | 20 | 31 |
| totals | 6 | 12 | 39 | 57 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 4 | 5 | 17 | 26 |
| with children | 15 | 21 | 40 | 76 |
| totals | 19 | 26 | 57 | 102 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 7 | 6 | 13 | 26 |
| with children | 5 | 5 | 15 | 25 |
| totals | 12 | 11 | 28 | 51 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 20 | 20 | 13 | 53 |
| with children | 4 | 4 | 2 | 10 |
| totals | 24 | 24 | 15 | 63 |

## QUESTION 6 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

**Income $19999 and below**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 7 | 7 | 22 | 36 |
| with children | 2 | 9 | 17 | 28 |
| totals | 9 | 16 | 39 | 64 |

**Income $20000 to $39999**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 8 | 18 | 29 | 55 |
| with children | 2 | 13 | 28 | 43 |
| totals | 10 | 31 | 57 | 98 |

**Income $40000 to $74999**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 11 | 15 | 15 | 41 |
| with children | 15 | 9 | 25 | 49 |
| totals | 26 | 24 | 40 | 90 |

**Income $75000 plus**

| | Responses | | | |
|---|---|---|---|---|
| | too much | about right | too little | totals |
| without children | 6 | 3 | 9 | 18 |
| with children | 12 | 6 | 9 | 27 |
| totals | 18 | 9 | 18 | 45 |

# APPENDIX H

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 10 | 32 | 8 | 50 |
| with children | 10 | 30 | 2 | 42 |
| totals | 20 | 62 | 10 | 92 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 5 | 63 | 17 | 85 |
| with children | 4 | 64 | 13 | 81 |
| totals | 9 | 127 | 30 | 166 |

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATION LEVEL RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 0 | 3 | 1 | 4 |
| College/ Bachelor | 14 | 32 | 5 | 51 |
| Grad'/ Doctoral | 6 | 27 | 4 | 37 |
| totals | 20 | 62 | 10 | 92 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 1 | 17 | 3 | 21 |
| College/ Bachelor | 5 | 75 | 18 | 98 |
| Grad'/ Doctoral | 3 | 35 | 9 | 47 |
| totals | 9 | 127 | 30 | 166 |

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | no imprv | mod' imprv | def imprv | totals |
| 19999 & below | 1 | 4 | 3 | 8 |
| 20000 to 39999 | 0 | 1 | 2 | 3 |
| 40000 to 74999 | 0 | 0 | 0 | 0 |
| 75000 plus | 1 | 0 | 0 | 1 |
| totals | 2 | 5 | 5 | 12 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | no imprv | mod' imprv | def imprv | totals |
| 19999 & below | 1 | 10 | 2 | 13 |
| 20000 to 39999 | 0 | 14 | 1 | 15 |
| 40000 to 74999 | 0 | 8 | 3 | 11 |
| 75000 plus | 1 | 4 | 3 | 8 |
| totals | 2 | 36 | 9 | 47 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| Income | no imprv | mod' imprv | def imprv | totals |
| 19999 below | 1 | 4 | 0 | 5 |
| 20000 to 39999 | 1 | 27 | 4 | 32 |
| 40000 to 74999 | 12 | 27 | 3 | 42 |
| 75000 plus | 1 | 9 | 1 | 11 |
| totals | 15 | 67 | 8 | 90 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| Income | no imprv | mod' imprv | def imprv | totals |
| 19999 & below | 2 | 8 | 2 | 12 |
| 20000 to 39999 | 2 | 7 | 6 | 15 |
| 40000 to 74999 | 1 | 12 | 0 | 13 |
| 75000 plus | 0 | 8 | 0 | 8 |
| totals | 5 | 35 | 8 | 48 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| Income | no imprv | mod' imprv | def imprv | totals |
| below | 1 | 9 | 2 | 12 |
| 39999 | 2 | 17 | 3 | 22 |
| 74999 | 1 | 12 | 3 | 16 |
| plus | 1 | 8 | 2 | 11 |
| totals | 5 | 46 | 10 | 61 |

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 0 | 5 | 5 | 10 |
| with children | 2 | 0 | 0 | 2 |
| totals | 2 | 5 | 5 | 12 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 0 | 18 | 6 | 24 |
| with children | 2 | 18 | 3 | 23 |
| totals | 2 | 36 | 9 | 47 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 6 | 14 | 3 | 23 |
| with children | 9 | 53 | 5 | 67 |
| totals | 15 | 67 | 8 | 90 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 5 | 19 | 2 | 26 |
| with children | 0 | 16 | 6 | 22 |
| totals | 5 | 35 | 8 | 48 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 4 | 39 | 9 | 52 |
| with children | 1 | 7 | 1 | 9 |
| totals | 5 | 46 | 10 | 61 |

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

**Income $19999 and below**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 3 | 22 | 5 | 30 |
| with children | 3 | 13 | 4 | 20 |
| totals | 6 | 35 | 9 | 50 |

**Income $20000 to $39999**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 5 | 36 | 9 | 50 |
| with children | 0 | 30 | 7 | 37 |
| totals | 5 | 66 | 16 | 87 |

**Income $40000 to $74999**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 6 | 26 | 8 | 40 |
| with children | 8 | 33 | 1 | 42 |
| totals | 14 | 59 | 9 | 82 |

**Income $75000 plus**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| without children | 1 | 11 | 3 | 15 |
| with children | 3 | 18 | 3 | 24 |
| totals | 4 | 29 | 6 | 39 |

## QUESTION 7 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME AND EDUCATION LEVEL RESPONSES

**Income $19999 and below**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 1 | 7 | 1 | 9 |
| College/ Bachelors | 5 | 21 | 7 | 33 |
| Graduate/ Doctoral | 0 | 7 | 1 | 8 |
| totals | 6 | 35 | 9 | 50 |

**Income $20000 to $39999**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 0 | 8 | 3 | 11 |
| College/ Bachelors | 3 | 40 | 8 | 51 |
| Graduate/ Doctoral | 2 | 18 | 5 | 25 |
| totals | 5 | 66 | 16 | 87 |

**Income $40000 to $74999**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 0 | 5 | 0 | 5 |
| College/ Bachelors | 8 | 37 | 6 | 51 |
| Graduate/ Doctoral | 6 | 17 | 3 | 26 |
| totals | 14 | 59 | 9 | 82 |

**Income $75000 plus**

| | Responses | | | |
|---|---|---|---|---|
| | no imprv | mod' imprv | def imprv | totals |
| HS & below | 0 | 0 | 0 | 0 |
| College/ Bachelors | 3 | 9 | 2 | 14 |
| Graduate/ Doctoral | 1 | 20 | 4 | 25 |
| totals | 4 | 29 | 6 | 39 |

# APPENDIX I

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME CLASS RESPONSES

**Males**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 4 | 12 | 16 |
| 20000 to 39999 | 5 | 26 | 31 |
| 40000 to 74999 | 23 | 30 | 53 |
| 75000 plus | 11 | 16 | 27 |
| totals | 43 | 84 | 127 |

**Females**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 11 | 53 | 64 |
| 20000 to 39999 | 11 | 70 | 81 |
| 40000 to 74999 | 7 | 40 | 47 |
| 75000 plus | 4 | 21 | 25 |
| totals | 33 | 184 | 217 |

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME RESPONSES

**Males**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 18 | 50 | 68 |
| with children | 25 | 34 | 59 |
| totals | 43 | 84 | 127 |

**Females**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 21 | 90 | 111 |
| with children | 12 | 94 | 106 |
| totals | 33 | 184 | 217 |

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 3 | 14 | 17 |
| 20000 to 39999 | 3 | 6 | 9 |
| 40000 to 74999 | 0 | 0 | 0 |
| 75000 plus | 1 | 1 | 2 |
| totals | 7 | 21 | 28 |

**Age Class 25 to 24**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 3 | 17 | 20 |
| 20000 to 39999 | 1 | 20 | 21 |
| 40000 to 74999 | 3 | 12 | 15 |
| 75000 plus | 3 | 6 | 9 |
| totals | 10 | 55 | 65 |

**Age Class 35 to 44**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 below | 2 | 7 | 9 |
| 20000 to 39999 | 5 | 32 | 37 |
| 40000 to 74999 | 18 | 33 | 51 |
| 75000 plus | 5 | 11 | 16 |
| totals | 30 | 83 | 113 |

**Age Class 45 to 54**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 1 | 14 | 15 |
| 20000 to 39999 | 3 | 13 | 16 |
| 40000 to 74999 | 1 | 12 | 13 |
| 75000 plus | 3 | 8 | 11 |
| totals | 8 | 47 | 55 |

**Age Class 55 plus**

| ($) Income | Responses: no | yes | totals |
|---|---|---|---|
| 19999 & below | 6 | 13 | 19 |
| 20000 to 39999 | 4 | 25 | 29 |
| 40000 to 74999 | 8 | 13 | 21 |
| 75000 plus | 3 | 11 | 14 |
| totals | 21 | 62 | 83 |

