A CONTENT ANALYSIS OF THE COVERAGE
OF THE OIL CRISIS BY THREE
U.S. NEWS MAGAZINES

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The mass media may not be successful in telling us what to think, but they are stunningly successful in telling us what to think about.

--Bernard Cohen
A CONTENT ANALYSIS OF THE COVERAGE
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PREFACE

A content analysis of the coverage of the oil crises by three U.S. news magazines, Newsweek, Time, and U.S. News & World Report was designed to determine how well U.S. news magazines contributed to the understanding of a major public policy issue and served the public's need to know. An earlier study on television news coverage of the oil crises by The Media Institute in Washington, D.C., was a guide for the researcher of this work. The goal of this study was to determine the content of communication for accurately predicting the coverage by news magazines on a major public policy issue in the future.

A random sample of articles about the oil crises of the seventies by Newsweek, Time, and U.S. News & World Report were analyzed for differences and similarities that would specify aspects of media coverage that could be improved upon in the future.

I wish to express my sincere gratitude to all the people who assisted me in this work during my stay at Oklahoma State University and since that time. I was especially inspired by the dedication and constant support of my major advisor, Dr. William Steng. I am equally as indebted to committee member, Dr. Walter Ward, for his guidance and advisement during the course of this work.

Most of all, I wish to dedicate this work to my father, Jack, a teacher, whose devotion to his profession inspired many to strive for excellence.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION.</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>The Purpose</td>
<td>2</td>
</tr>
<tr>
<td>The Objectives</td>
<td>4</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>5</td>
</tr>
<tr>
<td>II. REVIEW OF THE LITERATURE.</td>
<td>7</td>
</tr>
<tr>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>Historical and Economic Perspective</td>
<td>8</td>
</tr>
<tr>
<td>Solutions to the Crises</td>
<td>10</td>
</tr>
<tr>
<td>Causes of the Crises</td>
<td>10</td>
</tr>
<tr>
<td>Government Involvement</td>
<td>11</td>
</tr>
<tr>
<td>Effects of the Crises</td>
<td>12</td>
</tr>
<tr>
<td>Media Accountability and the Gatekeeping Function</td>
<td>12</td>
</tr>
<tr>
<td>Studies</td>
<td>13</td>
</tr>
<tr>
<td>III. METHODOLOGY</td>
<td>17</td>
</tr>
<tr>
<td>Selection and Samples of News Magazines</td>
<td>17</td>
</tr>
<tr>
<td>Criteria for Selection of Articles</td>
<td>18</td>
</tr>
<tr>
<td>Content Analysis</td>
<td>21</td>
</tr>
<tr>
<td>Categorical Variables</td>
<td>21</td>
</tr>
<tr>
<td>Categories and the Coding Process</td>
<td>22</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>25</td>
</tr>
<tr>
<td>Constraints</td>
<td>26</td>
</tr>
<tr>
<td>Testing of Hypotheses</td>
<td>27</td>
</tr>
<tr>
<td>The X² Test</td>
<td>27</td>
</tr>
<tr>
<td>Crossbreaks</td>
<td>28</td>
</tr>
<tr>
<td>Frequency Analysis</td>
<td>28</td>
</tr>
<tr>
<td>Magnitude of Relationship</td>
<td>29</td>
</tr>
<tr>
<td>IV. RESULTS AND DISCUSSION.</td>
<td>31</td>
</tr>
<tr>
<td>V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.</td>
<td>34</td>
</tr>
<tr>
<td>SELECTED BIBLIOGRAPHY</td>
<td>40</td>
</tr>
</tbody>
</table>
APPENDICES ................................................................. 47
APPENDIX A - CODING SHEET ................................. 48
APPENDIX B - CROSSBREAKS. ................................. 51
APPENDIX C - FREQUENCIES. ................................. 58
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Random Sample of Articles from Three U.S. News Magazines Coded for Content</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Analysis--First Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Random Sample of Articles from Three U.S. News Magazines Coded for Content</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Analysis -- Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Relations Between U.S. News Magazines and Subjects Discussed as Solutions</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>During the First Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>Relations Between U.S. News Magazines and Subjects Discussed as Solutions</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>During the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>V.</td>
<td>Relations Between U.S. News Magazines and Subjects Discussed as Causes of</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>the Oil Crisis During the First Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>VI.</td>
<td>Relations Between U.S. News Magazines and Subjects Discussed as Causes of</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>the Oil Crisis During the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>VII.</td>
<td>Relations Between U.S. News Magazines and Sources of Information Used</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>During the First Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>VIII.</td>
<td>Relations Between U.S. News Magazines and Sources of Information Used</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>During the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>IX.</td>
<td>Relations Between U.S. News Magazines and Solutions Discussed During the</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>First Oil Crisis and the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>X.</td>
<td>Relations Between U.S. News Magazines and Causes Discussed During the First</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Oil Crisis and the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>XI.</td>
<td>Relations Between U.S. News Magazines and Sources of Information During the</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>First Oil Crisis and the Second Oil Crisis.</td>
<td></td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1.</td>
<td>Frequency of Subjects Discussed as Solutions During the First Oil Crisis</td>
<td>59</td>
</tr>
<tr>
<td>2.</td>
<td>Frequency of Subjects Discussed as Solutions During the Second Oil Crisis</td>
<td>60</td>
</tr>
<tr>
<td>3.</td>
<td>Frequency of Subjects Discussed as Causes During the First Oil Crisis</td>
<td>61</td>
</tr>
<tr>
<td>4.</td>
<td>Frequency of Subjects Discussed as Causes During the Second Oil Crisis</td>
<td>62</td>
</tr>
<tr>
<td>5.</td>
<td>Frequency of Sources of Information During the First Oil Crisis</td>
<td>63</td>
</tr>
<tr>
<td>6.</td>
<td>Frequency of Sources of Information During the Second Oil Crisis</td>
<td>64</td>
</tr>
<tr>
<td>7.</td>
<td>Frequency of Subjects Discussed as Solutions During the First and Second Oil Crises</td>
<td>65</td>
</tr>
<tr>
<td>8.</td>
<td>Frequency of Subjects Discussed as Causes During the First and Second Oil Crises</td>
<td>66</td>
</tr>
<tr>
<td>9.</td>
<td>Frequency of Sources of Information During the First and Second Oil Crises</td>
<td>67</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Background

President Reagan on January 28, 1981, speeded oil decontrol that allowed the post-crisis era to commence. "With that simple act, the energy crisis of the 1970's has ended."

