A Marketing Research Study: The Determination of Consumer Ecological Concerns, Behaviors, Motivations, and Market Segments

An Honors Thesis (HONRS 499)

by

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PURPOSE OF THESIS

This marketing research study has been created in order to determine consumer ecological concerns, behaviors, motivations, and market segments. A questionnaire was formulated in order to gather data which was then analyzed to determine these aspects. This thesis includes: the background research used to create the questionnaire; all of the results; the recommendations to businesses, manufacturers, and marketers concerning their role with protecting the environment; and finally, the actual questionnaire.
A MARKETING RESEARCH STUDY: THE DETERMINATION OF CONSUMER ECOLOGICAL CONCERNS, BEHAVIORS, MOTIVATIONS, AND MARKET SEGMENTS
# TABLE OF CONTENTS

I. Introduction ........................................................................................................... 1
   A. Objectives ........................................................................................................ 2
   B. Study Format .................................................................................................... 2
       1. Sample ........................................................................................................ 3
       2. Questionnaire Design ................................................................................... 4
       3. Analysis ......................................................................................................... 5

II. Literature Review .................................................................................................. 7
   A. Article I ............................................................................................................ 7
   B. Article II .......................................................................................................... 8
   C. Article III ......................................................................................................... 10
   D. Article IV ......................................................................................................... 11
   E. Article V .......................................................................................................... 12
   F. Article VI .......................................................................................................... 13
   G. Article VII ........................................................................................................ 14
   H. Article VIII ...................................................................................................... 14
   I. Article IX .......................................................................................................... 15
   J. Article X ............................................................................................................ 16
   K. Article XI .......................................................................................................... 18
   L. Article XII ......................................................................................................... 19
   M. Article XIII ...................................................................................................... 19
   N. Article XIV ...................................................................................................... 21
   O. Article XV ........................................................................................................ 22

III. Frequency Distribution ....................................................................................... 23
   A. Demographics ................................................................................................. 23
   B. Awareness ....................................................................................................... 23
       1. Familiarity with Environmental Issues ......................................................... 24
       2. Importance of Environmental Issues ............................................................. 24
       3. Environmentally Responsible Companies ..................................................... 24
       4. Recollection of Environmentally Safe Product Labels ................................ 25
   C. Behaviors ......................................................................................................... 25
   D. Motivations ..................................................................................................... 26
   E. Attitudes .......................................................................................................... 27
F. Table and Charts
1. Table 1.................................................................29
2. Chart 1.................................................................31
3. Chart 2.................................................................32
4. Chart 3.................................................................33
5. Chart 4.................................................................34
6. Chart 5.................................................................35
7. Chart 5 continued.....................................................36
8. Chart 6.................................................................37
9. Chart 7.................................................................38
10. Chart 8.................................................................39
11. Chart 9.................................................................40
12. Chart 10...............................................................41