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**Age Class 18 TO 24**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 5 | 18 | 23 |
| with children | 2 | 3 | 5 |
| totals | 7 | 21 | 28 |

**Age Class 25 to 24**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 5 | 24 | 29 |
| with children | 5 | 31 | 36 |
| totals | 10 | 55 | 65 |

**Age Class 35 to 44**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 7 | 19 | 26 |
| with children | 23 | 64 | 87 |
| totals | 30 | 83 | 113 |

**Age Class 45 to 54**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 5 | 25 | 30 |
| with children | 3 | 22 | 25 |
| totals | 8 | 47 | 55 |

**Age Class 55 plus**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 17 | 54 | 71 |
| with children | 4 | 8 | 12 |
| totals | 21 | 62 | 83 |

## QUESTION 8 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

**Age Class 18 TO 24**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 0 | 4 | 4 |
| College/ Bachelors | 5 | 10 | 15 |
| Graduate/ Doctoral | 2 | 7 | 9 |
| totals | 7 | 21 | 28 |

**Age Class 25 to 24**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 0 | 7 | 7 |
| College/ Bachelors | 8 | 31 | 39 |
| Graduate/ Doctoral | 2 | 17 | 19 |
| totals | 10 | 55 | 65 |

**Age Class 35 to 44**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 1 | 4 | 5 |
| College/ Bachelors | 21 | 51 | 72 |
| Graduate/ Doctoral | 8 | 28 | 36 |
| totals | 30 | 83 | 113 |

**Age Class 45 to 54**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 0 | 5 | 5 |
| College/ Bachelors | 4 | 29 | 33 |
| Graduate/ Doctoral | 4 | 13 | 17 |
| totals | 8 | 47 | 55 |

**Age Class 55 plus**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 4 | 7 | 11 |
| College/ Bachelors | 9 | 36 | 45 |
| Graduate/ Doctoral | 8 | 19 | 27 |
| totals | 21 | 62 | 83 |

# APPENDIX J

## QUESTION 9 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 9 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 6 | 11 | 17 |
| 20000 to 39999 | 3 | 6 | 9 |
| 40000 to 74999 | 0 | 0 | 0 |
| 75000 plus | 1 | 1 | 2 |
| totals | 10 | 18 | 28 |

**Age Class 25 to 24**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 6 | 14 | 20 |
| 20000 to 39999 | 8 | 13 | 21 |
| 40000 to 74999 | 5 | 10 | 15 |
| 75000 plus | 5 | 4 | 9 |
| totals | 24 | 41 | 65 |

**Age Class 35 to 44**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 below | 3 | 6 | 9 |
| 20000 to 39999 | 13 | 24 | 37 |
| 40000 to 74999 | 22 | 29 | 51 |
| 75000 plus | 5 | 11 | 16 |
| totals | 43 | 70 | 113 |

**Age Class 45 to 54**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 12 | 3 | 15 |
| 20000 to 39999 | 8 | 8 | 16 |
| 40000 to 74999 | 7 | 6 | 13 |
| 75000 plus | 5 | 6 | 11 |
| totals | 32 | 23 | 55 |

**Age Class 55 plus**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 11 | 8 | 19 |
| 20000 to 39999 | 19 | 10 | 29 |
| 40000 to 74999 | 15 | 6 | 21 |
| 75000 plus | 7 | 7 | 14 |
| totals | 52 | 31 | 83 |

## QUESTION 9 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

Income $19999 and below

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 24 | 26 | 50 |
| with children | 14 | 16 | 30 |
| totals | 38 | 42 | 80 |

Income $20000 to $39999

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 33 | 30 | 63 |
| with children | 18 | 31 | 49 |
| totals | 51 | 61 | 112 |

Income $40000 to $74999

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 22 | 24 | 46 |
| with children | 27 | 27 | 54 |
| totals | 49 | 51 | 100 |

Income $75000 plus

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 8 | 12 | 20 |
| with children | 15 | 17 | 32 |
| totals | 23 | 29 | 52 |

## QUESTION 9 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF EDUCATION LEVEL AND INCOME CLASS RESPONSES

**High school and below**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 8 | 5 | 13 |
| 20000 to 39999 | 5 | 6 | 11 |
| 40000 to 74999 | 4 | 4 | 8 |
| 75000 plus | 0 | 0 | 0 |
| totals | 17 | 15 | 32 |

**College/Bachelors**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 & below | 26 | 28 | 54 |
| 20000 to 39999 | 35 | 34 | 69 |
| 40000 to 74999 | 26 | 32 | 58 |
| 75000 plus | 11 | 12 | 23 |
| totals | 98 | 106 | 204 |

**Graduate/Doctoral**

| | Responses | | |
|---|---|---|---|
| Income | no | yes | totals |
| 19999 below | 4 | 9 | 13 |
| 20000 to 39999 | 11 | 21 | 32 |
| 40000 to 74999 | 19 | 15 | 34 |
| 75000 plus | 12 | 17 | 29 |
| totals | 46 | 62 | 108 |

QUESTION 9 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF EDUCATION LEVEL AND CHILDREN IN THE HOME RESPONSES

Without children in the home

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 13 | 6 | 19 |
| College/ Bachelors | 55 | 54 | 109 |
| Graduate/ Doctoral | 19 | 32 | 51 |
| totals | 87 | 92 | 179 |

With children in the home

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 4 | 9 | 13 |
| College/ Bachelors | 43 | 52 | 95 |
| Graduate/ Doctoral | 27 | 30 | 57 |
| totals | 74 | 91 | 165 |

## APPENDIX K

## QUESTION 10 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 10 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATIONAL LEVEL RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 0 | 1 | 5 | 6 |
| College/ Bachelor | 2 | 14 | 57 | 73 |
| Grad'/ Doctoral | 3 | 5 | 38 | 38 |
| totals | 5 | 20 | 100 | 125 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 1 | 7 | 18 | 26 |
| College/ Bachelor | 2 | 21 | 106 | 129 |
| Grad'/ Doctoral | 1 | 7 | 54 | 62 |
| totals | 4 | 35 | 178 | 217 |

## QUESTION 10 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE AND INCOME CLASS RESPONSES

**Age Class 18 to 24**

| ($) Income | Responses: dis-agree | mod' agree | strgly agree | totals |
|---|---|---|---|---|
| 19999 & below | 1 | 4 | 12 | 17 |
| 20000 to 39999 | 0 | 1 | 8 | 9 |
| 40000 to 74999 | 0 | 0 | 0 | 0 |
| 75000 plus | 0 | 0 | 2 | 2 |
| totals | 1 | 5 | 22 | 28 |

**Age Class 25 to 34**

| ($) income | Responses: dis-agree | mod' agree | strgly agree | totals |
|---|---|---|---|---|
| 19999 & below | 0 | 3 | 17 | 20 |
| 20000 to 39999 | 0 | 1 | 20 | 21 |
| 40000 to 74999 | 1 | 5 | 9 | 15 |
| 75000 plus | 1 | 1 | 7 | 9 |
| totals | 2 | 10 | 53 | 65 |

**Age Class 35 to 44**

| ($) Income | Responses: dis-much | mod' right | strgly little | totals |
|---|---|---|---|---|
| 19999 & below | 1 | 0 | 8 | 9 |
| 20000 to 39999 | 0 | 8 | 29 | 37 |
| 40000 to 74999 | 2 | 14 | 35 | 51 |
| 75000 plus | 0 | 0 | 16 | 16 |
| totals | 3 | 22 | 88 | 113 |

**Age Class 45 to 54**

| ($) income | Responses: dis-agree | mod' agree | strgly agree | totals |
|---|---|---|---|---|
| 19999 & below | 0 | 2 | 11 | 13 |
| 20000 to 39999 | 1 | 3 | 12 | 16 |
| 40000 to 74999 | 0 | 2 | 11 | 13 |
| 75000 plus | 0 | 0 | 11 | 11 |
| totals | 1 | 7 | 45 | 53 |

**Age Class 55 plus**

| ($) income | Responses: agree | agree | agree | totals |
|---|---|---|---|---|
| 19999 & below | 0 | 1 | 18 | 19 |
| 20000 to 39999 | 0 | 7 | 22 | 29 |
| 40000 to 74999 | 2 | 2 | 17 | 21 |
| 75000 plus | 0 | 1 | 13 | 14 |
| totals | 2 | 11 | 70 | 83 |

## QUESTION 10 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

Income $19999 and below

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| without children | 1 | 7 | 40 | 48 |
| with chilren | 1 | 3 | 26 | 30 |
| totals | 2 | 10 | 66 | 78 |

Income $20000 to $39999

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| without children | 1 | 11 | 51 | 63 |
| with children | 0 | 9 | 40 | 49 |
| totals | 1 | 20 | 91 | 112 |

Income $40000 to $74999

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgy agree | totals |
| without children | 5 | 6 | 35 | 46 |
| with children | 0 | 17 | 37 | 54 |
| totals | 5 | 23 | 72 | 100 |

