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SAFETY BELT USAGE ATTITUDE STUDY

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16. Abstract

Despite increasing evidence that occupant restraint laws are effective in getting people to wear safety belts and an extremely cost-effective measure for reducing highway deaths and injuries, strong opposition at the state-level has prevented passage of such legislation in the United States. To further encourage and support state-level efforts on behalf of occupant restraint laws, the National Highway Traffic Safety Administration (NHTSA) contracted with Teknekron, Inc. to conduct a study to determine why past attempts to enact such laws in the United States have failed and to develop communication materials and strategies for overcoming state resistance to such legislation. This final report summarizes the activities and findings of that study.

A key part of the project was the development of communication materials and strategies designed to aid proponents in gaining passage of occupant restraint legislation. This led to the development of a "how to" handbook or manual for individuals and groups interested in obtaining passage of occupant restraint legislation. The purpose of the handbook is to aid individuals and organizations at the state-level in launching an effective program to gain passage of an occupant restraint law. The handbook, Occupant Restraint Legislation Handbook: A Guide for Proponents, is published as a separate volume to this report.

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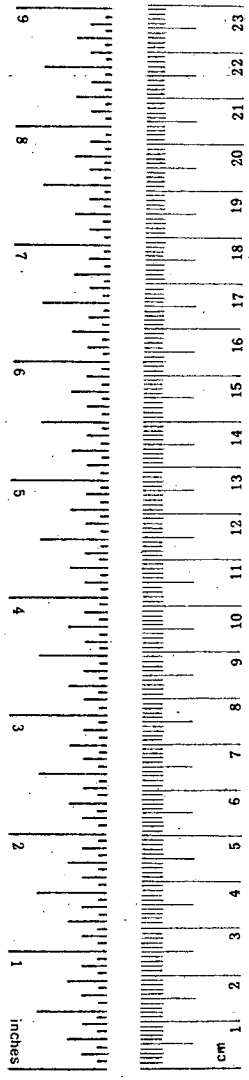
METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
	LENGTH			
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
	AREA			
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
	MASS (weight)			
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
	VOLUME			
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

*1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price $2.25, SD Catalog No. C13.10:286.



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
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mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
	AREA			
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
	MASS (weight)			
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
	VOLUME			
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
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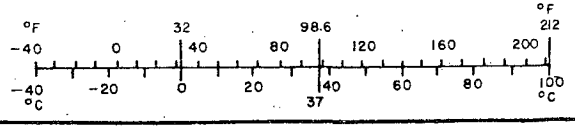
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



Preface

This study was undertaken to ascertain why past attempts to enact occupant restraint laws in the United States have failed and to develop communications materials and strategies for overcoming state resistance to such legislation. This report summarizes the research activities and findings of the study.

The major product of this study is a handbook to guide individuals and organizations involved in efforts to gain legislative approval of general safety belt usage laws or child restraint laws. The information contained in this handbook falls into two basic categories:

- Information and data to support arguments on behalf of occupant restraint legislation and to overcome the objections and reservations of non-supporters.

- Strategies, tactics, and methods for communicating the above data to state legislators, traffic safety officials, police officials, media representatives, and others.

The document is published as a separate volume to this report, entitled: Occupant Restraint Legislation Handbook: A Guide For Proponents.

This report was prepared by Teknekron, Inc. under Department of Transportation Contract Number DOT-HS-7-01644. The report was written by William B. Wilson with assistance from the following Teknekron staff and associates: Robert Berger, David Hieatt, and James Swinehart. Editorial support was provided by Helen Polhemus and Sherry Sheffer. In addition, Teknekron wishes to acknowledge the invaluable assistance and support of Pete Ziegler and William Foulis of the National Highway Traffic Safety Administration (NHTSA). Our appreciation is also expressed to Dwight Fee who allowed us to add several questions to NHTSA's National Telephone Survey. Finally, appreciation is expressed to the many state legislators, traffic safety officials, media representatives, police officials, civic groups, and members of the public who graciously assisted us in preparing this document.

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CHAPTER I

PROJECT OVERVIEW

For more than twenty years, the traffic safety community has been working to reduce the number and consequences of traffic accidents. For the most part, they have been very successful: accident rates are lower, automobiles and highways are safer, and driver skills have improved. Still every year thousands of people are killed and millions are injured in automobile accidents, and traffic accidents continue to be a major problem confronting American society.

The area where traffic safety officials have been the most unsuccessful is in getting motorists to wear safety belts. In a recent national survey, only 14 percent of the driving public was observed wearing safety belts.[1] As a direct consequence, countless people are being unnecessarily killed or injured, and the American public is being penalized millions of dollars in needless taxes and insurance premiums.

After experiencing varying degrees of success with public education or information campaigns and the use of reminder/warning devices in cars, many traffic safety experts and officials have concluded that passage of a law requiring the wearing of belts is the best way to increase the use of lap and shoulder belts. The argument for occupant restraint legislation has been bolstered by the success of such legislation in many countries (e.g., Australia, Canada, and France); however, efforts to pass occupant restraint laws in the United States have been unsuccessful.