IV. Consumer Ecological Market Segments.........................................42
A. Factor Analysis..........................................................42
   1. Factor 1-Environmental Product Seekers..........................42
   2. Factor 2-Recyclers....................................................43
   3. Factor 3-Environmental Activists....................................43
B. Results of the Cross-Tabulations Against the Demographics..............44
   1. Significant Relationship..............................................44
   2. Significant Relationship..............................................45
   3. Significant Relationship..............................................45
   4. Significant Relationship..............................................45
   5. Tables
      a. Table 1................................................................47
      b. Table 2................................................................48
      c. Table 3................................................................49
      d. Table 4................................................................50
C. Results from the Cross-Tabulations Against the Familiarity
   with Environmental Issues..................................................51
   1. Factor 1-Environmental Product Seekers................................51
   2. Factor 2-Recyclers.......................................................51
   3. Factor 3-Environmental Activists.......................................52
   4. Tables
      a. Table 5................................................................53
      b. Table 6................................................................54
      c. Table 7................................................................55
D. Results from the Cross-Tabulations Against the Importance
   of Environmental Issues.......................................................56
   1. Factor 1-Environmental Product Seekers............................56
      a. Solid Waste.............................................................56
      b. Air Pollution............................................................56
      c. Water Quality..........................................................57
      d. Ozone Layer............................................................57
e. Recycling........................................................................................................57
f. Tables
   1. Table 8........................................................................................................58
   2. Table 9........................................................................................................59
   3. Table 10......................................................................................................60
   4. Table 11......................................................................................................61
   5. Table 12......................................................................................................62
2. Factor 2-Recyclers..........................................................................................63
   a. Solid Waste..................................................................................................63
   b. Ozone Layer...............................................................................................63
   c. Recycling....................................................................................................63
   d. Tables
      1. Table 13..................................................................................................64
      2. Table 14..................................................................................................65
      3. Table 15..................................................................................................66
3. Factor 3-Environmental Activists.................................................................67
   a. Recycling....................................................................................................67
      1. Table 16..................................................................................................68
E. Results from the Cross-Tabulations Against Adequate Environmentally Safe Alternatives and Self Directed Motivation..................................................................69
   1. Factor Analysis............................................................................................69
      a. Factor 1-Adequate Environmentally Safe Alternatives..........................69
      b. Factor 2-Self Directed Motivation.............................................................70
   2. Cross-Tabulations.......................................................................................70
      a. Factor 1-Adequate Environmentally Safe Alternatives Against Factor 1-Environmental Product Seekers..............................................................70
      b. Factor 1-Adequate Environmentally Safe Alternatives Against Factor 2-Recyclers..............................................................71
      c. Factor 1-Adequate Environmentally Safe Alternatives Against Factor 3-Environmental Activists..............................................................71
      d. Factor 2-Self Directed Motivation Against Factor 1-Environmental Product Seekers..............................................................73
      e. Factor 2-Self Directed Motivation Against Factor 2-Recyclers..............73
      f. Factor 2-Self Directed Motivation Against Factor 3-Environmental Activists..............................................................73
g. Tables
1. Table 17......................................................................................75
2. Table 18......................................................................................76
3. Table 19......................................................................................77
4. Table 20......................................................................................78
5. Table 21......................................................................................79
6. Table 22......................................................................................80

F. Results from the Cross-Tabulations Against Attitudes...............81
   1. Factor 3-Environmental Activists...........................................81
   2. Table 23......................................................................................82

V. Conclusions..................................................................................83
   A. Summary of the Frequency Distribution.................................83
      1. Demographics.......................................................................83
      2. Awareness...........................................................................83
      3. Behaviors............................................................................84
      4. Motivations.........................................................................84
      5. Attitudes...............................................................................84
   B. Summary of the Cross-Tabulations...........................................85
      1. Factor 1-Environmental Products Seekers..........................85
      2. Factor 2-Recyclers...............................................................85
      3. Factor 3-Environmental Activists.........................................86
   C. Recommendations.....................................................................86
      1. Product...............................................................................86
      2. Price..................................................................................87
      3. Promotion...........................................................................87
      4. Place (Distribution)............................................................88

VI. Bibliography..................................................................................89

VII. Questionnaire
I. INTRODUCTION

In general, people are becoming increasingly aware and concerned about environmental issues. Basically, an environmental consciousness has been created. As a result of this new environmental consciousness, more consumers are changing their behaviors to favor the environment, as well as basing more of their purchases on concerns for the environment. Therefore, businesses, manufacturers, and marketers must do whatever they can, such as producing products and services that are ecologically safe, to satisfy the needs and concerns of their consumers. A fairly new concept has arisen from the different businesses’ and consumers’ environmental concerns, which has been termed Green Marketing.

Green Marketing is a very broad concept which includes producing, advertising, and selling products and services that are environmentally safe. Furthermore, the way in which a company operates, such as saving energy, or the type of behaviors they promote, such as recycling, can be included in this concept.

Since Green Marketing and environmental concerns have become such important topics, a few studies have been conducted in order to better understand these issues. This particular study was created in November 1991 in order to determine awareness of environmental issues/concerns, determine ecological practices/behaviors, and determine motivations for environmental practices. The ultimate goal is to determine ecological market segments based upon consumer behavior.

The research for this study was collected through questionnaires administered within Muncie and Anderson, Indiana. The survey was conducted via the telephone, and the questionnaire was designed to meet the objectives by asking respondents questions concerning awareness, behaviors, motivations, and attitudes about environmental issues. In analyzing the responses, valuable insights
will be discovered, which will help businesses, manufacturers, and marketers to better understand the consumers and their environmental needs.

A. OBJECTIVES

This study has four objectives, which are as follows:

1. to determine awareness of environmental issues/concerns.
2. to determine ecological practices/behaviors.
3. to determine motivations for environmental practices.
4. to determine ecological market segments based upon consumer behavior.