Income $75000 plus

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| without children | 0 | 1 | 19 | 20 |
| with children | 1 | 1 | 30 | 32 |
| totals | 1 | 2 | 40 | 52 |

## QUESTION 10 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME AND EDUCATION LEVEL RESPONSES

Income $19999 and below

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 1 | 4 | 8 | 13 |
| College/ Bachelors | 1 | 5 | 46 | 52 |
| Graduate/ Doctoral | 0 | 1 | 12 | 13 |
| totals | 2 | 10 | 66 | 78 |

Income $20000 to $39999

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 0 | 4 | 7 | 11 |
| College/ Bachelors | 1 | 12 | 56 | 69 |
| Graduate/ Doctoral | 0 | 4 | 28 | 32 |
| totals | 1 | 20 | 91 | 112 |

Income $40000 to $74999

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 0 | 0 | 8 | 8 |
| College/ Bachelors | 1 | 16 | 41 | 58 |
| Graduate/ Doctoral | 4 | 7 | 23 | 34 |
| totals | 5 | 23 | 72 | 100 |

Income $75000 plus

| | Responses | | | |
|---|---|---|---|---|
| | dis-agree | mod' agree | strgly agree | totals |
| HS & below | 0 | 0 | 0 | 0 |
| College/ Bachelors | 1 | 2 | 20 | 23 |
| Graduate/ Doctoral | 0 | 0 | 29 | 29 |
| totals | 1 | 2 | 49 | 52 |

## APPENDIX L

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| | Responses | | | | |
|---|---|---|---|---|---|
| Income | Unsym | Neu tral | Mod supr | Strg supr | totals |
| 19999 & below | 0 | 8 | 7 | 2 | 17 |
| 20000 to 39999 | 0 | 2 | 6 | 1 | 9 |
| 40000 to 74999 | 0 | 0 | 0 | 0 | 0 |
| 75000 plus | 0 | 2 | 0 | 0 | 2 |
| totals | 0 | 12 | 13 | 3 | 28 |

**Age Class 25 to 24**

| | Responses | | | | |
|---|---|---|---|---|---|
| Income | Unsym | Neu tral | Mod supr | Strg supr | totals |
| 19999 & below | 0 | 5 | 14 | 1 | 20 |
| 20000 to 39999 | 0 | 7 | 12 | 2 | 21 |
| 40000 to 74999 | 2 | 4 | 9 | 0 | 15 |
| 75000 plus | 1 | 4 | 4 | 0 | 9 |
| totals | 3 | 20 | 39 | 3 | 65 |

**Age Class 35 to 44**

| | Responses | | | | |
|---|---|---|---|---|---|
| Income | Unsym | Neu tral | Mod supr | Strg supr | totals |
| 19999 below | 1 | 2 | 6 | 0 | 9 |
| 20000 to 39999 | 0 | 12 | 21 | 4 | 37 |
| 40000 to 74999 | 2 | 12 | 30 | 7 | 51 |
| 75000 plus | 0 | 6 | 8 | 2 | 16 |
| totals | 3 | 32 | 65 | 13 | 113 |

**Age Class 45 to 54**

| | Responses | | | | |
|---|---|---|---|---|---|
| Income | Unsym | Neu tral | Mod supr | Strg supr | totals |
| 19999 & below | 1 | 6 | 6 | 2 | 15 |
| 20000 to 39999 | 1 | 5 | 9 | 1 | 16 |
| 40000 to 74999 | 0 | 5 | 5 | 3 | 13 |
| 75000 plus | 0 | 1 | 7 | 3 | 11 |
| totals | 2 | 17 | 27 | 9 | 55 |

**Age Class 55 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| Income | Unsym | Neu tral | Mod supr | Strg supr | totals |
| 19999 & below | 0 | 7 | 10 | 2 | 19 |
| 20000 to 39999 | 0 | 13 | 12 | 4 | 29 |
| 40000 to 74999 | 5 | 4 | 12 | 0 | 21 |
| 75000 plus | 0 | 5 | 9 | 0 | 14 |
| totals | 5 | 29 | 43 | 6 | 83 |

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**AGE CLASS 18 TO 24**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 0 | 10 | 10 | 3 | 23 |
| with children | 0 | 2 | 3 | 0 | 5 |
| totals | 0 | 12 | 13 | 3 | 28 |

**Age Class 25 to 24**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 1 | 8 | 20 | 0 | 29 |
| with children | 2 | 12 | 19 | 3 | 36 |
| totals | 3 | 20 | 39 | 3 | 65 |

**Age Class 35 to 44**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 1 | 5 | 17 | 3 | 26 |
| with children | 2 | 27 | 48 | 10 | 87 |
| totals | 3 | 32 | 65 | 13 | 113 |

**Age Class 45 to 54**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 2 | 7 | 18 | 3 | 30 |
| with children | 0 | 10 | 9 | 6 | 25 |
| totals | 2 | 17 | 27 | 9 | 55 |

**Age Class 55 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 5 | 24 | 37 | 5 | 71 |
| with children | 0 | 5 | 6 | 1 | 12 |
| totals | 5 | 29 | 43 | 6 | 83 |

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

AGE CLASS 18 TO 24

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod' supr | Strg supr | totals |
| HS & below | 0 | 4 | 0 | 0 | 4 |
| College/ Bachelor | 0 | 6 | 9 | 0 | 15 |
| Grad'/ Doctoral | 0 | 2 | 4 | 3 | 9 |
| totals | 0 | 12 | 13 | 3 | 28 |

Age Class 25 to 24

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| HS & bleow | 1 | 3 | 3 | 0 | 7 |
| College/ Bachelor | 1 | 13 | 22 | 3 | 39 |
| Grad'/ Doctoral | 1 | 4 | 14 | 0 | 19 |
| totals | 3 | 20 | 39 | 3 | 65 |

Age Class 35 to 44

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg suprtotals | |
| HS & below | 1 | 3 | 1 | 0 | 5 |
| College/ Bachelor | 1 | 16 | 48 | 7 | 72 |
| Grad'/ Doctoral | 1 | 13 | 16 | 6 | 36 |
| totals | 3 | 32 | 65 | 13 | 113 |

Age Class 45 to 54

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| HS & below | 0 | 3 | 2 | 0 | 5 |
| College/ Bachelor | 2 | 9 | 18 | 4 | 33 |
| Grad'/ Doctoral | 0 | 5 | 7 | 5 | 17 |
| totals | 2 | 17 | 27 | 9 | 55 |

Age Class 55 plus

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| HS & below | 0 | 5 | 3 | 3 | 11 |
| College/ Bachelor | 1 | 17 | 24 | 3 | 45 |
| Grad'/ Bachelor | 4 | 7 | 16 | 0 | 27 |
| totals | 5 | 29 | 43 | 6 | 83 |

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME CLASS AND CHILDREN IN THE HOME RESPONSES

**Income $19999 and below**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 1 | 19 | 25 | 5 | 50 |
| with children | 1 | 9 | 18 | 2 | 30 |
| totals | 2 | 28 | 43 | 7 | 80 |

**Income $20000 to $39999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 1 | 22 | 35 | 5 | 63 |
| with children | 0 | 17 | 25 | 7 | 49 |
| totals | 1 | 39 | 60 | 12 | 112 |

**Income $40000 to $74999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 7 | 6 | 30 | 3 | 46 |
| with children | 2 | 19 | 26 | 7 | 54 |
| totals | 9 | 25 | 56 | 10 | 100 |

**Income $75000 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| | Unsym | Neu tral | Mod supr | Strg supr | totals |
| without children | 0 | 7 | 12 | 1 | 20 |
| with children | 1 | 11 | 16 | 4 | 32 |
| totals | 1 | 18 | 28 | 5 | 52 |

## QUESTION 12 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF EDUCATION AND INCOME CLASS RESPONSES

**High School and below**

| ($) Income | Responses Unsym | Neu tral | Mod supr | Strg supr | totals |
|---|---|---|---|---|---|
| 19999 & below | 1 | 9 | 2 | 1 | 13 |
| 20000 to 39999 | 0 | 5 | 4 | 2 | 11 |
| 40000 to 74999 | 1 | 4 | 3 | 0 | 8 |
| 75000 plus | 0 | 0 | 0 | 0 | 0 |
| totals | 2 | 18 | 9 | 3 | 32 |

**College/Bachelors**

| ($) Income | Responses Unsym | Neu tral | Mod supr | Strg supr | totals |
|---|---|---|---|---|---|
| 19999 & below | 1 | 16 | 33 | 4 | 54 |
| 20000 to 39999 | 1 | 23 | 39 | 6 | 69 |
| 40000 to 74999 | 2 | 12 | 37 | 7 | 58 |
| 75000 plus | 1 | 10 | 12 | 0 | 23 |
| totals | 5 | 61 | 121 | 17 | 204 |