To further encourage and support state-level efforts on behalf of occupant restraint laws, the National Highway Traffic Safety Administration (NHTSA) contracted with Teknekron, Inc., to conduct a study to determine why past attempts to enact such laws in the United States have failed and to develop communication materials and strategies for overcoming state resistance to such legislation. This final report summarizes the activities and findings of that study.

1.1 PURPOSE AND ORGANIZATION OF REPORT

The report is organized into five chapters. This introductory chapter presents an overview of the project's background, objectives, and activities. Chapter II discusses the research methodology employed to accomplish project tasks, and Chapter III reports on the project's research findings. A key part of the project was the development of communication materials and strategies designed to aid proponents in gaining passage of occupant restraint legislation. The development and testing of these materials is described in Chapter IV. In addition, conclusions and recommendations regarding the prospects for occupant restraint legislation in the United States are presented in Chapter V. Finally, the report contains several appendices, prepared during the course of the project, that provide additional insight into the issue of occupant restraint legislation and this project.

1.2 BACKGROUND

Experiments by automotive engineers and traffic safety researchers during the 1940's and 1950's first demonstrated the value of seat belts for reduci accident-related deaths and injuries. The early experiments have been substantially validated by numerous studies of real accident situations. For example, during the mid-1960's authorities in Sweden examined the details of 28,000 automobile accidents. In not one case where the car was traveling up to 60 miles an hour was anyone killed who was wearing a seat belt. And the issue was not that deaths occurred only at speeds above 60: unbelted people were killed in collisions at less than 20 miles an hour. Other findings from the Swedish investigation showed that belted people received only half as many injuries as those not wearing belts, regardless of collision speed.[2]

A study by the U.S. National Highway Traffic Safety Administration of over 15,000 towaway accidents (1976) found that of those injured of killed in the accidents, occupants not using seat belts were 3 1/3 times more likely to be killed, 3 times as likely to be seriously injured, and 2 times as likely to be moderately injured than those who were wearing safety belts.[3] In addition, several other studies have shown that safety belts substantially reduce injuries and deaths (e.g., Blomgren and Scheuman, 1961; Campbell, 1969; Levine and Campbell, 1971; Ontario Department of Transportation, 1969; Robertson and Haddon, 1972; and Williams, 1972). The evidence that wearing a safety belt reduces one's changes of injury and death in the event of an automobile accident is indisputable.

In 1956, the National Safety Council issued its first recommendation that motorists use seat belts, and the major automobile manufacturers began offering safety belts as optional accessories. In 1961, Wisconsin became the first state to require the installation of safety belts in all cars sold or registered in the state. By 1964, 17 other states had enacted similar laws, and safety belts had become standard equipment on U.S. manufactured cars. Following passage of the National Traffic and Motor Vehicle Safety Act of 1966, the Federal government promulgated vehicle safety standards requiring all passenger cars to be equipped with lap and shoulder belts for front-seat passengers and safety belts at each seating position. In 1971, these requirements were extended to multi-purpose passenger vehicles, trucks, and buses.

As safety belts became more available, increased efforts were made to convince people to wear them, but in spite of the overwhelmingly convincing arguments showing that seat belts offer protection that is otherwise unattainable, their use has been resisted, sometimes passionately. One study has shown that about one-third of the people who use cars never use seat belts, while only about one-fifth use them regularly; the rest fall somewhere in between.[4] Although safety belts are standard equipment in almost all American and imported cars, safety belt usage rates continue to hover at very low levels.

To bolster usage, numerous safety belt advertising campaigns and educational programs were conducted (e.g., mass media advertising, endorsements by medical authorities, and educational appeals). Other efforts undertaken to encourage belt use have included: reminder buzzers linked to the belt, engines that won't start if the belt is unbuckled, inspection checks for the presence and adequacy of at least lap belts, and insurance-reduction incentives. These efforts have been intense, often ingenious, and frequently expensive; they have also been largely ineffective. For example, the University of California conducted a radio and TV campaign on the need to buckle-up. The results were discouraging:

> On the basis of 22,000 [unobtrusive] vehicle observations (28,000 occupants), it is concluded that the public service announcements have had little significant effect on safety belt usage or related attitudes.[5]

The National Safety Council reported similar results in 1968 after spending $51.5 million in public service advertising.[6]

Past experience indicates that it is unrealistic to expect most Americans to voluntarily wear safety belts. Efforts to encourage people to buckle-up have failed to produce a groundswell of support for safety belts. Consequently, traffic safety experts and officials have concluded that passage of a law requiring that belts be worn is the only way to effectively increase their use.

Safety Belt Usage Laws

Victoria, Australia, was the first jurisdiction to try safety belt usage laws. Following enactment of the law in 1971, safety belt usage by drivers and passengers rose from approximately 20 percent to around 75 percent. Surveys in 1974 showed usage to approximate 80 percent. As a result, accident-related deaths and injuries have been reduced by 25 and 20 percent respectively. Ontario, Canada, also experienced drastic reductions in traffic fatalities and injuries following its enactment of a safety belt usage law (1975). Despite large increases in the number of cars on the road and miles driven, traffic fatalities were 17 percent lower, and traffic injuries declined by 15 percent.* (See Table 1-1.) As of January 1978, 23 countries or regions have enacted safety belt usage laws.