B. STUDY FORMAT

In November 1991, a study was done in Muncie, and Anderson, Indiana, in order to determine various elements including consumer environmental awareness, practices/behaviors, and motivations. This information can then be used to create ecological market segments into which consumers can be placed. The study was completed by means of a telephone questionnaire. Respondents were chosen by randomly picking telephone numbers from the 1991-1992 Muncie area telephone directory. Each telephone number was tried three times by the questionnaire administrator. After three tries on separate occasions, if there was not an answer, or if the person declined participation, the telephone number directly following that one in the telephone directory was used. It is important to note that only households and not business were used in this study. The questionnaire took approximately seven to eight minutes to complete. Lastly, the
person responsible for most of the grocery shopping in the household was asked to participate in the survey.

1. Sample

The sample for the telephone questionnaire consisted of 506 residents from the Muncie and Anderson, Indiana, communities with a possible sampling error of +/- 3.9%. Each one of the respondents was contacted by telephone to complete the questionnaire. Of the 506 determined sample, 490 questionnaires were actually completed. An age quota was also established for the survey in order to obtain an accurate representation of all different age groups. The age quota is as follows:

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>46</td>
</tr>
<tr>
<td>25-34</td>
<td>92</td>
</tr>
<tr>
<td>35-49</td>
<td>138</td>
</tr>
<tr>
<td>50-64</td>
<td>138</td>
</tr>
<tr>
<td>65+</td>
<td>92</td>
</tr>
<tr>
<td>Total</td>
<td>506</td>
</tr>
</tbody>
</table>
2. Questionnaire Design

The questionnaire was divided into five sections. Each of these sections asked questions which pertained to the objectives of the study. The sections were awareness, behaviors, motivations, attitudes, and demographics.

The first section, awareness, measured how familiar the respondent was overall with environmental issues. For this question, the respondent was to answer by using an itemized rating scale of 1 to 5; where a 5 was very familiar, and a 1 was not at all familiar. The respondent was also asked how important the environmental issues of solid waste, air pollution, water quality, ozone layer, and recycling were to him or her. This question was also rated on a scale of 1 to 5; where a 5 was extremely important, and a 1 was not at all important. The third question was an open ended question in which the first and second environmentally responsible companies that came to mind were recorded. The last question in this section asked the respondent if he or she had recalled seeing any labels on packages that said the product was environmentally safe within the last two weeks.

The next section determined the ecological behaviors of the respondents. A somewhat lengthy list of behaviors some people were doing about the environment were read to the respondent. After each item was read, the respondent was to rate his or her household effort on a scale of 1 to 5; where a rating of 5 would be a very strong effort, and a rating of 1 would be no effort at all. The questions concerned making an effort in recycling, sorting, purchasing habits, and environmentally safe product usage, among other things.

The third section, motivations, had two questions within it. The first question determined what additional percentage the respondent would be willing to pay for environmentally safe products. The second question listed several reasons that the respondent may be doing something about the environment. The respondent was asked as to how much he or she agreed with each of the reasons on
a scale of 1 to 5; where a 5 was strongly agree, and a 1 was strongly disagree. Some of the reasons why the respondent might have been doing something about the environment included social pressure, helping future generations, etc.

The fourth section of the questionnaire consisted of one question which measured the attitude of the respondent concerning current environmental issues. The respondent was to state how much he or she agreed with each of the four issues on a scale of 1 to 5; where a 5 was strongly agree, and a 1 was strongly disagree. An example of one of the issues is, "I am confused with environmental claims on product packages."

Finally, the last section consisted of demographic questions. Marital status, age, political outlook, and income were some of the aspects included in this final section.

It is important to note that, where relevant, the responses of "I don't know" or "none" were acceptable answers. The actual questionnaire is included at the end of the study.

3. Analysis

Interpretation and analysis of the data for the questionnaire were presented in three forms. The first was a frequency distribution printout. This computer printout listed all the questions, the specific responses for each individual question, and the number of times each response was chosen by the respondent.

The second form of analysis was a cross tabulation printout. A cross tabulation was performed by describing two variables at one time. In other words, one variable is cross-classified with another variable to see if one significantly impacts the other. If one variable does significantly affect the other, then a relationship can be determined. In order to determine if a significant relationship is
present, a chi-square test must be administered. Upon analyzing the Pearson chi-square number, a significant relationship can be found if the number is less than or equal to .10. The significant relationship can then be studied more closely to determine what the impact actually means. In this particular study, the cross-tabulations will be used to show how the respective questions from the sections of demographics, familiarity/concern with environmental issues, motivations, and attitudes impacted the soon to be determined market segments.