Americans are more aware in the eighties of the importance of energy and, in particular, of the supply of oil and the devastating consequences of short supply. International events that prompted the oil crises of the seventies, and provoked spontaneous hostile reactions from American citizens and foreign nations as well, also have created an awareness of the media's role in reporting a major public policy issue.

Events that actually were tactics by nations of the Middle East and Arab oil-producing states to gain control of the world oil market appeared to be overnight occurrences to most Americans. When oil prices quadrupled, most Americans were confused and bewildered about the U.S. energy situation.

While Americans attempted to alter their lifestyles and become accustomed to long gas-lines, fuel shortages, and rationing, the Organization of Petroleum Exporting Countries (OPEC) cartel was strengthening its position in the international petroleum market. U.S. dependency on foreign oil allowed OPEC and other foreign oil-producing
countries to demand higher oil prices. Though OPEC had increased the price of oil by 40% in March of 1979, oil prices still doubled by year-end and the American public did not know why. ²

The beginning of the oil crisis can be traced to 1968 at the start of the environmental movement. Few Americans were aware that the nation was operating under a program initiated by President Eisenhower in 1959. The Oil Import Quota System placed limitations on the country's imports that amounted to no more than 12% of its total consumption. The program was initiated on the basis of national security. Politicians were concerned that dependence on foreign oil would leave the United States vulnerable in times of national security. By 1973, the United States was importing 48% of its petroleum supply from the OPEC countries. In 1978, U.S. petroleum imports rose to 69%.

This situation did not transpire overnight, but over a period of two decades. The short supply of petroleum in the United States debilitated by a lack of knowledge about simple economic principles and historical perspective could have been avoided. Instead, uninformed politicians, media, and consumers boosted the leverage of the OPEC cartel and other foreign oil-producers. Events leading to and following the first crisis have been labeled "the greatest and swiftest transfer of wealth in history."³ This short treatise on the oil crises of the seventies is merely a preamble to these vital questions concerning the media's role during those crises:

How well did it outline the range of policy issues and contribute to a better understanding of the public policy debate? and How well did it serve the public's need to know?⁴
The Purpose

Media coverage of the oil crises contributed to the public's understanding or misunderstanding of a major public policy issue. The magnitude of these crises was comparable perhaps only to Watergate or the Great Depression of the thirties.

The press too often is guilty of "event orientation" which means reporting just the "event" and not the whole picture. The Great Depression is a good example of "event orientation."

What the readers or viewers are really interested in are the implications of what takes place ... orientation frequently leaves these implications unstated ... Here we encounter some problems with this purely event orientation; it assumes that readers are interested in these events, as events. Like other "pseudo-events," the oil crises had "neat, well defined boundaries."

The pseudo-event is the logical, albeit sometimes absurd, outcome of the intensive event orientation of the press ... there is a real question of whether all these bits and pieces, no matter how skillfully handled, ever come together to form the full mosaic of our contemporary history. The press is quite adept at handling major misfortunes such as assassinations of political leaders, outbreaks of war, and economic catastrophes. The press can respond rapidly to such events, more rapidly than most public or quasi-public institutions.

Events supposedly have clear beginnings and endings, but often do not appear that way over time. The cause of this phenomenon is the method of reporting used:

... when it comes to reporting the broad secular sweep of history, then the press often lags significantly behind other public institutions. It is not in the press that one often learns of deeply embedded social problems, significant social realignments, and proposed solutions to the problems of the day.
Examination of the studies of the relationship of the oil crises and the media revealed the instantaneous impact of television warranted analysis. Polls indicate most people report receiving most of their news information from television rather than newspapers or news magazines. Lack of examination of the latter spurred this study. The purpose was two-fold: (1) to contribute to an understanding of a major public policy issue; (2) and to identify specific areas in which the quality of coverage might be improved. A comparison of the news magazines from one crisis to the next indicates the changes that have occurred in the selection of subjects by each news magazine.

The two-fold purpose was realized by analyzing the content of the oil crises by three weekly news magazines: Newsweek, Time, and U.S. News & World Report. McCombs, Shaw, and Grey explain that content analysis

... is an observation technique designed to take a sample of language (or paintings or music) and analyze that language for the message it carries. The goal is to be able to infer from objective, hard evidence what the sender of the message really means or to obtain some idea of the effect the sender intends.

The Objectives

The focus of this study was similar to that done by the Media Institute in Washington, D.C. on television coverage of the oil crises. It did not deal with the oil crises themselves, but with how the oil crises were covered by Newsweek, Time, and U.S. News & World Report. Also, similar to the Institute's study, the perceptions of the audience were not addressed in this study.

"Subjects" and sources were vital to television coverage and also to this work. These were deemed synonymous as in the above-mentioned
study. Summarily, the objectives, to fulfill the purpose of this study, were to determine:

(a) If similar "subjects" were used in the coverage of the oil crises by Newsweek, Time, and U.S. News & World Report?

(b) If similar sources were used in Newsweek's, Time's, and U.S. News & World Report's coverage of the oil crises?

(c) If the selection of subjects and sources by Newsweek, Time, and U.S. News and World Report, changed from the first oil crisis to the second oil crisis?