However, in the United States, efforts to mandate safety belt usage have been unsuccessful. Between 1972 and 1977, over 110 safety belt usage bills were introduced in some 32 state legislatures--none passed. In 1973, Congress authorized the payment of incentive grants and awards to states willing to adopt a safety belt usage law, but only Puerto Rico responded. In 1974, Congress failed to re-appropriate funds for the incentive awards. Gradually, state interest in safety belt usage legislation has diminished; in 1977 only six legislatures debated the issue.

*This decline is also partially attributable to the reduction of highway speed limits in Ontario.

TABLE 1-1

SAFETY BELT USAGE LAWS AROUND THE WORLD

Country	Effective Date of Law	Belt Usage* Before Law Effective	Belt Usage After Law Effective	Occupant* Fatality Reduction	Occupant* Injury Reduction
Australia (all States)	1/1/69	25%	68-85%	25%	20%
Belgium	6/1/75	-	92%	39%	24%
Ontario	1/1/76	17%	77%	17%	15%
Quebec	8/15/76	19%	64%	18%	
Finland	7/1/75	40%	71%	-	-
France	7/1/73	26%	85%	22%	32%
Israel	7/1/75	8%	80%	-	-
Netherlands	6/1/75	Rural: 28% Urban: 15%	Rural: 72% Urban: 53%	-	-
New Zealand	6/1/72	30%	62-83%	10%	18%
Norway	9/1/75	Rural: 37% Urban: 15%	Rural: 61% Urban: 32%	-	-
Sweden	1/1/75	36%	79%	46%	Serious injuries 46% Moderate injuries 36%

*Blanks indicate no information available

Source: Journal of Safety Research, National Safety Council, Volume 9, No. 2 (June 1977).

1.3 PROJECT OBJECTIVES AND TASKS

Despite increasing evidence that occupant restraint laws are effective in getting people to wear safety belts and an extremely cost-effective measure for reducing highway deaths and injuries, strong opposition at the state-level has prevented passage of such legislation in the United States. The purpose of the "Safety Belt Usage Attitude Study" was to identify and/or develop communication strategies and materials that would aid individuals and organizations at the state-level in gaining passage of occupant restraint legislation.* Specifically, the project's objectives were:

- To identify and assess attitudes held by the general public, organized civic and professional individuals/groups, media representatives, and state legislators toward occupant restraint laws.
- To determine the basis for their support of or resistance to such laws.
- To determine whether negative attitudes towards occupant restraint laws can be reversed or neutralized by an appropriate presentation of relevant information.
- To design and validate appropriate communication strategies and materials helpful to proponents in seeking passage of occupant restraint legislation.

Accomplishing the objectives involved four specific tasks. Task I focused on identifying the key groups and individuals important to the success of occupant restraint legislation. Four target audiences were selected: state legislators, individuals and organizations with a professional or civic interest in highway safety, media representatives, and the general public. Task I also involved the identification of representative data sources on the attitudes and knowledge of each target audience concerning occupant restraint legislation. These sources were derived from state-of-the-art program and research activities conducted in the United States and countries that had enacted safety belt usage legislation. In addition, the type of information and data to be collected relative to each target group were specified.

During Task II, information and data were collected on each target group's attitude/knowledge toward restraint usage laws and the basis of their opposition or support for such laws. Data collection methods included a review of written documentation and telephone or written communications with state and foreign country personnel. Among the types of written documentation reviewed were the following:

- A bibliography of materials regarding public attitudes on restraint systems and restraint system legislation.

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*Although the study was focused primarily on the issue of safety belt usage laws, the research is also generally applicable to the child restraint law issue.

- A bibliography of materials regarding public information campaigns on restraint system usage.
- State-level newspaper articles and editorials reflecting media coverage and attitudes toward safety belt usage laws.
- Policy and research documentation from public and private organizations whose activities pertain to traffic safety, and potentially to safety belt issues.
- Transcripts and records of hearings or debates held by states on safety belt usage legislation.
- Evaluation findings of foreign countries that have enacted similar legislation.

Informal telephone and written communications were used to supplement or clarify information obtained in written materials. Most notably, a series of open-ended telephone discussions were conducted with state legislators who had either supported or opposed safety belt usage legislation in the states during the past six years.

Task III involved the development and testing of appropriate strategies and materials designed to increase support for occupant restraint laws among the various target audiences. Based on the information gained in Task II, arguments, data, and educational materials were assembled and tested for persuasive appeal. The objective of Task III was to determine whether negative attitudes toward occupant restraint legislation could be reversed or neutralized. Because no professional or civic organization could be identified that actively opposed occupant restraint legislation, it was not necessary to identify or develop "persuasive" communications for this group, and none were tested. Similarly, the media target audience did not lend itself to the development of communications materials. With respect to the professional/civic group and media representative target groups, the focus of Task III was on how to utilize these two groups of resources in seeking passage of restraint usage laws (see Chapter IV for details).