The last type of analysis included hand tabulating the open-ended questions included in the the questionnaire.

The frequency distribution and the cross tabulation printouts were done by the Ball State mainframe computers, located in the Ball State University Bureau of Business Research.
II. LITERATURE REVIEW

The purpose of this literature review is threefold. First, a great number of articles are explored in order to gain insight into the awareness people generally have concerning environmental issues, the various ecological practices and behaviors they have, and the motivations they have for environmental practices. This ecological background information will then to be used as a guide to create a questionnaire to further examine the three areas mentioned above. Lastly, in analyzing the data emulated from the study, environmental strategies will be suggested for businesses, manufacturers, and marketers.

A. ARTICLE I


1. Purpose

Several issues are mentioned in this article. First, the article states that people feel they, as well as companies, are responsible for the environmental problems currently facing the nation. Furthermore, the article lists some practices people are doing to help alleviate environmental problems, such as recycling or using public transportation. Lastly, the article includes information pertaining to consumers’ confusion about what they should do about the environment and about the authenticity of certain environmental claims by companies.
2. **Management Questions**

* Are consumers concerned about environmental problems?
* Do consumers believe environmental claims?
* What can consumers do to help protect the environment?

3. **Conclusions**

* Consumers are concerned about environmental problems. In fact, a Washington Post-ABC News survey of 1,016 adults reported that people felt the environmental problems were reaching a crisis status.
* Consumers are becoming confused with the numerous environmental claims. They do not know which claims to believe and which ones they should disregard.
* Consumers are willing to make sacrifices for the environment, but they do not know where to begin or what exactly they should do.

**B. ARTICLE II**


1. **Research Purpose**

   The purpose of this research was to conduct a survey in which consumers were to rate marketers and brands on their concern for the environment.

2. **Research Questions**

   * Are marketers concerned about the environment?
   * Do marketers' products show they are concerned about the environment?
   * What characteristics impact consumer purchase decisions?
3. Research Design

The survey conducted by Advertising Age was designed to measure consumer opinion and consumer behavior. The survey was given to 1,514 consumers, and the survey used was a telephone survey which used random digit dialing to choose those consumers to be surveyed.

"Characteristics of the sample are: 48% male, 52% female; ages 12-17, 10%; 18-24, 13%; 25-34, 21%; 35-44, 17%; 45-54, 12%; 55-64, 12%; 65 and older, 15%"(10). This survey was also given in all regions of the United States as follows: "Twenty-one percent of the sample was located in the Northeast U.S., 33% in the South Central region, 26% in the North Central, and 20% in the West"(10).

The survey contained several questions in which the consumers were to rate companies and individual product categories by their concern for the environment. The rating system assigned points to different categories as follows:

"very concerned" = 4 points
"somewhat concerned" = 3 points
"somewhat unconcerned" = 2 points
"very unconcerned" = 1 point
"don't know" = not tabulated

From these ratings, a mean was then calculated. Also, some of the results were given in percentages.

4. Research Findings

There were an abundance of statistical findings, and the following statements are generalizations concerning these findings.

* The most environmentally conscious company was Proctor & Gamble Co.
* The industry which was the "greenest" was cereals as opposed to soft drinks, retail
chains, toothpaste, laundry soaps-detergents, beer, automotive, fast-food chains, cosmetic companies, and diapers.
* Wal-Mart, McDonald's, and Proctor & Gamble were most concerned about the environment according to the products they marketed.
* About half of the consumers asked would not cancel their subscriptions to magazines and newspapers that did not use recycled paper.

C. ARTICLE III

1. Purpose
The purpose of this article was to show the findings from a survey in which Americans' opinions concerning various environmental issues were sought.

2. Research Questions
* Will Americans pay more for products or services that will help protect the environment?
* Do Americans favor any type of punishment for companies that break environmental regulations?
* What type of role should the government take in protecting the environment?

3. Research Design
The survey was conducted by Golin/Harris Communications and the Angus Reid Group, and was titled, Environment U.S.A. '91. The 200-questions survey was given to 2,000 American adults over the telephone during a 35 minute period.
4. Research Findings
* Some respondents felt that those companies which break environmental regulations should receive a jail sentence.
* The majority of the people were willing to pay additional money for environmentally safe products and garbage disposal.
* Slightly over half of the respondents felt that the government has the responsibility to close factories which pollute the environment.