Statement of Problem

The problem can be stated: "Were there significant differences among Newsweek, Time, and U.S. News & World Report in their coverage of the oil crises?" Through ex post facto study and content analysis, "a research technique for the objective, systematic, and quantitative description of the manifest content of communication," this study examined the coverage of the oil crises by Newsweek, Time, and U.S. News & World Report.
ENDNOTES


2 The Media Institute, I, p. vi.


4 The Media Institute, I, p. vi.


6 McCombs, Shaw, and Grey, p. 4-5.

7 McCombs, Shaw, and Grey, p. 5.

8 McCombs, Shaw, and Grey, p. 141.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Within less than a week of his inauguration, President Ronald Reagan dissolved price controls that had governed American oil for almost 10 years. Unlike other proclamations, which usually are accompanied by pomp and circumstance, this one was uneventful. At the onset, the hoopla surrounding long gas lines, rationing, and higher oil prices, received major media play. At the resolve, media coverage was minimal.

An inattentive American public was preoccupied with the current panacea and measures that would combat further dependence on foreign oil-producers like OPEC. By 1981, it was evident that oil prices and the leverage of OPEC were declining. "Before very long, these events started to have repercussions on the world market. By early summer, every major OPEC nation found itself with growing stockpiles."\(^1\)

What led to these events was unforeseeable and obscure to the American layman. Regardless, the American public should have been more informed. Perspective on any major public policy issue is given through day-to-day coverage by the media. In this instance, it is apparent to some that the media failed to provide that information.

Researchers of the Media Institute were aware of the media's failure in coverage of the oil crises and, thus, analyzed the content of evening news broadcasts of ABC, CBS, and NBC. However, there is no indication
that further examination has been attempted by others. The researcher's
own investigation did not reveal additional research relevant to this
study. Little has been done on the impact of the media or on public
awareness of the oil crises. Lack of examination by researchers on this
major public policy issue suggested the need for this study and others
to follow.

Historical and Economic Perspective

Two journalism professors have studied the problem of constructing
an historical standard to compare the performance of weekly news
magazines in reporting events. L. John Martin, a professor at the
University of Maryland, and Harold L. Nelson, professor emeritus at the
University of Wisconsin,

... are concerned that the traditional methods of history do
not produce an historical standard that is objective in the
sense that it can be duplicated.2

Historical perspective, according to the Media Institute's study, is
essential for examining clearly the relationship between international
and domestic crude oil production and U. S. government policies. Energy
experts and economists seemed to be the only ones who could explain that
the artificially low price of domestic oil induced by the freeze of 1971
encouraged consumers to buy more rather than to conserve.

Our economic illiteracy rate is alarmingly high ... When we
examine the more special challenges of communication in
economics and suggest that these challenges should be met, let
us admit in advance that meeting them would be no small
accomplishment.3
Berelson, on establishing an historical standard, says

... press performance may be evaluated in the light of an outside non-content standard. The content of the medium, that is, may be checked against the content of what actually happened ... the standard must be accepted before there can be confidence in evaluation of performance. 4

The Media Institute noted that many subjects that dealt with economic aspects of the oil crises were not treated as causes or solutions.

It is revealing that the networks treated the economic components of the crises as incidental to the solutions and causes, rather than as the very essence of both. 5

The economic perspective or the universally accepted law of supply and demand vital to regulation and allocation of our scarce resources was relied on less than 2% of the time in television coverage.

The most elemental concept in an introductory economics course has escaped many of our brightest and best informed citizens and it was undoubtedly a difficult subject to popularize. 6

Popular or not, the message never got to people. "Few seemed to recognize that price has a profound influence on demand and supply." 7

Had the public realized that ending price controls would resolve the oil crises in the United States, they may or may not have heeded economists' warnings. But as the eighties progressed, evidence clearly mounted in favor of basic economic understanding. Methods for controlling conservation, had they been initiated, may have ended the continual rise in oil prices. Economic principles, at least, have proven effective in the eighties.
Solutions to the Oil Crises

A variety of solutions to the oil crises were addressed by U.S. news magazines, Newsweek, Time, U.S. News & World Report. Among those solutions covered were non-market issues such as conservation, rationing, regulation, and price controls. There was no casual link between the political economy of the oil crises and the coverage that non-market solutions received during 1973-74 and 1978-79.

An over-reliance on government sources for information may have resulted in the coverage that non-market solutions received. A lack of interest in the expertise of economists for the preference of government sources created a perspective void of economic and historical dimensions necessary for presenting a comprehensive picture of a major public policy issue.

Allowing the free market to regulate the price of oil in the eighties has proven that market solutions were the most viable of all solutions proposed during the oil crises of the seventies.

Causes of the Crises

"Is the crisis real?" Many Americans grappled with this question while pondering the alternative to a real crisis which meant manipulation by "Big Oil." "... seven in ten Americans thought the gasoline shortages were deliberately contrived by oil companies..." Perhaps the complexity of the crises seemed too great for even the most experienced reporters. Possibly the medium to disseminate information was incorrect for in-depth research necessary for efficient and accurate reporting in the time or space allotted.
Whatever the reason, motives behind and blame for the oil crises were placed on the oil companies and popularized by the news media. The Media Institute's study revealed that "... 35% of the discussion on the origins of the crises dwelled on the oil industry as the prime perpetrator."9

OPEC, too, became a target for angry consumers and businessmen. In essence, the cartel was blessed by absolute timing. Despite confused media and popular opinion, OPEC had not devised a scheme to curtail competition in the world oil market. OPEC simply reacted to "an inevitable social process."10 In March 1973, President Nixon reenacted price controls on petroleum products though a domestic crude oil shortage existed prior to the Arab oil embargo.

Government Involvement

"Since at least the 1930s," writes Professor Clayburn LaForce, "the United States petroleum market has been manipulated for political purposes."11 President Reagan's move to decontrol the price of oil revealed astonishing results. By allowing the price to rise, gasoline lines were eliminated, entitlements were abolished and U.S. dependence on oil somewhat alleviated.