**Graduate/Doctoral**

| ($) Income | Responses Unsym | Neu tral | Mod supr | strg supr | totals |
|---|---|---|---|---|---|
| 19999 below | 0 | 3 | 8 | 2 | 13 |
| 20000 to 39999 | 0 | 11 | 17 | 4 | 32 |
| 40000 to 74999 | 6 | 9 | 16 | 3 | 34 |
| 75000 plus | 0 | 8 | 16 | 5 | 29 |
| totals | 6 | 31 | 57 | 14 | 108 |

## APPENDIX M

## QUESTION 13 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 13 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

Age Class 18 TO 24

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 19 | 4 | 23 |
| with children | 5 | 0 | 5 |
| totals | 24 | 4 | 28 |

Age Class 25 to 24

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 26 | 3 | 29 |
| with children | 32 | 4 | 36 |
| totals | 58 | 7 | 65 |

Age Class 35 to 44

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 17 | 9 | 26 |
| with children | 71 | 16 | 87 |
| totals | 88 | 25 | 113 |

Age Class 45 to 54

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 24 | 6 | 30 |
| with children | 15 | 10 | 25 |
| totals | 39 | 16 | 55 |

Age Class 55 plus

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 62 | 9 | 71 |
| with children | 9 | 3 | 12 |
| totals | 71 | 12 | 83 |

## QUESTION 13 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME AND EDUCATION LEVEL RESPONSES

Income $19999 and below

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 10 | 3 | 13 |
| College/ Bachelors | 46 | 8 | 54 |
| Graduate/ Doctoral | 9 | 4 | 13 |
| totals | 65 | 15 | 80 |

Income $20000 to $39999

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 11 | 0 | 11 |
| College/ Bachelors | 57 | 12 | 69 |
| Graduate/ Doctoral | 25 | 7 | 32 |
| totals | 93 | 19 | 112 |

Income $40000 to $74999

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 8 | 0 | 8 |
| College/ Bachelors | 52 | 6 | 58 |
| Graduate/ Doctoral | 27 | 7 | 34 |
| totals | 87 | 13 | 100 |

Income $75000 plus

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| HS & below | 0 | 0 | 0 |
| College/ Bachelors | 19 | 4 | 23 |
| Graduate/ Doctoral | 16 | 13 | 29 |
| totals | 35 | 17 | 52 |

# APPENDIX N

## QUESTION 20A FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 20-A FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATION LEVEL RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 3 | 1 | 2 | 6 |
| College/ Bachelor | 29 | 17 | 29 | 75 |
| Grad'/ Doctoral | 17 | 8 | 21 | 46 |
| totals | 49 | 26 | 52 | 127 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 10 | 6 | 10 | 26 |
| College/ Bachelor | 30 | 41 | 58 | 129 |
| Grad'/ Doctoral | 14 | 12 | 36 | 62 |
| totals | 54 | 59 | 104 | 217 |

## QUESTION 20-A FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND GENDER RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 0 | 2 | 3 | 5 |
| females | 8 | 8 | 7 | 23 |
| totals | 8 | 10 | 10 | 28 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 11 | 4 | 9 | 24 |
| females | 8 | 16 | 17 | 41 |
| totals | 19 | 20 | 26 | 65 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 16 | 9 | 13 | 38 |
| females | 19 | 19 | 37 | 75 |
| totals | 35 | 28 | 50 | 113 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 9 | 6 | 8 | 23 |
| females | 7 | 5 | 20 | 32 |
| totals | 16 | 11 | 28 | 55 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 13 | 5 | 19 | 37 |
| females | 12 | 11 | 23 | 46 |
| totals | 25 | 16 | 42 | 83 |

# APPENDIX O

## QUESTION 20B FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 20-B FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND INCOME CLASS RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| 19999 & below | 2 | 9 | 6 | 17 |
| 20000 to 39999 | 0 | 3 | 6 | 9 |
| 40000 to 74999 | 0 | 0 | 0 | 0 |
| 75000 plus | 0 | 1 | 1 | 2 |
| totals | 2 | 13 | 13 | 28 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| 19999 & below | 2 | 5 | 13 | 20 |
| 20000 to 39999 | 2 | 7 | 12 | 21 |
| 40000 to 74999 | 2 | 2 | 11 | 15 |
| 75000 plus | 1 | 3 | 5 | 9 |
| totals | 7 | 17 | 41 | 65 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| 19999 below | 0 | 0 | 9 | 9 |
| 20000 to 39999 | 5 | 12 | 20 | 37 |
| 40000 to 74999 | 3 | 14 | 34 | 51 |
| 75000 plus | 2 | 1 | 13 | 16 |
| totals | 10 | 27 | 76 | 113 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| 19999 & below | 0 | 4 | 11 | 15 |
| 20000 to 39999 | 1 | 1 | 14 | 16 |
| 40000 to 74999 | 1 | 6 | 6 | 13 |
| 75000 plus | 2 | 3 | 6 | 11 |
| totals | 4 | 14 | 37 | 55 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| 19999 & below | 2 | 5 | 12 | 19 |
| 20000 to 39999 | 2 | 3 | 24 | 29 |
| 40000 to 74999 | 0 | 3 | 18 | 21 |
| 75000 plus | 0 | 1 | 13 | 14 |
| totals | 4 | 12 | 67 | 83 |

## QUESTION 20-B FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

Age Class 18 TO 24

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 1 | 13 | 9 | 23 |
| with children | 1 | 0 | 4 | 5 |
| totals | 2 | 13 | 13 | 28 |

Age Class 25 to 24

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 4 | 7 | 18 | 29 |
| with children | 3 | 10 | 23 | 36 |
| totals | 7 | 17 | 41 | 65 |

Age Class 35 to 44

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 2 | 5 | 19 | 26 |
| with children | 8 | 22 | 57 | 87 |
| totals | 10 | 27 | 76 | 113 |

Age Class 45 to 54

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 2 | 6 | 22 | 30 |
| with children | 2 | 8 | 15 | 25 |
| totals | 4 | 14 | 37 | 55 |

Age Class 55 plus

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 3 | 9 | 59 | 71 |
| with children | 1 | 3 | 8 | 12 |
| totals | 4 | 12 | 67 | 83 |

## QUESTION 20-B FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 1 | 2 | 1 | 4 |
| College/ Bachelor | 1 | 8 | 6 | 15 |
| Grad'/ Doctoral | 0 | 3 | 6 | 9 |
| totals | 2 | 13 | 13 | 28 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 0 | 3 | 4 | 7 |
| College/ Bachelor | 5 | 13 | 21 | 39 |
| Grad'/ Doctoral | 2 | 1 | 16 | 19 |
| totals | 7 | 17 | 41 | 65 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 0 | 2 | 3 | 5 |
| College/ Bachelor | 4 | 17 | 51 | 72 |
| Grad'/ Doctoral | 6 | 8 | 22 | 36 |
| totals | 10 | 27 | 76 | 113 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 1 | 0 | 4 | 5 |
| College/ Bachelor | 3 | 8 | 22 | 33 |
| Grad'/ Doctoral | 0 | 6 | 11 | 17 |
| totals | 4 | 14 | 37 | 55 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 0 | 0 | 11 | 11 |
| College/ Bachelor | 4 | 9 | 32 | 45 |
| Grad'/ Doctoral | 0 | 3 | 24 | 27 |
| totals | 4 | 12 | 67 | 83 |

## QUESTION 20-B FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF EDUCATION AND INCOME CLASS RESPONSES

**High School and below**

| ($) Income | Responses: Never | Some times | Freq' | totals |
|---|---|---|---|---|
| 19999 & below | 1 | 4 | 8 | 13 |
| 20000 to 39999 | 0 | 3 | 8 | 11 |
| 40000 to 74999 | 1 | 0 | 7 | 8 |
| 75000 plus | 0 | 0 | 0 | 0 |
| totals | 2 | 7 | 23 | 32 |

**College/Bachelors**

| ($) Income | Responses: Never | Some times | Freq' | totals |
|---|---|---|---|---|
| 19999 & below | 5 | 16 | 33 | 54 |
| 20000 to 39999 | 7 | 16 | 46 | 69 |
| 40000 to 74999 | 1 | 20 | 37 | 58 |
| 75000 plus | 4 | 3 | 16 | 23 |
| totals | 17 | 55 | 132 | 204 |

**Graduate/Doctoral**

| ($) Income | Responses: Never | Some times | Freq' | totals |
|---|---|---|---|---|
| 19999 below | 0 | 3 | 10 | 13 |
| 20000 to 39999 | 3 | 7 | 22 | 32 |
| 40000 to 74999 | 4 | 5 | 25 | 34 |
| 75000 plus | 1 | 6 | 22 | 29 |
| totals | 8 | 21 | 79 | 108 |