Project activities during Task IV centered on writing a "how to" handbook or manual for individuals and groups interested in obtaining passage of occupant restraint legislation. The purpose of the handbook is to aid individuals and organizations at the state-level in launching an effective program to gain passage of an occupant restraint law. The handbook, Occupant Restraint Legislation Handbook: A Guide for Proponents, is published as a separate volume to this report. Finally, Task IV involved the preparation of this final report.

Footnotes: Chapter I

1. Opinion Research Corporation. Safety Belt Usage: Survey of Cars in the Traffic Population. U.S. Department of Transportation, National Highway Safety Administration. November 1978.

2. Bohlin, N.I., A Statistical Analysis of 28,000 Accident Cases with Emphasis on Occupant Restraint Value. Eleventh STAPP Car Crash Conference, Society of Automotive Engineers, 1967.

3. Reinfurt, D.W., Silva, C., and Seila, A.F. A Statistical Analysis of Seat Belt Effectiveness in 1973-1975 Model Cars Involved in Towaway Crashes. U.S. Department of Transportation, National Highway Traffic Safety Administration, Washington, D.C. 1976.

4. Yankelovich, Skelly, and White, Inc. A Summary Report of Driver Attitudes Toward Restraints for Greater Safety in the Operation of an Automobile. Motor Vehicle Manufacturers Association. September 1976.

5. Fleischer, Gerald. An Experiment in the Use of Broadcast Media in Highway Safety: Systematic Analysis of the Effect of Mass Media Communication in Highway Safety. U.S. Department of Transportation, National Highway Traffic Safety Administration. December, 1971.

6. Robertson, L.S., et al. "A Controlled Study of the Effect of Television Messages on Safety Belt Use." American Journal of Public Health. Volume 64 No. 11. November 1974.

CHAPTER II

RESEARCH METHODOLOGY

A three-step methodology was employed to accomplish project objectives and to complete project tasks. The first step was to identify and collect data on public attitudes towards occupant restraint laws. To facilitate data collection, the public was divided into four groups: state legislators, individuals and organizations with a professional or civic interest in highway safety, media representatives, and the general public. A variety of data collection techniques (including literature reviews, quasi-clinical interviews, and focus group sessions) was utilized to gather data from members of each target group.

The second step in the research process was to review and evaluate the attitudes (positive and negative) held by members of each prospective group towards occupant restraint legislation. The arguments and data presented by both proponents and opponents of occupant restraint legislation were analayzed for validity, factualness, and effectiveness. Several indices were used to assess differences between supporters and non-supporters, including:

- Frequency of safety belt use,
- Attitudes toward safety belts -- especially their effectiveness,
- Knowledge of state accident problems,
- Knowledge of foreign successes with restraint usage laws,
- Awareness of the potential life saving and monetary benefits of restraint usage laws, and
- Philosophical opinions regarding occupant restraint legislation.

Once the basis of support or resistance within each group vis-a-vis occupant restraint legislation had been analyzed, the final step in the research methodology was to determine whether objections/reservations regarding occupant restraint legislation could be reversed or neutralized and support for such legislation increased. This involved both identifying and developing communication materials and strategies to reinforce the case for occupant restraint legislation, to educate the public regarding safety belts and safety belt usage legislation, and to overcome negative attitudes toward occupant restraint laws. To ensure the validity and effectiveness of the materials, a pilot-test was conducted using two of the groups (the state legislators and the general public).

Originally, all materials, data and strategies found to be effective in increasing support for occupant restraint legislation were to be used in a NHTSA-sponsored demonstration project designed to achieve passage of a state-level safety belt usage law. Because this project was subsequently cancelled, another way had to be found to make use of the material. As a result, a handbook on occupant restraint legislation was prepared. This handbook provides a working guide to individuals and organizations involved in efforts to gain legislative approval of either general safety belt usage laws or child restraint laws.

2.1 THE IDENTIFICATION OF TARGET GROUPS

Since the public is not a homogeneous entity, but a variety of individuals and organizations with different and often competing interests, the first step in the research process was to identify those individuals and organizations exerting a major influence on legislative decisions concerning occupant restraint laws. Dividing the public into groups served to expedite and focus research activities as well as to ensure a thorough compilation of data on public attitudes towards occupant restraint laws.

Three target groups were readily identified as having a key role in the legislative process with respect to occupant restraint laws: state legislators, individuals and organizations with a professional or civic interest in highway safety, and licensed drivers. To this list was added a fourth group--the media. Although actually an observer of the legislative process, the media exerts a significant influence on the other three groups. Not only does the media provide the main mechanism by which the other groups interact, but the media, through editorials and news coverage, influences each group's thoughts on the issue.