D. ARTICLE IV
Crispens, Jonna. "'Green' Packages Put the Wrap on Sales". Supermarket News.

1. Purpose
This article gives information pertaining to consumers' purchasing habits. It also describes the retailers role in the consumers' purchasing of products.

2. Management Questions
* Do consumers want environmentally safe packaging?
* If retailers offer environmentally safe product packages, will consumers purchase them?
* Are retailers willing to offer environmentally safe product packaging?

3. Conclusions
* With the consumers' increasing concern about the environment, they are more conscious about purchasing products with environmentally safe packaging.
* Retailers really do not want to pay extra money for the environmentally safe product packages; however, the consumers are requesting them, causing the retailers to oblige.

E. ARTICLE V


1. Purpose

The main point of this particular article concerned designing products for environmentally safe disposability. More specifically, it mentioned ways in which Proctor & Gamble altered its packaging to meet the environmental concerns of the EPA and consumers.

2. Management Questions

* Are there ways to alter product packaging to make them more environmentally friendly?
* Will consumers have to change their habits in order to use any new packaging?

3. Conclusions

* Product packaging can be changed through the following means: eliminating packaging, reducing packaging, using refillable, returnable, or reusable packaging, and also by using recyclable materials in packaging.
* Proctor & Gamble has incorporated many of the above packaging changes in their products.
* Consumers really will not have to make changes in their lifestyles to use products with new types of packaging.
F. ARTICLE VI


1. Purpose

The article emphasizes the importance of communicating company environmental practices with the consumers.

2. Management Questions

* How important is a company's environmental image?
* Why should a company relate their environmental practices to the consumers?
* How should a company relate their environmental practices to the consumers?

3. Conclusions

* The image of providing environmentally safe products and packages is important because consumers are more willing to purchase from these types of companies.
* Consumers have been known to boycott companies which do things that are unsafe for the environment. For example, McDonald’s had to stop using chlorofluorocarbons due to consumer concern.
* Relating company environmental practices to consumers, gives the company a competitive advantage over its competitors.
* A company can inform the consumers about their environmental practices and products through advertising and brochures.
G. ARTICLE VII


1. Purpose

This short article briefly focuses on the fact that companies do not always have true or accurate environmental claims.

2. Management Questions

* Are companies giving true environmental claims concerning their products?
* What is being done to counteract the false environmental claims by companies?

3. Conclusions

* People do not always believe environmental claims because companies have been caught using false claims.
* Guidelines for labeling and advertising of environmentally safe products must be created.

H. ARTICLE VIII


1. Purpose

This article touches upon the concept of green marketing as companies are trying to meet the environmentally safe product concerns of the consumers.
2. **Management Questions**

* Is there a request for environmentally safe products by the consumers?
* What are companies doing about the environmental problems?
* Are environmental claims valid?

3. **Conclusions**

* There is a growing number of consumers who want retailers to offer environmentally safe products.
* Companies are doing a variety of things to help protect the environment and satisfy the needs of the consumers.

I. **ARTICLE IX**

Gutfeld, Rose. "Eight of 10 Americans are Environmentalists, at Least so They Say".  

1. **Purpose**

This article summarizes the results from a nationwide *Wall Street Journal*/NBC News poll. Various questions were posed to people concerning the areas of environmental awareness, concerns, and behaviors.

2. **Management Questions**

There were several questions asked within this survey. Thus, only a few of the management questions are listed here.
* Are people concerned about the environment?
* What are people willing to do in order to protect the environment?
* How is the government viewed in so far as what they should be doing about the environment?

3. **Conclusions**

* Many people are concerned about the environment and have named themselves environmentalists.
* People say they will purchase environmentally safe products if given the choice; however, they do not always follow through with this behavior. Often times the consumer will not give up convenience and low price for an environmentally safe product.
* People do not feel that the government is handling the environmental issue adequately.

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**J. ARTICLE X**


1. **Research Purpose**

The purpose of this research was to examine consumer environmentalism through a survey.

2. **Research Questions**

* Will consumers boycott companies who have a negative environmental image or record?
* How are companies reacting to the green movement?
* What are the different market segments based on the level of greenness?
* What can companies do to satisfy the green movement?

3. Research Design

The telephone survey was conducted in June 1990. The sample size included 1000 adults. Also, the results were reported in percentages.