## APPENDIX P

## QUESTION 20C FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 20-C FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND GENDER RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 0 | 2 | 3 | 5 |
| females | 5 | 9 | 9 | 23 |
| totals | 5 | 11 | 12 | 28 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 6 | 6 | 12 | 24 |
| females | 8 | 13 | 20 | 41 |
| totals | 14 | 19 | 32 | 65 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 9 | 10 | 19 | 38 |
| females | 12 | 21 | 42 | 75 |
| totals | 21 | 31 | 61 | 113 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 8 | 6 | 9 | 23 |
| females | 2 | 5 | 25 | 32 |
| totals | 10 | 11 | 34 | 55 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| males | 6 | 5 | 26 | 37 |
| females | 12 | 8 | 26 | 46 |
| totals | 18 | 13 | 52 | 83 |

## QUESTION 20-C FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATION LEVEL RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 2 | 2 | 2 | 6 |
| College/ Bachelor | 21 | 19 | 35 | 75 |
| Grad'/ Doctoral | 6 | 8 | 32 | 46 |
| totals | 29 | 29 | 69 | 127 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 7 | 2 | 17 | 26 |
| College/ Bachelor | 23 | 41 | 65 | 129 |
| Grad'/ Doctoral | 9 | 13 | 40 | 62 |
| totals | 39 | 56 | 122 | 217 |

## QUESTION 20-C FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

Age Class 18 TO 24

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 4 | 11 | 8 | 23 |
| with children | 1 | 0 | 4 | 5 |
| totals | 5 | 11 | 12 | 28 |

Age Class 25 to 24

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 6 | 11 | 12 | 29 |
| with children | 8 | 8 | 20 | 36 |
| totals | 14 | 19 | 32 | 65 |

Age Class 35 to 44

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 4 | 6 | 16 | 26 |
| with children | 17 | 25 | 45 | 87 |
| totals | 21 | 31 | 61 | 113 |

Age Class 45 to 54

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 6 | 6 | 18 | 30 |
| with children | 4 | 5 | 16 | 25 |
| totals | 10 | 11 | 34 | 55 |

Age Class 55 plus

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| without children | 16 | 11 | 44 | 71 |
| with children | 2 | 2 | 8 | 12 |
| totals | 18 | 13 | 52 | 83 |

# APPENDIX Q

## QUESTION 20D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 20-D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

Males

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| 19999 & below | 7 | 2 | 7 | 16 |
| 20000 to 39999 | 10 | 4 | 17 | 31 |
| 40000 to 74999 | 15 | 9 | 29 | 53 |
| 75000 plus | 12 | 4 | 11 | 27 |
| totals | 44 | 19 | 64 | 127 |

Females

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| 19999 & below | 34 | 7 | 23 | 64 |
| 20000 to 39999 | 32 | 9 | 40 | 81 |
| 40000 to 74999 | 23 | 4 | 20 | 47 |
| 75000 plus | 7 | 4 | 14 | 25 |
| totals | 96 | 24 | 97 | 217 |

QUESTION 20-D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATION LEVEL RESPONSES

**Males**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 3 | 1 | 2 | 6 |
| College/ Bachelor | 22 | 10 | 43 | 75 |
| Grad'/ Doctoral | 19 | 8 | 19 | 46 |
| totals | 44 | 19 | 64 | 127 |

**Females**

| | Responses | | | |
|---|---|---|---|---|
| | Never | Some times | Freq' | totals |
| HS & below | 15 | 2 | 9 | 26 |
| College/ Bachelor | 55 | 18 | 56 | 129 |
| Grad'/ Doctoral | 26 | 4 | 32 | 62 |
| totals | 96 | 24 | 97 | 217 |

## QUESTION 20-D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

**Age Class 18 TO 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 0 | 1 | 4 |
| College/ Bachelor | 3 | 3 | 9 | 15 |
| Grad'/ Doctoral | 5 | 0 | 4 | 9 |
| totals | 11 | 3 | 14 | 28 |

**Age Class 25 to 24**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 2 | 3 | 7 |
| College/ Bachelor | 14 | 8 | 17 | 39 |
| Grad'/ Doctoral | 7 | 0 | 12 | 19 |
| totals | 24 | 10 | 31 | 65 |

**Age Class 35 to 44**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 1 | 1 | 5 |
| College/ Bachelor | 19 | 8 | 45 | 72 |
| Grad'/ Doctoral | 11 | 3 | 22 | 36 |
| totals | 33 | 12 | 68 | 113 |

**Age Class 45 to 54**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 1 | 0 | 4 | 5 |
| College/ Bachelor | 9 | 6 | 18 | 33 |
| Grad'/ Doctoral | 8 | 3 | 6 | 17 |
| totals | 18 | 9 | 28 | 55 |

**Age Class 55 plus**

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 8 | 0 | 3 | 11 |
| College/ Bachelor | 32 | 3 | 10 | 45 |
| Grad'/ Doctoral | 14 | 6 | 7 | 27 |
| totals | 54 | 9 | 20 | 83 |

## APPENDIX R

## QUESTION 20E FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 20-E FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

Age Class 18 TO 24

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 1 | 0 | 4 |
| College/ Bachelor | 8 | 5 | 2 | 15 |
| Grad'/ Doctoral | 2 | 4 | 3 | 9 |
| totals | 13 | 10 | 5 | 28 |

Age Class 25 to 24

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 1 | 3 | 7 |
| College/ Bachelor | 19 | 13 | 7 | 39 |
| Grad'/ Doctoral | 12 | 6 | 1 | 19 |
| totals | 34 | 20 | 11 | 65 |

Age Class 35 to 44

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 3 | 0 | 2 | 5 |
| College/ Bachelor | 40 | 20 | 12 | 72 |
| Grad'/ Doctoral | 21 | 7 | 8 | 36 |
| totals | 64 | 27 | 22 | 113 |

Age Class 45 to 54

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 2 | 1 | 2 | 5 |
| College/ Bachelor | 21 | 10 | 2 | 33 |
| Grad'/ Doctoral | 11 | 4 | 1 | 17 |
| totals | 34 | 15 | 6 | 55 |

Age Class 55 plus

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Freq' | totals |
| HS & below | 5 | 5 | 1 | 11 |
| College/ Bachelor | 33 | 9 | 3 | 45 |
| Grad'/ Doctoral | 24 | 2 | 1 | 27 |
| totals | 62 | 16 | 5 | 83 |

## APPENDIX S

## QUESTION 14 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 14 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME RESPONSES

**Males**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 52 | 16 | 68 |
| with children | 34 | 25 | 59 |
| totals | 86 | 41 | 127 |

**Females**

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 93 | 18 | 111 |
| with children | 93 | 13 | 106 |
| totals | 186 | 31 | 217 |

QUESTION 14 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

Age Class 18 TO 24

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 17 | 6 | 23 |
| with children | 4 | 1 | 5 |
| totals | 21 | 7 | 28 |

Age Class 25 to 24

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 24 | 5 | 29 |
| with children | 26 | 10 | 36 |
| totals | 50 | 15 | 65 |

Age Class 35 to 44

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 23 | 3 | 26 |
| with children | 67 | 20 | 87 |
| totals | 90 | 23 | 113 |

Age Class 45 to 54

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 26 | 4 | 30 |
| with children | 22 | 3 | 25 |
| totals | 48 | 7 | 55 |

Age Class 55 plus

| | Responses | | |
|---|---|---|---|
| | no | yes | totals |
| without children | 55 | 16 | 71 |
| with children | 8 | 4 | 12 |
| totals | 63 | 20 | 83 |

## APPENDIX T

## QUESTION 17 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 17 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND AGE CLASS RESPONSES

Males

| | Responses | | | |
|---|---|---|---|---|
| Age | Never | Some times | Most/ time | totals |
| 18-24 | 0 | 4 | 1 | 5 |
| 25-34 | 1 | 15 | 8 | 24 |
| 35-44 | 1 | 29 | 8 | 38 |
| 45-54 | 1 | 16 | 6 | 23 |
| 55 plus | 1 | 17 | 19 | 37 |
| totals | 4 | 81 | 42 | 127 |

Females

| | Responses | | | |
|---|---|---|---|---|
| Age | Never | Some times | Most/ time | totals |
| 18-24 | 0 | 15 | 8 | 23 |
| 25-34 | 1 | 25 | 15 | 41 |
| 35-44 | 1 | 25 | 49 | 75 |
| 45-54 | 0 | 16 | 16 | 32 |
| 55 plus | 3 | 22 | 21 | 46 |
| totals | 5 | 103 | 109 | 217 |

## QUESTION 17 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

**Males**

| ($) Income | Responses: Never | Some times | Most/ time | totals |
|---|---|---|---|---|
| 19999 & below | 0 | 12 | 4 | 16 |
| 20000 - 39999 | 2 | 16 | 13 | 31 |
| 40000 - 74999 | 1 | 36 | 16 | 53 |
| 75000 plus | 1 | 17 | 9 | 27 |
| totals | 4 | 81 | 42 | 127 |