The state legislator target group was made up of state legislators who either supported occupant restraint laws, opposed occupant restraint laws, or considered themselves to be neutral on the issue. The professional and civic organizations target group was composed of both individuals and organized groups. Organized groups consisted of formally established institutions with some interest in highway safety (e.g., the American Seat Belt Council, the National Safety Council, and the Motor Vehicle Manufacturers Association). The unorganized group was composed mainly of individuals whose professional interests related to highway safety (e.g., state traffic safety officials, police officials, physicians, and driver educators). In some cases, members of an unorganized group were represented by an organized institution (e.g., doctors were represented by two groups--the American Association of Automotive Medicine and the Physicians for Automotive Safety). The media target group also had two components: the electronic media (radio and television) and the print media (newspapers); the licensed drivers target group was composed of men and women over age 18 and possessing a valid driver's license.

Having identified four groups for investigation, specific procedures were developed for identifying and collecting data on each group. These procedures included:

- Literature searches on public attitudes toward restraint systems and on public information and education (P.I.& E.) campaigns on restraint system usage (see Appendix A).
- Archival studies of legislative debates on safety belt usage laws and of media coverage/reaction relative to proposed occupant restraint laws.
- Quasi-clinical interviews with state legislators, police officials, and media representatives.
- Focus group sessions with members of the general public (all licensed drivers) regarding occupant restraint laws.

- Telephone survey of public attitudes toward safety belt usage laws.*
- Evaluation of restraint usage legislation in foreign countries.

These procedures were generally employed in unison but not with each target group. For example, constructing case histories on past legislative attempts to enact occupant restraint laws involved the use of both unfocused, informal telephone discussions and archival studies of legislative debates and newspaper accounts of the proposed legislation. In contrast, focus group sessions and telephone surveys were used only with the licensed drivers group. The research methodology and procedures employed for each target group are briefly discussed below.

2.2 RESEARCH METHODOLOGY: STATE LEGISLATOR TARGET GROUP

State legislators were considered the most important target group in the study. To better understand the legislative problems and issues associated with occupant restraint legislation, information was developed on:

- The legislative history of occupant restraint laws in the United States.
- The most common reasons for the defeat of occupant restraint legislation.
- How the attitudes of state legislators influence their support or opposition towards restraint usage laws. Specifically, the beliefs legislators hold regarding the effectiveness of safety belts as well as their attitudes regarding the propriety of self-protection laws.
- The concerns of state legislators regarding the enforcement of occupant restraint laws.
- How legislators' perceptions of public opinion influence their support of or opposition to restraint usage laws.
- How pressure groups have influenced legislative decisions about occupant restraint legislation.
- The process by which legislation is introduced and passed in the states. How long it takes to get a law enacted. The committees that typically have jurisdiction over occupant restraint laws.

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*Eight questions on safety belts and safety belt usage laws were incorporated into a 1978 national telephone survey sponsored by NHTSA as part of another project. See 1978 Survey of Public Perceptions on Highway Safety, National Highway Traffic Safety Administration (November 1978).

A two-step procedure was used to obtain this information. First, the legislative research service of every state where occupant restraint legislation had been considered was contacted. The services provided copies of safety belt usage and child restraint bills that had been introduced in their respective legislatures, the names of the bills' sponsors, transcript of legislative debates (if available), and any supporting research that had been conducted on behalf of proposed occupant restraint legislation (if available). This information was supplemented by archival studies of news accounts of the proposed legislation.

Second, three series of open-ended, unstructured telephone discussions were held with state legislators. The discussions were confined to the ten states where the issue of occupant restraint legislation had been the most often considered. Discussions were held with nine legislative proponents of restraint usage legislation, eight state legislators who opposed occupant restraint laws, and ten state legislators who considered themselves neutral. In some cases, informal telephone conversations with the state Traffic Safety Coordinators or Governor's Highway Safety Representative served to increase or clarify information received from the legislators.

Data and information collected from the telephone discussions and the written materials were subsequently analyzed and evaluated. Based on this evaluation, written communications materials designed to increase support among state legislators for occupant restraint legislation were developed. These materials were then tested for effectiveness and persuasive appeal among members of the state legislator target audience. Research findings regarding the state legislation target audience are reported in Chapter III; the results of the pilot-test on the communications materials are reported in Chapter IV.

2.3 RESEARCH METHODOLOGY: INDIVIDUALS AND ORGANIZATIONS WITH A PROFESSIONAL OR CIVIC INTEREST IN HIGHWAY SAFETY

Many individuals and organizations have taken an interest in the issue of occupant restraint legislation. These individuals and organizations range from traffic safety experts to private physicians interested in traffic safety laws as health measures. All such individuals and organizations were categorized as a target group, and a number of research activities were conducted to ascertain their respective positions regarding safety belt usage and child restraint laws and their influence on legislative debates about such laws.

The first step in the process was to compile a list of professional and civic groups with an interest in highway safety. The organized groups were contacted to ascertain the organization's policy toward occupant restraint legislation, their support or opposition to restraint usage laws, past public information and education efforts the organization had conducted on behalf of safety belts or safety belt usage legislation, and any research the organization had performed on the issue. Key representatives of the unorganized groups were also contacted to determine their position and attitudes on the issue of occupant restraint legislation.