A complimentary effect of crude oil price decontrol has been a rise in domestic energy production. U.S. oil exploration was the boom industry of the early 1980s, registering a 30% increase in 1980 and an additional 28% rise in the first half of 1981.12

Throughout the oil crises, government involvement received little media attention. At the end, evidence implicated federal energy policies as debilitating vulnerability to foreign sources.
The government truly enjoyed total immunity in the energy crises. It could devote full resources to creating fuel shortages, and in plain view of the national press corps it could boast of such efforts while simultaneously being characterized as the solution to the crises... while Senate panels convened in the 1973-74 crises to discuss whether the gas shortages were "real," the Federal Energy Office could have supplied a ready answer. The FEO knew the gas shortages were real because they were enforcing rules purposely designed to create them.13

Effects of the Oil Crises

Though the oil crises of the seventies were a major event, the effects of the oil crises were the accretion of smaller events affecting the ordinary American citizen, government, the oil industry, and many other industries such as tourism, auto, trucking, and airline. Media coverage, unlike other aspects of the oil crises, cited the consumer point of view when discussing these effects, rather than the government's. The dilemma the crises caused for this variety of people and industries resulted in the diverse coverage it received.

Media Accountability and the Gatekeeping Function

Media responsibility and ethics have been a controversial issue for many years, and while the Media Institute's study attempts to place no blame on any one individual or organization, it does note that the media failed to cover the oil crises adequately.

It should become habitual editorial policy to play fairly and clearly the opinions, analyses, and situations offered by a wide variety of people, expert, and nonexpert, covering the spectrum regardless of the proprietor's personal positions.14

In-depth coverage necessary for adequately reporting a major public policy issue such as the oil crises may not have been ideally suited for the television medium, however, the media must remain accountable to the
public . . . "because the media function as an information gatekeeper, selecting from the vast assortment of ideas and opinions those few that will enjoy exposure."15

The phenomenon known as "gatekeeping" is not new. It was advanced by a social scientist, Dr. Kurt Lewin. Lewin explained the process this way:

... gate sections are governed either by impartial rules or by "gatekeepers," and in the latter case an individual or group is "in power" for making the decision between "in" or "out."16

In any event, nothing is more important than the "gatekeeping" function. Wilbur Schramm remarks that,

... no aspect of communication is so impressive as the enormous number of choices and discards which have to be made between the formation of the symbol in the mind of the communicator, and the appearance of a related symbol in the mind of the receiver.17

Studies

The oil crises of the seventies left Americans with many unanswered questions. Among those questions were those posed by The Media Institute, a non-profit, tax-exempt research organization founded to research and analyze major public policy issues.

In 1982, The Media Institute published a three-volume study of network news coverage of the oil-crisis. As the Institute's study stated:

... the oil crises of 1973-74 and 1978-79 shocked Americans economically and psychologically more than any non-military event since the Great Depression of the 1930s.18

Apparent to researchers of The Media Institute were these unanswered questions:
How well did television teach and illuminate for its viewers the causes, effects, and possible solutions to this major story which saw world oil prices jump eighteen-fold from less than $2 to about $35 a barrel in six years? How well did it outline the range of public policy issues and contribute to a better understanding of the public policy debate? How well did it serve the public's need to know?
ENDNOTES


6 The Media Institute, I, p. vii.

7 The Media Institute, I, p. vii.

8 The Media Institute, III, p. 20.

9 The Media Institute, III, p. XXIV.

10 The Media Institute, III, p. XIII.

11 The Media Institute, III, p. XI.

12 The Media Institute, III, p. 33.

13 The Media Institute, III, p. 23.


15 The Media Institute, I, p. 2.


18 The Media Institute, p. v.
19 The Media Institute, p. vi.
CHAPTER III

METHODOLOGY

Selection and Samples of News Magazines

Data for analysis in this study were drawn from articles listed under the heading "Petroleum Supply" in the Reference Guide to Periodicals. Issues were selected only from the time periods designated as either the first or second oil crises. News magazines chosen for analysis were Newsweek, Time, and U.S. News & World Report.

It has been determined by Berelson that

For most purposes, analysis of a small, carefully chosen sample of the relevant content will produce just as valid results as the analysis of a great deal more . . . 1

However, Kerlinger's remarks to the beginning researcher are somewhat different.

Use as large samples as possible. Large numbers are not advocated because large numbers are good in and of themselves. They are advocated in order to give the principle of randomization, or simply randomness, a chance to work . . . 2

In content analysis, or any other type of analysis for that matter, random sampling is "one of the most important principles in sampling theory and practice." 3 And for this reason, random sampling was used in this study as the most viable method for sampling media coverage of the oil crises in Newsweek, Time, and U.S. News & World Report.
Nowhere in social science research does one escape the necessity for having a sound sampling scheme. Such a plan is especially important in content analysis.

Criteria for Selection of Articles

Issues of the news magazines Newsweek, Time, and U.S. News & World Report, were drawn at random from each of the time periods determined to be the first and second oil crises. The third week of each month of the first and then the second oil crises was selected randomly to represent the coverage of the oil crises. The first crisis was comprised of 24 weeks and the second crisis of 32 weeks. In each case, however, the third week of each month beginning with the first month of each crisis (October for the first crisis and November for the second crisis) was selected to represent each distinct period. Those weeks that did not contain coverage during the designated time periods were eliminated and the next week automatically moved up in the selection process. For this study, this sampling procedure produced for examination 9 weeks/36 articles during the first crisis and 8 weeks/24 articles during the second crisis. Table I, page 19, and Table II, page 20, show the random assignment of articles from Newsweek, Time, and U.S. News & World Report, used in this study.
TABLE I
RANDOM SAMPLE OF ARTICLES SELECTED FROM THREE U.S. NEWS MAGAZINES DURING FIRST OIL CRISIS CODED FOR CONTENT ANALYSIS

<table>
<thead>
<tr>
<th>Weeks Selected for Sample</th>
<th>Number of Newsweek Articles</th>
<th>Number of Time Articles</th>
<th>Number of U.S. News &amp; World Report Articles</th>
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<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
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<tr>
<td>November 26</td>
<td>(3)</td>
<td>(4)</td>
<td>(3)</td>
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<tr>
<td>December 10</td>
<td>(0)</td>
<td>(4)</td>
<td>(0)</td>
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<tr>
<td>December 31</td>
<td>(0)</td>
<td>(0)</td>
<td>(6)</td>
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<td>Number of Time Articles</td>
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Content Analysis

Content is the "what" of the "who says what to whom, how, with what effect" in the communication process.