4. Research Findings

* The article reported that 27% of the respondents had boycotted a product produced by a company which had a poor environmental image or record.
* Some companies are altering their products so they are environmentally safe. For example, McDonald's is discontinuing its use of foam packaging.
* This survey recognized four different market segments. The first segment was termed the die-hard "greener-than-greens"; the people in this segment are willing to pay a higher price for environmentally safe products. They represent 23% of the population. The second segment was called the somewhat-concerned "greens"; they tend to make sacrifices for the safety of the environment. 59% of the population is included in this segment. The next segment, the "light greens", have a concern for the environment, but do not really do anything about it. 15% of the population are "light greens". The last segment earned the name of "un-greens", and they do not recycle.
* The study recommended that companies search for opportunities to produce environmentally safe products, as well as to seek input from environmental groups.
K. ARTICLE XI

Riddle, Judith S. “Shoppers Make Purchases Based on 'Green' Products”.

1. Purpose

This article focuses on the movement to eliminate or reduce product packaging. It also briefly discusses whether or not plastic is harmful to the environment.

2. Management Questions

* Is there a need to change the way in which products are packaged?
* What are some ways to eliminate or reduce product packaging?
* What is the true effect of plastic on the environment?

3. Conclusions

* Consumers are concerned about the over-packaging of products, so much that some will not even purchase a product which they feel has too much packaging or is packaged in harmful material.
* The boxes and wrappings of some products can be left off the products to help reduce needless trash. In addition to this, aluminum trays on some food items can be eliminated. Also, people can use reusable canvas bags in place of paper or plastic bags.
* Plastic is not harmful to the environment when handled correctly. In fact, paper and cardboard are much more damaging to the environment.
L. ARTICLE XII


1. Purpose

This article does not have a main focus. Basically, it states different ways in which green marketing has emerged as a new way of life.

2. Management Questions

* Is green marketing a fad?
* Do people consider themselves environmentalists?
* How will the concept of green marketing grow?

3. Conclusions

* In general, people feel that green marketing is not a fad and will continue to become important.
* It was stated in the article that between 25% and 50% of the population call themselves environmentalists. However, these percentages seem to be continually changing, and people have differing definitions concerning what it means to be an environmentalist.
* Various types of media will help to spread the concept of green marketing.

M. ARTICLE XIII

1. **Purpose**

This article is based on the findings from The Roper Organizations, Inc.'s report, "The Environment: Public Attitudes and Individual Behavior", which was prepared for S.C. Johnson & Sons Inc. in July 1990. The purpose of this study was to determine environmental attitudes and awareness. This comprehensive report resulted from a nationwide study of 1,413 men and women who were interviewed face-to-face. The report included the actual questionnaire, the results, and the conclusions. Some questions from the Roper Organization's questionnaire/study were used in this study, while some of the questions were slightly altered and then used.

Therefore, the purpose of this particular article is to explain whether businesses or consumers are at fault for the environmental problems today. This article also describes the five behavioral segments into which American consumers are placed based on their environmentally safe practices.

2. **Management Questions**

* Are businesses to blame for environmental problems?
* Are consumers to blame for environmental problems?
* How does consumer behavior affect the environment?
* Are consumers and businesses doing their respective parts in protecting the environment?
* What are True-Blue Greens, Greenback Greens, Sprouts, Grousers, and Basic Browns?

3. **Conclusions**

* Consumers do not feel that businesses are doing enough for the environment.
* Consumers blame businesses for environmental problems, especially for
industrial pollution.
* Americans feel they are also at fault for environmental problems; they say they are not willing to pay higher prices for environmentally safe products.
* Consumers found in the True-Blue Greens category are very willing to do their part to help the environment. They make up 11% of the population.
* Consumers found in the Greenback Greens segment will pay more for environmentally safe products, but will not give up convenience to help the environment. They account for 11% of the population.
* Consumers found in the Sprouts segment are willing to change their lifestyles to help protect the environment. They account for 26% of the population.
* Consumers found in the Grouser segment are basically indifferent when it comes to their views concerning the environment. They account for 24% of the population.
* Consumers found in the Basic Browns segment are least likely to support any actions to help protect the environment. They account for 28% of the population.

N. ARTICLE XIV


1. Purpose

This supplement explained various ways in which a grocer, Schnucks, changed its business ways to become more environmentally conscious.

2. Management Questions

* What is a grocer's main purpose; environmental responsibility or simply being a
grocer?
* What has Schnucks done to prove their environmental responsibility?

3. **Conclusions**

* Schnucks feels that their first responsibility lies in being a grocer and then in being environmentally responsible.
* Schnucks offers its customers reusable canvas bags and egg cartons which can be recycled, as well as many other green products under the Greenmark line.