Once all available data had been collected and analyzed on the professional and civic organizations target audience, it became evident that further research was necessary on one component of this group--police officials. Thus a series of unstructured, open-ended telephone discussions were initiated with key representatives of the police. Altogether police officials in eight states were interviewed on the issue. In addition, Canadian police officials were contacted regarding procedures used to enforce occupant restraint legislation.

The results of the research performed with respect to the professional and civic organizations target groups are presented in Chapter III. In addition, a model process was developed for enforcing occupant restraint laws based on experiences in Canada. This process is outlined in Chapter IV.

2.4 RESEARCH METHODOLOGY: THE MEDIA TARGET GROUP

The research aimed at the media target audience had two primary objectives: (1) to identify and assess the media's attitudes toward occupant restraint legislation, and (2) to determine the feasibility of using the media's resources in efforts to increase state support for occupant restraint laws. In addition, this research was used to learn more about the attitudes of other target group members (e.g., state legislators and licensed drivers towards restraint usage laws).

In connection with the above objectives, a number of research activities were carried out. First, published surveys and reports on media reaction to proposed safety belt usage and child restraint laws were reviewed and analyzed. In addition, the content of news reports and articles on occupant restraint legislation in several states was evaluated. Media coverage and reaction to proposed restraint usage laws were also discussed with state legislators and state traffic safety officials. Several Canadian officials were contacted to learn more about the role the media played vis-a-vis Ontario's safety belt usage law. Finally, interviews were conducted with the editors or managers of nineteen radio stations, six television stations, and five newspapers.

Research findings relative to the media are discussed in Chapter III. Although no specific media-oriented communications materials were developed, various recommendations and guidelines for dealing with the media were incorporated into the Occupant Restraint Legislation Handbook. These are discussed in Chapter IV.

2.5 RESEARCH METHODOLOGY: GENERAL PUBLIC TARGET AUDIENCE

Public acceptance is an important issue in all legislative debates and critically important to the fate of occupant restraint legislation. For these reasons, a concerted effort was made to assess the attitudes of licensed drivers towards occupant restraint legislation and to develop strategies and materials to increase public support for the legislation.

A comprehensive literature search was undertaken to identify published reports on public information campaigns on restraint system usage. This search was conducted by the University of Michigan's Highway Safety Research Institute (HSRI) who also prepared annotated bibliographies on each (see Appendix A). In addition, past surveys dealing with the question of occupant restraint legislation were identified and collected.

At the same time, eight questions on safety belts and restraint usage laws were incorporated in a survey being conducted for NHTSA in connection with another project. Four focus group sessions were also conducted with licensed drivers to explore in depth their knowledge regarding highway safety issues, their opinions about occupant restraint legislation, and major arguments advanced on behalf of safety belt usage and child restraint laws.

Information obtained on the attitudes of licensed drivers regarding occupant restraint legislation was used to develop a set of persuasive communications aimed at the general public. These materials were tested for effectiveness and appeal among licensed drivers. For research findings pertaining to licensed drivers, see Chapter III; for results of the pilot-test, see Chapter IV.

CHAPTER III

RESEARCH FINDINGS

Chapter III describes the key research findings on each target group. It analyzes the attitudes, knowledge, and understanding of both proponents and opponents in each group regarding the issue of occupant restraint legislation. Other findings that bear on the issues of restraint usage laws are also presented (e.g., problems in the legislative process that affect the outcome of proposed occupant legislation). This research formed the basis for the subsequent development of communications materials and strategies to increase support for occupant restraint laws (see Chapter IV).

3.1 STATE LEGISLATOR TARGET AUDIENCE

Interviews with state legislators on the issue of occupant restraint legislation revealed no new or surprising arguments. For the most part, state legislators express the same concerns and use the same arguments (for and against) that arise whenever the issue is discussed. Reviews of legislative debates on proposed restraint usage legislation and public statements made by state legislators on the issue also support this finding. This fact suggests that most legislators are more influenced by their roles as ordinary citizens than by their roles as legislators with respect to occupant restraint legislation.

The most significant conclusion drawn regarding state legislators is that their attitudes toward safety belts generally determine whether they are for, against, or undecided on the issue of occupant restraint legislation. Proponent legislators believe very strongly in the effectiveness of safety belts and report frequent usage. In contrast, most opponents are skeptical about the effectiveness of safety belts and never wear them. Between these two extremes, fall those legislators who are neither active proponents or active opponents of occupant restraint laws (i.e., the neutral legislators). These legislators tend to believe in the effectiveness of safety belts but wear them infrequently.

A second important conclusion drawn from the discussions with state legislators is that the legislative process tends to work to the advantage of those legislators who oppose restraint legislation and to the disadvantage of those legislators who support such laws. First, proponents experience a problem in ensuring that all legislators are exposed to their facts and arguments. Sponsors of occupant restraint legislation usually rely upon committee hearings and floor debates in order to present facts and develop the issues; however, few legislators attend the hearings of committees they do not serve on. Moreover, the issue of restraint usage legislation is too complex to be fully articulated during the floor debates (most of which last less than 20 minutes).