... since the content represents the means through which one person or group communicates with another, it is important for communication research to be described with accuracy and interpreted with insight.

To achieve these goals, content analysis is employed as the most scientific method for examining differences between *Newsweek*, *Time*, and *U.S. News & World Report*, in the coverage of the oil crises of the seventies. Kerlinger describes content analysis this way:

It is a method of observation. Instead of observing people's behavior directly, or asking them to respond to scales, or interviewing them, the investigator takes the communications that people have produced and asks questions of the communications.

The primary focus of content analysis is the content of communication. Its relationships to other variables are imperative and yield a necessary prerequisite—understanding communication behavior. "The ultimate goal of the investigator in the behavioral sciences is to predict behavior." Determining differences and similarities in the coverage of the oil crises among *Newsweek*, *Time*, and *U.S. News & World Report* by using content analysis should aid in the accurate prediction of future reporting, investigating, and possible understanding of a major public policy issue such as the oil crises of the seventies.

Categorical Variables

Categorical variables are nominal variables. A nominal variable is one that has no numerical value, but possesses attributes that can be assigned to categories and measured. To name something is nominal. If
it can be named, it can be put into a category, then measured. The level of measurement is called nominal.

In this study, categorical variables were "subjects" and "sources." Data selected from a random sample of articles of U.S. news magazines, Newsweek, Time, and U.S. News & World Report, were assigned to categories and measured.

Categories and the Coding Process

To determine differences and similarities of coverage of the oil crises by Newsweek, Time, and U.S. News & World Report, categories from the Media Institute's Study were used to determine an article relevant to this study. As reported on page 17, articles were selected from under the heading "Petroleum Supply" in the Reference Guide to Periodicals and only from Newsweek, Time, and U.S. News & World Report, during 1973-1974 and 1978-1979. An attempt was made to select articles from under the heading "Energy Crisis." However, a reference was made to "Petroleum Supply." The terms "energy crisis" and "petroleum supply" were too broad for the purpose of this study, so criteria for selection of news articles were constructed. The same categories that identified oil crises stories in the Media Institute's study of television coverage of the oil crises were used in this study.

Because a single story might cover several different subjects or present several opposing views on the subject, this study was designed to accommodate such complexity and variety. For the purpose of this study, a "subject" was defined as an issue or point of view raised in the oil crises stories, such as oil-crises-induced unemployment or lowered highway speeds.
For each subject(s) raised in a story (includes opposing viewpoints), the source(s) was noted. These subjects then could be classified as solutions to or causes of the oil crises.

"Solutions to" the oil crises were either market or non-market solutions. Non-market solutions discussed and analyzed were either conservation, rationing, regulation or price controls.

Conservation included these subjects: called for/needed/advanced as solution; conservation measures as effective/successful; conservation measures as ineffective/unsuccessful; lowered thermostat settings; lowered highway speeds; White House symbolic conservation measures; reduced electric lighting; daylight savings time; car pooling; airline flight reductions; other measures discussed (fuel efficient cars, closing schools in winter) (excluding price induced conservation).

Rationing was comprised of the subjects: overall portrayal as desirable/advanced as a solution; overall portrayal as undesirable; rationing is probable; rationing is unlikely to occur; rationing, other.

Regulation, a category the Media Institute added during the second crises included: regulation; price controls.

Market solutions covered in the articles about the oil crises were deregulation; decontrol; taxes; price mechanism; domestic production.

The category "causes of" included: oil industry, government, OPEC, and other. The oil-industry referred to: oil-industry blamed (general); holding back supplies/tankers offshore; excessive profits; price gouging; hoax; conspiracy.

Government referred to: allocation system blamed; regulation; price controls; government blamed (general); and denial that government should be blamed.
Sources discussed in the oil crises stories were distinguished as a separate category. Sources identified were 1) government: federal; Congress; and state and local; and 2) non-government which included: the oil-industry (excluding service station operators); non-oil industry/business; OPEC; "man-in-the-street"; labor (auto, teamsters, miners); "experts" (financial analysts, economists, energy experts); other (consumer groups, GALLUP, AP, academic institutions); service station operators; and unidentifiable (unattributed sources).

The same index used to identify oil crises stories in the Media Institute's study also excluded the following categories and was used in this study.

(1) Alternate Fuels - only stories pertaining to crude oil and refined products, e.g., gasoline, heating oil, aviation fuel, and kerosene were included. Thus, stories concerning oil shales, synfuels, natural gas, coal, solar, geo-thermal, and nuclear energy were excluded.

(2) Foreign events only indirectly related to the oil crises in the United States. Thus, stories about the Arab-Israeli War, the Iranian Revolution, and the energy crises in foreign countries were excluded, unless they referred to the production of petroleum for export to the United States. If a story mentioned oil production in the context of a longer story about other matters, as in a story about the Iranian Revolution that makes mention of cutbacks in production, then only that portion of the story making a direct reference to oil was included.
(3) Bureaucratic Shuffle - stories noting, for example, that the Federal Energy Administration had had a change of command were excluded, unless some substantive policy matters were discussed in the story.

Hypotheses

"Scientific research is systematic, controlled, empirical, and critical investigation of hypothetical propositions about the presumed relations among natural phenomena." 8

So that this study could be conducted in a scientific manner, the research question was: "Were there significant differences in the coverage of oil crises by Newsweek, Time, and U.S. News & World Report, during the periods October 1973 to May 1974 and November 1978 to August 1979?"

Danielson observed that the trend in content analysis is toward hypothesis testing as opposed to purely descriptive research. To be more specific, the following hypotheses were stated as a result of the research question:

(1) U.S. news magazines, Newsweek, Time, and U.S. News & World Report, presented a biased picture of solutions to the oil crises by relying more on non-market solutions (conservation, rationing, regulation, and price controls) than on market solutions (deregulation, decontrol, the price mechanism, and domestic production) as the most viable of solutions.