O. **ARTICLE XV**


1. **Purpose**

This article lists various ways in which companies have altered or are planning to alter their packaging to be more environmentally responsible.

2. **Management Questions**

* What are companies doing to change their product packaging and why?

3. **Conclusions**

* Companies are altering their product packaging due to the consumers’ demand for it. Cola companies were the first to use recycled plastic bottles. Other companies are following the lead. For example, Lever Brothers is using some recycled material in their liquid detergent bottles.
III. FREQUENCY DISTRIBUTION

The frequency distribution was a collection of all the responses from the questionnaires. In other words, it tabulated and exposed the frequency with which each of the possible responses were chosen for each of the questions. The resulting data was exhibited by percentages and average ratings.

A. DEMOGRAPHICS

This was the final section of the questionnaire. The demographic section was placed at the end of the questionnaire because the respondent is usually more willing to answer personal questions about himself or herself at the close of the survey, than at the beginning. Some questions in this section pertained to gender, marital status, age, income, political outlook, and educational level.

Table 1 shows the frequencies in percentages of all the demographic questions. 75% of the respondents were female, and 25% were male. The majority of the respondents were between 35 and 64 years old. Only 9% of the respondents earned an annual household income before taxes of $45,000-$54,999. As far as marital status was concerned, 60% were married, and of those married, 48% had both spouses working outside of the home. All of the demographical information can be found in Table 1.

B. AWARENESS

This section dealt with the respondents familiarity and concern for environmental issues, as well as their recollection of environmentally safe companies and package labels.
1. **Familiarity with Environmental Issues**

The respondent was first asked to rate how familiar he or she was with environmental issues on a scale of 1 to 5; a 5 being very familiar and a 1 being not at all familiar. Chart 1 illustrated the respondents' knowledge of the environment. As shown in the pie chart, 79% of the respondents said that they were somewhat familiar about environmental issues. Only 6% of those people questioned were not familiar with environmental issues. See Chart 1.

2. **Importance of Environmental Issues**

For this question, the respondent was asked to rate solid waste, air pollution, water quality, ozone layer, and recycling as to how important each issue was on a scale of 1 to 5; a 5 being very important and a 1 being not at all important. The majority of the respondents felt that the five issues were important. Chart 2, the bar graph, displays the importance of the environmental issues of water quality, air pollution, recycling, solid waste, and the ozone layer. Here, the average rating was used in order to show which one of the issues was the most important. However, according the chart, the different environmental issues were of almost equal importance. The ozone layer was ever so slightly less important than the water quality. This information can be seen on Chart 2.

3. **Environmentally Responsible Companies**

The third question in this section asked the respondent to state the first environmentally responsible company that came to mind, and then the second. This information is displayed in a bar chart. 37% of the respondents did not know of an environmentally responsible company as their response. 4% of the respondents stated that McDonald's came to mind first when thinking of an environmentally responsible company. In addition, .5% of the respondents listed
Proctor & Gamble as the company thought of second as an environmentally responsible company. See Chart 3.

4. **Recollection of Environmentally Safe Product Labels**

In the final question of this section, the respondent was asked if he or she had recalled seeing any labels on packages within the past two weeks that said the product was environmentally safe. There were a great number of respondents which answered no to this particular question. Chart 4 shows the respondents' recollection of environmentally safe product labels within the last two weeks. 40% of the respondents recalled seeing a package, which stated that the product was environmentally safe. On the other hand, 13% did not recall seeing such a label. See Chart 4.

**C. BEHAVIORS**

In this section, several activities were listed, which included some things people were doing about the environment. The respondent was asked to state how much of an effort his or her household was making to do something about the environment on a scale from 1 to 5. Here, a rating of 5 was a very strong effort, while a rating of 1 was no effort at all.

Chart 5 rated the respondents' ecological behaviors. It shows what particular behavior had the strongest household effort and what behavior had no household effort at all. Furthermore, it shows many other behavioral efforts. The average rating was used to rank the behaviors from strongest effort to no effort at all. People made the strongest effort to return aluminum and/or glass containers of any form to a recycling drop or center in comparison to any of the other behaviors. According to the chart, writing letters to politicians to express opinions concerning
environmental issues rated last. See Chart 5.

Chart 6 displays the respondent's answer as to whether or not he or she had a yard for which he or she was responsible for mowing. According to the chart, 76% of those participating in the survey have a yard which they are responsible for mowing. See Chart 6.