A second problem inherent in the legislative process is that a proposed safety belt usage law or child restraint law must go through the committee hearing and floor debate twice--once in the House chamber and once in the Senate chamber. If the bill overcomes opposition and passes the first chamber, it

usually must overcome the same resistance in the second. Usually the legislative session is nearly over by this time, and there is insufficient time to generate support for the proposed bill.

A number of other problems in the legislative process also handicap proponent efforts on behalf of occupant restraint legislation. Many critical points exist in the legislative process where a strategically placed individual or minority coalition can easily block a bill. In addition, there is a large turnover in state legislatures. Thus a sizeable proportion of the legislature will be unfamiliar with carryover safety belt usage legislation or legislation previously introduced but not passed. Finally, in most states being a legislator is a part-time job. Many legislators have no staff and few resources. Consequently, keeping informed on an issue is a major problem.

The following summarizes significant observations derived from project research activities that focused on state legislators:

- Proponents of occupant restraint laws tend to believe that safety belts are effective and to report frequent personal use of safety belts. They agreed that a belt use law would result in fewer deaths and injuries from auto accidents, because it would force more people to wear their safety belts. They believe such laws are justified because society has a responsibility to protect the lives and safety of its citizens, and safety belt usage laws, if enacted, would lower societal costs and consumer insurance premiums.

- Proponent legislators tend to be knowledgeable about state traffic safety problems, general safety belt usage rates among the public, the effects and consequences of automobile accidents, and the success that foreign countries (especially Australia) have had with occupant restraint laws.

- Legislative efforts on behalf of occupant restraint laws typically lack organization; most are "spear-headed" by a single legislator and receive minimal support from either the media or outside groups (including the state government).

- Safety belt usage legislation is typically presented as a traffic safety issue rather than a health issue. As such, it is sometimes viewed by legislators as being a relatively insignificant issue.

- Legislators who opposed safety belt usage laws expressed more skepticism about belt effectiveness and seldom used belts themselves. These legislators expressed belief in the same myths about safety belt dangers (entrapment, etc.) as do most non-users.

- Legislative opponents also argued that such laws are a serious invasion of privacy and infringe upon individual rights. The individual's decision to wear a safety belt was seen as having no social consequences that warrant legislative control; safety belt usage laws were seen as part of a growing trend towards too much government involvement in the private lives of citizens.

- Opponents tend to underestimate the problem of low belt usage rates, and they are not sure that occupant restraint legislation would be successful in increasing safety belt use.

- Enforcement has proven to be a sticky and important issue during legislative debates over occupant restraint legislation. Legislators who favor restraint usage laws admit that enforcement would be difficult, but they maintain that a substantial number of people would obey the law (up to 70 percent). Opponent legislators maintain that laws which can not be enforced are disobeyed and create disrespect for the government and the legal system.

- The debate between legislative opponents and proponents over the issue of safety belt usage legislation usually turns upon the opponents' arguments, not the proponents'. Proponents usually support their viewpoints with statistical data, and these data are often too abstract and non-localized to be meaningful. By contrast, opponents have no need to substantiate their viewpoint. Opponents focus on philosophical issues (freedom of choice) rather than traffic safety issues and argue with emotionalism or case histories rather than facts and data. They are especially skeptical of factual data such as that pertaining to successful experiences of foreign countries with safety belt usage laws.

- State legislators who are neither proponents or opponents of occupant restraint legislators say that safety belts are effective in preventing injury and death in automobile crashes, but they do not wear them. Many hold to prevalent myths about safety belts and are generally unaware of the traffic safety problems of their states.

- Neutral legislators hold few preconceived biases against restraint laws but tend to associate them with excessive government control. Most are unaware of arguments made on behalf of restraint usage laws.

3.2 PROFESSIONAL AND CIVIC ORGANIZATIONS TARGET AUDIENCE

Outside support for occupant restraint legislation originates from two main sources: (1) national organizations with an abiding interest that overlaps the issue of occupant restraint legislation (e.g., the National Council of Governor's Highway Safety Representatives, the American Seat Belt Council, and the American Automobile Association); and (2) individuals (who typically do not represent an organization) with a professional or civic interest in the traffic safety problems of their states (e.g., police, physicians, or driver educators). There exists almost no organized opposition to occupant restraint legislation, nor does the opposition expressed by individuals tend to represent any professional or civic interest.

Occupant restraint legislation has been endorsed by three national organizations that represent traffic safety professionals (i.e., the National Conference of

Governor's Highway Safety Representatives, the National Safety Council, and the American Driver Education Traffic Safety Association), and four national organizations that represent industry groups (the American Seat Belt Council, the Highway Users Federation for Safety and Mobility, Motorist Information, Inc., and the American Vehicle Manufacturers Association). In addition, restraint usage legislation has been endorsed by the International Association of Chiefs of Police (at least on a trial basis), the American Association of Automotive Medicine, and the Physicians for Automotive Safety.