(2) U.S. news magazines, Newsweek, Time, and U.S. News & World Report, were biased in their selection of government sources over non-government sources when covering possible solutions to and causes of the oil crises.

(3) U.S. news magazines, Newsweek, Time, and U.S. News & World Report, distorted the coverage that causes of the oil crises received by implicating OPEC and the oil industry instead of the U.S. government as prime perpetrators of the crises.
The hypotheses derive from the nature of the problem and in a sense help to refine it. In this study, subjects and sources were categorized and then translated into concrete, specific indicators for purposes of actual analysis. The results were then generalized and applied to the level of the categories and, thus, constituted a test of the hypotheses under investigation.

Constraints

Hypotheses are if-then statements. To construct a design that has empirical validity, it is necessary to "control the independent variables so the extraneous and unwanted sources of systematic variance have minimal opportunity to operate." The confidence level of the results is related directly to these controls. "The whole structure of probabilistic-statistical reasoning depends on randomization." Both control and randomization are a function of internal validity.

Equally as important to a research design is the generalizability of the conclusions. In other words, can the results of this study be generalized to other subjects, other groups and other conditions? Generalizability is a function of external validity.

Aspects of "true" experiments are not possible in ex post facto research. Unlike the experimental researcher, the ex post facto researcher attempts to explain phenomenon that already has occurred. Direct control in ex post facto research is not possible. The researcher cannot use manipulation and randomization. Control, the basic difference in experimental and ex post facto research, thus, results in a course of action to be taken by the ex post facto
researcher that is significantly different from that of the experimental scientist.

Because of the constraints in ex post facto research, interpreting the conclusions becomes risky. It is easy to "fit the facts" to the results of the study when the research is guided by hypotheses. However, an ex post facto design that does not test hypotheses is scientifically insignificant.

Testing of Hypotheses

"In ex post facto research, one cannot manipulate or assign subjects or treatments because the independent variables already have occurred." The following research design was chosen to answer the research questions and to adequately test the hypotheses.

The Chi Square Test

"The function of statistical tests is to compare obtained results with those to be expected on the basis of chance." The chi-square test, written $x^2$, was used in this study because it is one of the simplest and yet most useful of statistical tests, according to Kerlinger. In scientific research, the scientist wants to know if the obtained results differed significantly from those expected. Results that are considered "statistically significant" warrant further analysis since they do not occur by chance alone. The $x^2$ then measures the deviation of obtained results compared with those expected by chance.
Crossbreaks

"A crossbreak is a numerical tabular presentation of data, usually in frequency or percentage form, in which variables are cross-partitioned in order to study the relations between them." Crossbreaks are cross partitions used with categorical or nominal data.

Crossbreaks, in this study, represent the relationship of U.S. news magazines and the content of articles selected for analysis. The attributes or characteristics of the content of the articles were structured by the U.S. news magazines. The distribution of the data is shown in percentage form in crossbreaks in Appendix B. Calculations down the columns are shown in the upper left of each cell. Calculations over the whole table are shown in the lower right of each cell. Calculations from the independent to the dependent variable are in parentheses.

Frequency Analysis

The simplest form of analysis of categorical variables is frequency analysis. Frequencies are the number of objects in a set or universe. To measure an attribute of the members of the set or universe, objects with the same value or characteristic are counted and set up in an analytical paradigm. The paradigm bears directly on the hypothesis, the stated problem, or the relationship of the independent and dependent variables. In this study, the paradigms represent the relationship of U.S. news magazines and subjects and sources chosen from the universe for analyses.
The content of articles randomly selected from U.S. news magazines, *Newsweek*, *Time*, and *U.S. News & World Report*, is the universe of discourse of the set of dependent variable measures. U.S. news magazines are the independent variables and their categories structure the dependent variables, subjects and sources, for analysis. It is the dependent variable measures that are analyzed and it is the independent variables and their categories that partition or structure the dependent variables for analysis.

Categories are set up according to the research hypotheses; they are independent and mutually exclusive; they are mutually exhaustive; each category is derived from one and only one classification principle; all categories are on one level of discourse. If the relationships between frequencies of categories did not occur by chance alone, then the "no difference assumption" or null hypothesis was rejected and conclusions were drawn in support of the level of statistical significance.

**Magnitude of Relationship**

The next step after testing the subjects and sources selected by *Newsweek*, *Time*, and *U.S. News & World Report*, for articles about the oil crises with the $x^2$ test, was to determine the magnitude of the relationship or the strength of difference, if differences occurred, with the C coefficient of contingency. The C coefficient is an index of the strength of the relationship and a measure of association between the U.S. news magazines, *Newsweek*, *Time*, and *U.S. News & World Report*, and subjects and sources selected for inclusion in articles about the oil crises during the seventies.
ENDNOTES


5 Berelson, p. 13.

6 Kerlinger, p. 525.

7 Budd, p. 3.

8 Kerlinger, p. 11.


10 Kerlinger, p. 315.

11 Kerlinger, p. 323.

12 Kerlinger, p. 323.

13 Kerlinger, p. 167.

14 Kerlinger, p. 137.
CHAPTER IV

RESULTS AND DISCUSSION

Results of this study are based on the scientific testing of the articles randomly selected from three U.S. news magazines, Newsweek, Time, and U.S. News & World Report. By using content analysis, the content of these articles was organized into specific categories and analyzed to determine support or nonsupport of the hypotheses. The data analyzed by the $x^2$ test revealed the following results:

Subjects - Solutions to the Oil Crises

Analysis did not support the hypothesis that U.S. news magazines biased the coverage of solutions by selecting nonmarket solutions more often than market solutions during the first or the second oil crises.