**Females**

| ($) Income | Responses: Never | Some times | Most/ time | totals |
|---|---|---|---|---|
| 19999 & below | 2 | 35 | 27 | 64 |
| 20000 - 39999 | 1 | 37 | 43 | 81 |
| 40000 - 79999 | 1 | 20 | 26 | 47 |
| 75000 plus | 1 | 11 | 13 | 25 |
| totals | 5 | 103 | 109 | 217 |

## QUESTION 17 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

Age Class 18 TO 24

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Most/ time | totals |
| HS & below | 0 | 3 | 1 | 4 |
| College/ Bachelor | 0 | 12 | 3 | 15 |
| Grad'/ Doctoral | 0 | 4 | 5 | 9 |
| totals | 0 | 19 | 9 | 28 |

Age Class 25 to 24

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Most/ time | totals |
| HS & below | 0 | 6 | 1 | 7 |
| College/ Bachelor | 1 | 23 | 15 | 39 |
| Grad'/ Doctoral | 1 | 11 | 7 | 19 |
| totals | 2 | 40 | 23 | 65 |

Age Class 35 to 44

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Most/ time | totals |
| HS & below | 0 | 5 | 0 | 5 |
| College/ Bachelor | 1 | 32 | 39 | 72 |
| Grad'/ Doctoral | 1 | 17 | 18 | 36 |
| totals | 2 | 54 | 57 | 113 |

Age Class 45 to 54

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Most/ time | totals |
| HS & below | 0 | 4 | 1 | 5 |
| College/ Bachelor | 1 | 15 | 17 | 33 |
| Grad'/ Doctoral | 0 | 13 | 4 | 17 |
| totals | 1 | 32 | 22 | 55 |

Age Class 55 plus

| | Responses | | | |
|---|---|---|---|---|
| Income | Never | Some times | Most/ time | totals |
| HS & below | 0 | 7 | 4 | 11 |
| College/ Bachelor | 3 | 23 | 19 | 45 |
| Grad'/ Doctoral | 1 | 9 | 17 | 27 |
| totals | 4 | 39 | 40 | 83 |

# APPENDIX U

## QUESTION 18 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 18 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND AGE CLASS RESPONSES

Males

| | Responses | | | |
|---|---|---|---|---|
| Age | Better | Same | Worse | totals |
| 18-24 | 1 | 1 | 2 | 4 |
| 25-34 | 9 | 6 | 8 | 23 |
| 35-44 | 17 | 6 | 11 | 34 |
| 45-54 | 9 | 4 | 6 | 19 |
| 55 plus | 19 | 4 | 10 | 33 |
| totals | 55 | 21 | 37 | 113 |

Females

| | Responses | | | |
|---|---|---|---|---|
| Age | Better | Same | Worse | totals |
| 18-24 | 4 | 7 | 8 | 19 |
| 25-34 | 3 | 5 | 29 | 37 |
| 35-44 | 37 | 12 | 19 | 68 |
| 45-54 | 7 | 5 | 16 | 28 |
| 55 plus | 10 | 12 | 16 | 38 |
| totals | 61 | 41 | 88 | 190 |

## QUESTION 18 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME AND EDUCATION LEVEL RESPONSES

Income $19999 and below

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 4 | 2 | 6 | 12 |
| College/ Bachelors | 10 | 15 | 18 | 43 |
| Graduate/ Doctoral | 1 | 1 | 10 | 12 |
| totals | 15 | 18 | 34 | 67 |

Income $20000 to $39999

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 3 | 5 | 3 | 11 |
| College/ Bachelors | 23 | 6 | 31 | 60 |
| Graduate/ Doctoral | 12 | 6 | 9 | 27 |
| totals | 38 | 17 | 43 | 98 |

Income $40000 to $74999

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 3 | 2 | 3 | 8 |
| College/ Bachelors | 26 | 9 | 18 | 23 |
| Graduate/ Doctoral | 15 | 8 | 8 | 31 |
| totals | 44 | 19 | 29 | 92 |

Income $75000 plus

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 0 | 0 | 0 | 0 |
| College/ Bachelors | 7 | 4 | 10 | 21 |
| Graduate/ Doctoral | 12 | 4 | 9 | 25 |
| totals | 19 | 8 | 19 | 46 |

# APPENDIX V

## QUESTION 19 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 19 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

**Males**

| ($) Income | Responses: Better | Same | Worse | totals |
|---|---|---|---|---|
| 19999 & below | 2 | 6 | 3 | 11 |
| 20000 - 39999 | 3 | 14 | 8 | 25 |
| 40000 - 74999 | 9 | 33 | 5 | 47 |
| 75000 plus | 11 | 14 | 0 | 25 |
| totals | 25 | 67 | 16 | 108 |

**Females**

| ($) Income | Responses: Better | Same | worse | totals |
|---|---|---|---|---|
| 19999 & below | 5 | 22 | 21 | 48 |
| 20000 - 39999 | 15 | 31 | 16 | 62 |
| 40000 - 79999 | 10 | 18 | 11 | 39 |
| 75000 plus | 4 | 9 | 4 | 17 |
| totals | 34 | 80 | 52 | 166 |

## QUESTION 19 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARAIBLE INTERACTIONS OF INCOME AND EDUCATION LEVEL RESPONSES

Income $19999 and below

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 2 | 5 | 3 | 10 |
| College/ Bachelors | 5 | 19 | 14 | 38 |
| Graduate/ Doctoral | 0 | 4 | 7 | 11 |
| totals | 7 | 28 | 24 | 59 |

Income $20000 to $39999

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 2 | 4 | 3 | 9 |
| College/ Bachelors | 11 | 26 | 14 | 51 |
| Graduate/ Doctoral | 5 | 15 | 7 | 27 |
| totals | 18 | 45 | 24 | 87 |

Income $40000 to $74999

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 2 | 5 | 1 | 8 |
| College/ Bachelors | 10 | 30 | 8 | 48 |
| Graduate/ Doctoral | 7 | 16 | 7 | 30 |
| totals | 19 | 51 | 16 | 86 |

Income $75000 plus

| | Responses | | | |
|---|---|---|---|---|
| | Better | Same | Worse | totals |
| HS & below | 0 | 0 | 0 | 0 |
| College/ Bachelors | 6 | 12 | 1 | 19 |
| Graduate/ Doctoral | 9 | 11 | 3 | 23 |
| totals | 15 | 23 | 4 | 42 |

## APPENDIX W

## QUESTION 21A FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

# APPENDIX X

## QUESTION 21D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 21-D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND CHILDREN IN THE HOME RESPONSES

**Males**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| without children | 8 | 8 | 21 | 27 | 64 |
| with children | 7 | 16 | 19 | 12 | 54 |
| totals | 15 | 24 | 40 | 39 | 118 |

**Females**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| without children | 8 | 12 | 29 | 58 | 107 |
| with children | 7 | 6 | 31 | 58 | 102 |
| totals | 15 | 18 | 60 | 116 | 209 |

## QUESTION 21-D FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND CHILDREN IN THE HOME RESPONSES

**Age Class 18 to 24**

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| without children | 3 | 3 | 4 | 13 | 23 |
| with children | 2 | 0 | 0 | 3 | 5 |
| totals | 5 | 3 | 4 | 16 | 28 |

**Age Class 25 to 34**

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| without children | 0 | 1 | 12 | 16 | 29 |
| with children | 2 | 7 | 7 | 20 | 36 |
| totals | 2 | 8 | 19 | 36 | 65 |

**Age Class 35 to 44**

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| without children | 3 | 0 | 7 | 16 | 26 |
| with children | 8 | 8 | 34 | 34 | 84 |
| totals | 11 | 8 | 41 | 50 | 110 |

**Age Class 45 to 54**

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| without children | 4 | 4 | 5 | 17 | 30 |
| with children | 1 | 5 | 4 | 12 | 22 |
| totals | 5 | 9 | 9 | 29 | 52 |

**Age Class 55 plus**

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| without children | 6 | 12 | 22 | 23 | 63 |
| with children | 1 | 2 | 5 | 1 | 9 |
| totals | 7 | 14 | 27 | 24 | 72 |

# APPENDIX Y

## QUESTION 21E FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-E FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

**Males**

| | Responses | | | | |
|---|---|---|---|---|---|
| (6) Income | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 19999 & below | 1 | 6 | 5 | 1 | 13 |
| 20000 - 39999 | 1 | 9 | 9 | 6 | 25 |
| 40000 - 74999 | 3 | 19 | 13 | 7 | 42 |
| 75000 plus | 1 | 11 | 7 | 2 | 21 |
| totals | 6 | 45 | 34 | 16 | 101 |

**Females**

| | Responses | | | | |
|---|---|---|---|---|---|
| (6) Income | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 19999 & below | 3 | 6 | 14 | 29 | 52 |
| 20000 - 39999 | 0 | 14 | 28 | 22 | 64 |
| 40000 - 74999 | 0 | 7 | 16 | 21 | 44 |
| 75000 plus | 1 | 3 | 13 | 8 | 25 |
| totals | 4 | 30 | 71 | 80 | 185 |