If the respondent answered yes to this question, then he or she was asked to rate how much of an effort he or she made to put organic materials, such as grass clippings and leaves, in a compost pile. Once again, the rating scale covered the interval of 1 to 5; a 5 being a very strong effort and a 1 being no effort at all.

Chart 7 shows the amount of effort the respondents made in putting organic material in a compost pile, provided they were responsible for mowing a yard. 24% made a very strong effort; whereas, double that percentage (48%) made no effort at all. See Chart 7.

The last question in this section was an open ended question. It asked the respondents to state if there was something else that they were doing about the environment which had not been previously mentioned. After hand tabulating all of the responses, some of the more important environmental behaviors were: conserving electricity and water, not smoking or quitting smoking, avoiding chemical and lawn sprays or pesticides, planting trees, educating others about recycling, and taking own bags to grocery stores.

**D. MOTIVATIONS**

In the first of two questions within this section, the respondent was requested to choose, from those categories listed, what additional percentage he or she would be willing to pay for environmentally safe products. Chart 8 illustrates the
additional percentages people were willing to pay for environmentally safe products. 30% were willing to pay an extra 5% for safe products, while only 12% were willing to pay an additional 15% on top of what they have been paying. See Chart 8.

The second question listed ten reasons why people may be doing something about the environment. The respondent was requested to state the extent to which he or she agreed with each of the listed reasons. The respondent rated his or her agreement on a scale of 1 to 5; where a 5 was strongly agree, and a 1 was strongly disagree.

The bar chart, Chart 9, displayed the reasons people may have been doing something about the environment, along with each reason's respective average rating. The average ratings were chosen in order to show which reasons the respondents agreed with more. The reasons ranged from the average rating of 4.24 to 2.63. As compared to all of the listed reasons, purchasing environmentally safe products to help protect future generations rated first. Social pressure to make lifestyle changes in order to help protect the environment was the least agreed with reason. See Chart 9.

E. ATTITUDES

The section on attitudes was composed of one question in which four current environmental issues were listed. The respondent was to agree or disagree with each of the issues on a scale of 1 to 5; where a 5 represented strongly agree, and a 1 represented strongly disagree. The purpose of this section was to determine the respondents' attitudes toward environmental claims.

Chart 10 lists the four issues which pertained to environmental claims on products by companies. Once again, the average ratings were shown in order to
prioritize the different issues. Respondents agreed with most, the issue that companies need to substantiate more the environmental claims for their products; whereas, the respondents rated the issue of being confused with environmental claims on products packages last. See Chart 10.
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<th>Characteristic</th>
<th>Percent</th>
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Chart 1
Environmental Knowledge

Familiarity with Environmental Issues

Very Familiar
15%

Not Familiar
6%

Somewhat Familiar
79%

490 Muncie and Anderson Residents
November 1991
Chart 2
Importance of Environmental Issues

Water Quality 4.44
Air Pollution 4.44
Recycling 4.32
Solid Waste 4.28
Ozone Layer 4.11

*Average Rating

*1-5 scale; 5= extremely impt.&1=not impt
490 Muncie and Anderson Residents
November 1991
Chart 3
Environmentally Safe Companies

Percent

McDonalds  P&G  Walmart  Other  None  Don't Know

 Thought of first

 Thought of second

490 Muncie and Anderson Residents
November 1991
Chart 4
Respondents' Recollection of Environmentally Safe Labels

Within the last two weeks

Yes  No  Don't Recall
Chart 5
Respondents' Ecological Behaviors

Household Behavior

- Return aluminum/glass: 3.4
- Low phosphate soaps: 3.32
- Use cloth diapers: 3.24
- Buy recycled materials: 3.2
- Use biodegradable bags: 3.19
- Avoid aerosol containers: 3.1
- Recycle newspapers: 2.99
- Buy refillable packages: 2.79

*1-5 scale; 5=extremely imp & 1=not imp
490 Muncie and Anderson Residents
November 1991
Chart 5 continued
Respondents’ Ecological Behaviors

Household Behavior

- Read labels: 2.76
- Sort trash at home: 2.63
- Not buy from bad co.: 2.45
- Sort trash at work: 2.31
- Avoid styrofoam cont: 2.29
- Avoid plastic cont.: 2.26
- Car pool, etc.: 1.88
- Give money to groups: 1.72
- Write to politicians: 1.56

*1-5 scale; 5=very strong eff.& 1=no eff.
490 Muncie and Anderson Residents
November 1991