Subjects - Causes of the Oil Crises

Results indicated no significant difference among Newsweek, Time, and U.S. News & World Report, when reporting on this subject during either crises. Analysis did not support the hypothesis that the oil industry and OPEC were blamed more often than government as a cause of the oil crises and, thus, did not support the hypothesis that the coverage was biased by the selection of subjects for causes to the oil crises.
Sources of Information

The results of analysis showed no significant difference among Newsweek, Time, and U.S. News & World Report, when reporting on sources or subjects reported during either the first or second oil crises. Thus, there was no evidence to support that government sources were relied on more often than non-government sources during the first or second oil crises.

Differences/Similarities from the First to the Second Oil Crises

Results of scientific testing to determine if significant differences occurred from the first oil crisis to the second oil crisis revealed the following conclusions.

Subjects - Solutions to the Oil Crises

Analysis of solutions from the first to the second oil crises revealed that observed differences did not exceed the level of statistical significance.

Subjects - Causes of the Oil Crises

Analysis of causes from the first to the second oil crises showed observed differences did not exceed the chance or expected value at either the .01 or .05 level of statistical significance.

Sources of Information

Analysis of sources of information from the first oil crisis to the second oil crisis showed that the sources used by U.S. News & World
Report, Time, and Newsweek, did not exceed the chance or expected level of significance.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine how well Newsweek, Time, and U.S. News & World Report, illuminated for their readers the causes of and solutions to a major event which saw world oil prices jump eighteen-fold from less than $2 to about $35 a barrel in six years. Also proposed was how well these three U.S. news magazines outlined the range of policy issues and contributed to a better understanding of the public policy debate and served the public's need to know. The results of this study did not support the contention that the coverage of subjects and sources of information presented in articles about the oil crises of the seventies were biased.

This study attempted to present a picture of what three U.S. news magazines told Americans about the oil crises of the seventies. There was no attempt to document the actual events that constituted the oil crises or the relative merits of the different explanations that appeared in Newsweek, Time, and U.S. News & World Report.

When the history books are written, however, it now seems likely they will describe the 1980s as a period of major adaptation, a time when oil and other cheap energy sources ceased to be regarded as social entitlements and as commodities somehow immune from the laws of economics.
Conclusions

The two oil crises of the past decade (1973-74) and (1978-79) were given considerable coverage by Newsweek, Time, and U.S. News & World Report. The researcher of this study found that these three U.S. news magazines portrayed the oil crises of the seventies in the following way:

Subjects - Solutions to the Oil Crises

The role of market solutions (deregulation, decontrol) vs. non-market solutions (conservation, rationing, regulation, and price controls) received similar coverage by these three U.S. news magazines even though economists contended that there would have been no oil shortage and no gas lines had the price of oil been permitted to reflect its relative scarcity rather than being kept artificially low. Market solutions proven effective in the eighties, at least in the petroleum market, also necessitated conservation measures that were considered obvious solutions in the coverage of the oil crises. Still, no one solution dominated the coverage.

Being an economic problem, the shortage of housing, or energy, or any other commodity, involves specifically a failure of communication: While consumers would be willing to pay more for a given resource, say energy, the providers of such are not permitted to hear this demand, due to the transmission trouble called price controls.

Price controls caused American imports to increase by 37% between 1971-73. The result was dependency on foreign oil-producers such as OPEC.
Subjects - Causes of the Oil Crises

Causes of the oil crises were government, oil industry, OPEC, and other. No one cause was cited more than any other when addressed by Newsweek, Time, and U.S. News & World Report. Imposed at a time when the United States was in fact running out of "cheap oil," price controls initiated a ten-year decline in U.S. oil drilling and production by freezing prices such that oil production became less profitable. This was not decided by OPEC or contrived by the oil industry, but by an inevitable social process. Causes of the oil crises since the seventies have proven to be policy induced. Prior to the seventies, federal policy encouraged consumption with lower oil prices which also increased the profitability of oil drilling. As the supply of oil increased and additional capital was invested, crude reserves were depleted because of import quotas. Price control policy imposed by President Nixon in March 1973 resulted in gasoline shortages at the pumps the following October. This historical perspective was elementary in understanding the cause of events that affected every American citizen.

The lessons of the first 1973 gas shortage were manifest: OPEC was not the root cause, binding price controls mean shortages are plugged by the foreign oil market.

Sources of Information

Sources were aggregated according to affiliation (e.g. government or non-government) and were relied on similarly by Newsweek, Time, and U.S. News & World Report. Throughout the 1970s, sources of information continually supported various means of protectionism. Government sources denied that price-induced controls debilitated the U.S. oil market. Businessmen with interests in the oil industry have
historically disliked competitive prices for petroleum as well as a policy of free market competition in energy. In fact, the petroleum industry has regulated the supply of oil and the market place since the early 1920's.

The oil crises (or more precisely the two oil crises of 1973-74 and 1978-79 dramatically reshaped our foreign policy, particularly our view of the Third World. It touched every side of our domestic economy from, as Ronald Reagan puts it, "Wall Street to Main Street" ... The American experience of the 1970s was profoundly reshaped by the two words "oil crises." 4

Recommendations

Because the media are entrusted with the responsibility of accurate reporting, investigating, and understanding of a major public policy issue, the presentation of coverage of the oil crises during the seventies by U.S. news magazines raised questions of accountability.

The information disseminated is a small part of the vast assortment of ideas that the medium has to choose from, and so, the selection process must be given careful consideration. Historical perspective and economic principles are vital components for understanding a major public policy issue. The oil crises were reported as if the United States had no economic history though market solutions have proven in the eighties to be the most viable solution to our nation's energy problems. These are areas of research that should be included in any study addressing a major public policy issue. Since the petroleum market has experienced another economic downturn in the eighties and other studies may follow this one, it is proposed that the political economy of the petroleum market based on economic principles and
historical perspective be foremost in the research design rather than addressed as an underlying issue.