## QUESTION 21-E FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF INCOME LEVEL AND EDUCATION LEVEL RESPONSES

**Income $19999 and below**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 0 | 4 | 5 | 10 |
| College/ Bachelor | 3 | 9 | 11 | 22 | 45 |
| Graduate/ Doctoral | 0 | 3 | 4 | 3 | 10 |
| totals | 4 | 12 | 19 | 30 | 65 |

**Income $20000 to $39999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 6 | 2 | 8 |
| College Bachelor | 0 | 18 | 21 | 14 | 53 |
| Graduate/ Doctoral | 1 | 5 | 10 | 12 | 28 |
| totals | 1 | 23 | 37 | 28 | 89 |

**Income $40000 to $74999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 1 | 0 | 4 | 5 |
| College Bachelor | 3 | 14 | 19 | 16 | 52 |
| Graduate/ Doctoral | 0 | 11 | 10 | 9 | 29 |
| totals | 3 | 26 | 29 | 28 | 86 |

**Income $75000 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 0 | 0 | 0 |
| College/ Bachelor | 2 | 5 | 9 | 3 | 19 |
| Graduate/ Doctoral | 0 | 9 | 11 | 7 | 27 |
| totals | 2 | 14 | 20 | 10 | 46 |

# APPENDIX Z

## QUESTION 21F FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-F FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

**Males**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 2 | 6 | 3 | 0 | 11 |
| 20000 - 39999 | 1 | 11 | 8 | 2 | 22 |
| 40000 - 74999 | 7 | 24 | 13 | 1 | 45 |
| 75000 plus | 2 | 15 | 3 | 3 | 23 |
| totals | 12 | 56 | 27 | 6 | 101 |

**Females**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 5 | 5 | 19 | 15 | 44 |
| 20000 - 39999 | 4 | 14 | 28 | 15 | 61 |
| 40000 - 74999 | 2 | 6 | 19 | 12 | 39 |
| 75000 plus | 2 | 6 | 9 | 2 | 19 |
| totals | 13 | 31 | 75 | 44 | 163 |

## QUESTION 21-F FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF INCOME LEVEL AND AGE CLASS RESPONSES

Income $19999 and below

| | Responses | | | | |
|---|---|---|---|---|---|
| Age | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 18-24 | 2 | 0 | 7 | 3 | 12 |
| 25-34 | 0 | 1 | 5 | 5 | 11 |
| 35-44 | 1 | 1 | 4 | 0 | 6 |
| 45-54 | 2 | 2 | 2 | 5 | 11 |
| 55 plus | 2 | 7 | 4 | 2 | 15 |
| totals | 7 | 11 | 22 | 15 | 55 |

Income $20000 to $39999

| | Responses | | | | |
|---|---|---|---|---|---|
| Age | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 18-24 | 0 | 4 | 1 | 2 | 7 |
| 25-34 | 0 | 5 | 9 | 4 | 18 |
| 35-44 | 0 | 9 | 14 | 7 | 30 |
| 45-54 | 3 | 2 | 4 | 1 | 10 |
| 55 plus | 2 | 5 | 8 | 3 | 18 |
| totals | 5 | 25 | 36 | 17 | 83 |

Income $40000 to $74999

| | Responses | | | | |
|---|---|---|---|---|---|
| Age | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 18-24 | 0 | 0 | 0 | 0 | 0 |
| 25-34 | 1 | 5 | 2 | 5 | 13 |
| 35-44 | 6 | 16 | 16 | 6 | 44 |
| 45-54 | 1 | 4 | 4 | 2 | 11 |
| 55 plus | 1 | 5 | 10 | 0 | 16 |
| totals | 9 | 30 | 32 | 13 | 84 |

Income $75000 plus

| | Responses | | | | |
|---|---|---|---|---|---|
| Age | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| 18-24 | 1 | 0 | 0 | 0 | 1 |
| 25-34 | 1 | 3 | 2 | 2 | 1 |
| 35-44 | 1 | 6 | 6 | 0 | 13 |
| 45-54 | 0 | 6 | 1 | 1 | 8 |
| 55 plus | 1 | 6 | 3 | 3 | 13 |
| totals | 4 | 21 | 12 | 5 | 42 |

## QUESTION 21-F FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

Age Class 18 to 24

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 2 | 3 |
| College/ Bachelor | 3 | 3 | 5 | 1 | 12 |
| Graduate/ Doctoral | 0 | 1 | 2 | 2 | 5 |
| totals | 3 | 4 | 8 | 5 | 20 |

Age Class 25 to 34

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 1 | 3 | 3 | 7 |
| College/ Bachelor | 1 | 10 | 11 | 6 | 28 |
| Graduate/ Doctoral | 1 | 3 | 4 | 6 | 14 |
| totals | 2 | 14 | 18 | 14 | 49 |

Age Class 35 to 44

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 1 | 2 | 0 | 4 |
| College/ Bachelor | 6 | 16 | 23 | 10 | 55 |
| Graduate/ Doctoral | 1 | 15 | 15 | 3 | 34 |
| totals | 8 | 32 | 40 | 13 | 93 |

Age Class 45 to 54

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 1 | 2 |
| College/ Bachelor | 5 | 6 | 9 | 7 | 27 |
| Graduate/ Doctoral | 1 | 8 | 1 | 1 | 11 |
| totals | 6 | 14 | 11 | 9 | 40 |

Age Class 55 plus

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 2 | 2 | 0 | 5 |
| College/ Bachelor | 5 | 9 | 16 | 5 | 35 |
| Graduate/ Doctoral | 0 | 12 | 7 | 3 | 22 |
| totals | 6 | 23 | 25 | 8 | 62 |

# APPENDIX AA

## QUESTION 21G FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-G FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

Age Class 18 to 24

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 3 | 4 |
| College/ Bachelor | 1 | 0 | 6 | 8 | 15 |
| Graduate/ Doctoral | 0 | 0 | 1 | 8 | 9 |
| totals | 1 | 0 | 8 | 19 | 28 |

Age Class 25 to 34

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 0 | 7 | 7 |
| College/ Bachelor | 0 | 1 | 8 | 30 | 39 |
| Graduate/ Doctoral | 0 | 0 | 8 | 11 | 19 |
| totals | 0 | 1 | 16 | 48 | 65 |

Age Class 35 to 44

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 0 | 0 | 4 | 5 |
| College/ Bachelor | 2 | 3 | 19 | 48 | 72 |
| Graduate/ Doctoral | 0 | 0 | 12 | 24 | 36 |
| totals | 3 | 3 | 31 | 76 | 113 |

Age Class 45 to 54

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 4 | 5 |
| College/ Bachelor | 0 | 2 | 6 | 25 | 33 |
| Graduate/ Doctoral | 0 | 0 | 5 | 12 | 17 |
| totals | 0 | 2 | 12 | 41 | 55 |

Age Class 55 plus

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 1 | 0 | 10 | 11 |
| College/ Bachelor | 0 | 1 | 20 | 23 | 44 |
| Graduate/ Doctoral | 0 | 5 | 3 | 19 | 27 |
| totals | 0 | 7 | 23 | 52 | 82 |

QUESTION 21-G FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF CHILDREN IN THE HOME AND EDUCATION LEVEL RESPONSES

Without Children in the Home

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 2 | 17 | 19 |
| College/ Bachelor | 3 | 3 | 29 | 74 | 109 |
| Graduate/ Doctoral | 0 | 4 | 12 | 35 | 51 |
| totals | 3 | 7 | 43 | 126 | 179 |

With Children in the Home

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 1 | 0 | 11 | 13 |
| College/ Bachelor | 0 | 4 | 30 | 60 | 94 |
| Graduate Doctoral | 0 | 1 | 17 | 39 | 57 |
| totals | 1 | 6 | 47 | 110 | 164 |

## APPENDIX BB

## QUESTION 21H FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-H FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF INCOME LEVEL AND EDUCATION LEVEL RESPONSES

Income $19999 and below

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| HS & below | 2 | 0 | 1 | 10 | 13 |
| College/ Bachelor | 3 | 2 | 11 | 34 | 50 |
| Graduate/ Doctoral | 1 | 0 | 4 | 8 | 13 |
| totals | 6 | 2 | 16 | 52 | 76 |

Income $20000 to $39999

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| HS & below | 0 | 0 | 5 | 6 | 11 |
| College Bachelor | 0 | 10 | 27 | 30 | 67 |
| Graduate/ Doctoral | 2 | 2 | 12 | 15 | 31 |
| totals | 2 | 12 | 44 | 51 | 109 |

Income $40000 to $74999

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| HS & below | 0 | 0 | 4 | 4 | 8 |
| College Bachelor | 1 | 4 | 28 | 25 | 58 |
| Graduate/ Doctoral | 0 | 9 | 11 | 13 | 33 |
| totals | 1 | 13 | 43 | 42 | 99 |