Furthermore, future reporting of a major public policy issue should require in-depth research of underlying issues that contribute to the overall picture. Simply reporting the diverse range of subjects relative to a major public policy issue is inadequate if the link between historical and future policy issues is to be disclosed. Moreover, analytical rather than investigative journalism should be fundamental in reporting such complex issues. Reporting a major public policy issue of the magnitude of the oil crises requires that journalists are aware of the implications of their coverage. Comprehensive coverage of a major public policy issue by journalists requires a knowledge of our political economy that exceeds expectations. Professionalism is based on confidence, thus, the media professions are charged with the responsibility of imposing standards that are beyond scrutiny.
ENDNOTES


3 The Media Institute, III, p. 16.

4 The Media Institute, III, pp. 1-2.
SELECTED BIBLIOGRAPHY


"Blaming the Obstetrician." *Newsweek*. June 4, 1979, p. 70.


"Giscard: Oil is the Issue." Newsweek. July 2, 1979, pp. 30 and 32.


"How Much Will Prices Drop?" Time. April 22, 1974, p. 49.


"More Gas--At Higher Prices." Newsweek. April 1, 1974, pp. 61-62, 64.


"Paying the Pumpers." Newsweek. March 12, 1979, pp. 68 & 70.


"Unity Against a Rat Race." Time. March 12, 1979, p. 46.


"Will Everyone Hold It at Fifty?" Newsweek. November 26, 1973, p. 84.


APPENDICES
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Solutions (Other)

- Divestiture of Oil Companies
- Countermeasures against OPEC by U.S.

Causes:

Oil Industry:
- Oil industry blamed (general)
- Holding back supplies/tankers offshore
- Excessive profits, price-gouging
- Hoax, conspiracy

Government:
- Allocation system blamed
- Regulation, price controls
- Government blamed (general)
- Denial that government should be blamed

OPEC:
- OPEC blamed

Sources:

Government:
- Federal, excluding Congress
- Congress
- State & local

Non-Government:
- Oil Industry (excluding service station operators)
- Non-oil industry/business
- OPEC
- "Man-in-the-street"
- Labor (auto, teamsters, miners)
- "Experts" (financial analysts, economists, energy experts)
- Other (consumer groups, foreign leaders, foreign countries, GALLUP, AP, academic institutions)
- Service station operators
- Unidentifiable (unattributed source)
APPENDIX B

CROSSBREAKS
### TABLE III

**RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SUBJECTS DISCUSSED AS SOLUTIONS DURING THE FIRST OIL CRISIS**

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<td><strong>Time</strong></td>
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<td><strong>U.S. News &amp; World Report</strong></td>
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### TABLE IV

**RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SUBJECTS DISCUSSED AS SOLUTIONS DURING THE SECOND OIL CRISIS**

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<td><strong>U.S. News &amp; World Report</strong></td>
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<td>.28 (.45) .10</td>
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### TABLE V

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SUBJECTS DISCUSSED AS CAUSES OF THE OIL CRISIS DURING THE FIRST OIL CRISIS

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<td><strong>Time</strong></td>
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<td>.33 (.20)</td>
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### TABLE VI

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SUBJECTS DISCUSSED AS CAUSES OF THE OIL CRISIS DURING THE SECOND OIL CRISIS

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### TABLE VII

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SOURCES OF INFORMATION USED DURING THE FIRST OIL CRISIS

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### TABLE VIII

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SOURCES OF INFORMATION USED DURING THE SECOND OIL CRISIS

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TABLE IX

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SOLUTIONS DISCUSSED DURING THE FIRST OIL CRISIS AND THE SECOND OIL CRISIS

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TABLE XI

RELATIONS BETWEEN U.S. NEWS MAGAZINES AND SOURCES OF INFORMATION DURING THE FIRST OIL CRISIS AND THE SECOND OIL CRISIS

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APPENDIX C

FREQUENCIES
FIRST OIL CRISIS
SOLUTIONS DISCUSSED

Figure 1.
NEWSWEEK      TIME      U.S. NEWS
SECOND OIL CRISIS
SOLUTIONS DISCUSSED

Figure 2.

NEWSWEEK
TIME
U.S. NEWS
FIRST OIL CRISIS
CAUSES DISCUSSED

Figure 3.
SECOND OIL CRISIS

CAUSES DISCUSSED

FREQUENCIES

GOVT

OIL IND

OPEC

Figure 4.

NEWSWEEK

TIME

U.S. NEWS
SECOND OIL CRISIS

SOURCES OF INFORMATION

FREQUENCIES

GOVT

NONGOV'T

NEWSWEEK

TIME

U.S. NEWS

Figure 6.
FIRST & SECOND OIL CRISIS

SOLUTIONS DISCUSSED

FREQUENCIES

Figure 7.
FIRST & SECOND OIL CRISIS

CAUSES DISCUSSED

Figure 8.

<table>
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NEWSWEEK   TIME   U.S. NEWS
FIRST & SECOND OIL CRISIS

SOURCES OF INFORMATION

FREQUENCIES

GOVT       NONGOV'T       GOVT       NONGOV'T

NEWSWEEK    TIME       U.S. NEWS

Figure 9.
VITA

Jana Denise Grace

Candidate for the Degree of

Master of Science


Major Field: Mass Communication

Biographical:

Personal Data: Born in Norman, Oklahoma, July 24, 1951, the daughter of Jack (deceased) and Juanita Grace. Married to Gregory A. Smith on February 14, 1986.

Education: Graduated from Sooner High School, Bartlesville, Oklahoma, in May 1969; received Bachelor of Science degree in Arts and Sciences from Oklahoma State University in 1981; completed requirements for Master of Science degree at Oklahoma State University in July, 1987.

Professional Experience: Member of Engineers Club of Bartlesville--Programs Vice-Chairman, 1985; Public Relations Vice-Chairman, 1986; Member of Women in Energy, Bartlesville Chapter--Membership Chairman, 1985; State Program Chairman, 1986; Member of National Association of Female Executives; Candidate for Who's Who of American Women, 1985; Publicity Committee for SPE/DOE EOR Symposium, 1984; Writer/Editor for Systematics General Corporation, Support Contractor for the U.S. Department of Energy, Bartlesville Project Office.