Income $75000 plus

Responses

| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| HS & below | 0 | 0 | 0 | 0 | 0 |
| College/ Bachelor | 2 | 1 | 13 | 7 | 23 |
| Graduate/ Doctoral | 0 | 5 | 8 | 14 | 27 |
| totals | 2 | 6 | 21 | 21 | 50 |

## APPENDIX CC

## QUESTION 211 FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

QUESTION 21-I FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF CHILDREN IN THE HOME AND EDUCATION LEVEL RESPONSES

Without Children in the Home

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 2 | 17 | 19 |
| College/ Bachelor | 4 | 6 | 33 | 66 | 109 |
| Graduate/ Doctoral | 0 | 5 | 17 | 28 | 50 |
| totals | 4 | 11 | 52 | 111 | 178 |

With Children in the Home

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 1 | 5 | 6 | 13 |
| College/ Bachelor | 1 | 11 | 30 | 53 | 95 |
| Graduate Doctoral | 1 | 10 | 19 | 26 | 56 |
| totals | 3 | 22 | 54 | 85 | 164 |

## APPENDIX DD

## QUESTION 21J FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-J FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF INCOME AND CHILDREN IN THE HOME RESPONSES

**Without Children in the Home**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 1 | 1 | 8 | 38 | 48 |
| 20000 - 39999 | 0 | 3 | 10 | 50 | 63 |
| 40000 - 74999 | 0 | 4 | 11 | 31 | 46 |
| 75000 plus | 1 | 1 | 7 | 11 | 20 |
| totals | 2 | 9 | 36 | 130 | 177 |

**With Children in the Home**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 1 | 1 | 8 | 19 | 29 |
| 20000 - 39999 | 0 | 3 | 8 | 37 | 48 |
| 40000 - 74999 | 0 | 3 | 21 | 29 | 53 |
| 75000 plus | 2 | 3 | 7 | 19 | 31 |
| totals | 3 | 10 | 44 | 104 | 161 |

## APPENDIX EE

## QUESTION 21K FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS

## QUESTION 21-K FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND INCOME LEVEL RESPONSES

**Males**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 3 | 2 | 3 | 7 | 15 |
| 20000 - 39999 | 2 | 1 | 13 | 13 | 29 |
| 40000 - 74999 | 3 | 10 | 17 | 22 | 52 |
| 75000 plus | 2 | 6 | 12 | 6 | 26 |
| totals | 10 | 19 | 45 | 48 | 48 |

**Females**

| ($) Income | Responses: No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
|---|---|---|---|---|---|
| 19999 & below | 2 | 3 | 18 | 38 | 61 |
| 20000 - 39999 | 1 | 8 | 21 | 46 | 76 |
| 40000 - 74999 | 0 | 3 | 17 | 26 | 46 |
| 75000 plus | 1 | 0 | 11 | 13 | 25 |
| totals | 4 | 14 | 67 | 123 | 208 |

QUESTION 21-K FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF GENDER AND EDUCATION LEVEL RESPONSES

**Males**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 5 | 6 |
| College/ Bachelor | 8 | 10 | 25 | 28 | 71 |
| Graduate/ Doctoral | 2 | 9 | 19 | 15 | 45 |
| totals | 10 | 19 | 45 | 48 | 122 |

**Females**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 1 | 9 | 15 | 26 |
| College/ Bachelor | 3 | 9 | 40 | 70 | 122 |
| Graduate Doctoral | 0 | 4 | 18 | 38 | 60 |
| totals | 4 | 14 | 67 | 123 | 208 |

## QUESTION 21-K FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF AGE CLASS AND EDUCATION LEVEL RESPONSES

**Age Class 18 to 24**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 3 | 4 |
| College/ Bachelor | 1 | 1 | 4 | 7 | 13 |
| Graduate/ Doctoral | 0 | 3 | 1 | 4 | 8 |
| totals | 1 | 4 | 6 | 14 | 25 |

**Age Class 25 to 34**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 2 | 5 | 7 |
| College/ Bachelor | 2 | 3 | 13 | 19 | 37 |
| Graduate/ Doctoral | 0 | 0 | 6 | 12 | 18 |
| totals | 2 | 3 | 21 | 36 | 62 |

**Age Class 35 to 44**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 0 | 1 | 3 | 5 |
| College/ Bachelor | 3 | 6 | 23 | 37 | 69 |
| Graduate/ Doctoral | 0 | 3 | 13 | 20 | 36 |
| totals | 4 | 9 | 37 | 60 | 110 |

**Age Class 45 to 54**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 4 | 5 |
| College/ Bachelor | 0 | 5 | 5 | 22 | 32 |
| Graduate/ Doctoral | 0 | 4 | 7 | 6 | 17 |
| totals | 0 | 9 | 13 | 32 | 54 |

**Age Class 55 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 1 | 5 | 5 | 11 |
| College/ Bachelor | 5 | 4 | 20 | 13 | 42 |
| Graduate/ Doctoral | 2 | 3 | 10 | 11 | 26 |
| totals | 7 | 8 | 35 | 29 | 79 |

## QUESTION 21-K FREQUENCY TABLES OF THE TWO-WAY INDEPENDENT VARIABLE INTERACTIONS OF INCOME LEVEL AND EDUCATION LEVEL RESPONSES

**Income $19999 and below**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 1 | 0 | 3 | 9 | 13 |
| College/ Bachelor | 3 | 4 | 14 | 29 | 50 |
| Graduate/ Doctoral | 1 | 1 | 4 | 7 | 13 |
| totals | 5 | 5 | 21 | 45 | 76 |

**Income $20000 to $39999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 1 | 6 | 4 | 11 |
| College Bachelor | 3 | 6 | 20 | 36 | 65 |
| Graduate/ Doctoral | 0 | 2 | 8 | 19 | 29 |
| totals | 3 | 9 | 34 | 59 | 105 |

**Income $40000 to $74999**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 1 | 7 | 8 |
| College Bachelor | 2 | 8 | 20 | 26 | 56 |
| Graduate/ Doctoral | 1 | 5 | 13 | 15 | 34 |
| totals | 3 | 13 | 34 | 48 | 98 |

**Income $75000 plus**

| | Responses | | | | |
|---|---|---|---|---|---|
| | No Threat | Not Much Threat | Mod' Serious Threat | Very Serious Threat | totals |
| HS & below | 0 | 0 | 0 | 0 | 0 |
| College/ Bachelor | 3 | 1 | 11 | 7 | 22 |
| Graduate/ Doctoral | 0 | 5 | 12 | 12 | 29 |
| totals | 3 | 6 | 23 | 19 | 51 |

## APPENDIX FF

## VITA

VITA 2

Bradley Neil Cox

Candidate for the Degree of

Master of Science

**Thesis:** 1993 PUBLIC OPINION ON ENVIRONMENTAL ISSUES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**Major Field:** Environmental Sciences

**Biographical:**

Personal Data: Born in Garland, Texas, July 29, 1968; the son of Billie and Larry Cox.

Education: Graduated from Bixby High School, Bixby, Oklahoma in May of 1986; attended Tulsa Junior College part-time, Tulsa, Oklahoma, 1986-1988; earned a Bachelor of Science degree in Political Science from Oklahoma State University, Stillwater, Oklahoma in May of 1991. Completed requirements for the Master of Science degree in Environmental Science, Oklahoma State University, Stillwater, Oklahoma in May of 1994.

Experience: Legal Non-Commissioned Officer (NCO), United States Army Reserves, Judge Advocate General's office, Tulsa, Oklahoma, active reserves 1987-1993, inactive reserves 1993-Present; Receiving Department Assistant Manager, Hastings Music Book and Video, Stillwater, Oklahoma, 1992-Present; Paralegal, OXY USA Incorporated and Occidental Oil and Gas, Litigation Support Center, Tulsa, Oklahoma, 1991-1992; Ranch Hand, Spencer Maybe Horse Ranch, Glenpool, Oklahoma, 1988; Security Agent, Sears Roebuck and Company, Tulsa, Oklahoma, 1985-1988.

Professional Memberships: National Association of Environmental Professionals.

**OKLAHOMA STATE UNIVERSITY**
**INSTITUTIONAL REVIEW BOARD**
**FOR HUMAN SUBJECTS RESEARCH**

**Date:** 10-15-93 **IRB#:** AS-94-007

**Proposal Title:** 1993 PUBLIC OPINION ON ENVIRONMENTAL ISSUES IN REGION VI OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**Principal Investigator(s):** James J. Lawler, Larry G. Talent, William D. Warde

**Reviewed and Processed as:** Exempt

**Approval Status Recommended by Reviewer(s):** Approved

**APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.**
**APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL. ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.**

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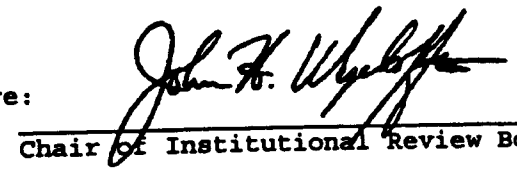
Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

**Signature:**  **Date:** October 19, 1993

Chair of Institutional Review Board