At the state level, individual members of various occupational groups have endorsed occupant restraint legislation, including state traffic safety officials, police personnel, physicians, teachers, ambulance and rescue drivers, and insurance agents. In some cases, state chapters of various national organizations (e.g., the National Association of Women Highway Safety Leaders and the American Automobile Association) have supported safety belt usage legislation even though their national organizations are neutral on the issue.

The most active support for restraint usage laws has come from national organizations. The activities of these groups have involved presenting testimony at legislative hearings, disseminating research data, and conducting public education campaigns to promote safety belt use. Markedly less activity has characterized the efforts of state and local interests. Except for a few notable cases, support from state groups has been minimal. Many legislative sponsors of restraint usage laws stated that although they received the endorsement of their state's traffic safety agency, they received very little other support. In most states, the police failed to support proposed occupant restraint laws.

The combination of very strong national support and weak state support for occupant restraint legislation caused many legislators to perceive the issue as a narrow national issue rather than a real concern of their state. Legislators tended to be skeptical of the efforts of national organizations, because "they always have something to sell." In many states, the national organizations were viewed as "outsiders, " and often their efforts on behalf of restraint usage laws turned out to be counter-productive.

In cases where local and state support for proposed restraint usage legislation did exist, it was quite effective. The involvement of medical and police professionals was especially influential. In Tennessee, for example, the medical community, the state police, and the state Traffic Safety Coordinator were all involved in that state's successful efforts to pass a child restraint law.

Although support for occupant restraint legislation exists in other states, it is unorganized. In addition, no mechanism exists in most states to organize this support. In Tennessee, a citizens group provided the needed organizational mechanism, but other states have not been as fortunate.

In numerous discussions with state legislators and traffic safety officials, the lack of support by police officials was mentioned as a factor in the defeat of proposed occupant restraint legislation. Although the police had not opposed the proposed legislation, they had not endorsed or supported it

either. However, this ambivalence increased the reservations of legislators about occupant restraint legislation and actually diminished the legislation's chances for passage.

To develop a better understanding of the police position on occupant restraint laws, a number of open-ended discussions were held with state police on the subject. This research revealed that the overwhelming majority of police officials advocate the use of safety belts and habitually wear them; however, by a factor of three, they oppose restraint usage laws. Furthermore, their major objection (in most cases only objection) is enforcement: they do not believe that occupant restraint laws can be adequately and fairly enforced, and they believe that a lack of enforcement will create disrespect for the police.

At the same time, most police officials believe that self-protection laws (e.g., helmet laws for motorcyclists) are justified and have no philosophical objections to either safety belt usage laws or child restraint laws. In fact, several departments required their officers to wear safety belts while in police vehicles. In addition, many police officials, although opposed to occupant restraint laws, stated that they thought such laws would increase the use of restraint devices.

3.3 THE MEDIA TARGET AUDIENCE

Research findings on the media target group were clustered in three areas:

- Media attitudes towards occupant restraint legislation,
- The effect of the media on the attitudes of licensed drivers and state legislators toward restraint usage laws, and
- Use of the media as a resource to increase public understanding of occupant restraint legislation.

These findings are discussed below.

Media Attitudes on Occupant Restraint Legislation

Occupant restraint legislation generally receives very little media attention; most coverage of the issue is restricted to the editorial pages. As for straight news reports on the subject, they tend to be sparse and incomplete. Indeed, proposed restraint usage laws are seldom reported on until a vote on the measure is called for. Overall, the media can be characterized as disinterested in traffic safety issues (especially those without a strong local connection). Thus, the basic problem with the media vis-a-vis occupant restraint legislation is convincing them that the issue is actually news-worthy.

For the most part, key media personnel (i.e., editors and station managers) are objective and impartial regarding occupant restraint legislation; in fact, the majority of newspapers endorse the concept. Still their knowledge of restraint usage legislation and of traffic safety issues in general is very limited. Most of those contacted had only a superficial understanding of their states' accident problem; they tended to assign a lower priority to highway safety than to other social problems. Although their attitudes on safety belts were generally favorable, they reported inconsistent use.

The reasoning of those newspapers which favor the enactment of restraint usage laws generally parallels that of other proponents. Generally, the editorials cite statistics on road deaths and injuries as well as data showing the effectiveness of belt use laws in foreign countries. Also frequently mentioned are reservations concerning the air bag and the opinion that safety belts constitute the least expensive and most effective way of reducing traffic deaths and injuries. To counter the arguments of those who do not favor mandatory safety belt usage, the editorials often argue that the proponent case is more compelling, and that restraint usage laws are not unconstitutional. The motorcycle helmet law is often cited as an analogous situation. Finally, editorials in support of restraint usage laws argue that fines for violations are reasonable and that the legislation should be given a chance to prove its worth.

On the opposite side, those newspapers which oppose occupant restraint legislation generally argue that such laws are an invasion of privacy, an infringement on personal liberties, and unenforceable. Often they cite the proposed legislation as another example of tyrannical government. Other points made against occupant restraint laws include possible liability problems, public resentment, and development of the airbag. Unlike many state legislators and members of the general public, few of the editorials attempt to rebut proponent arguments on the effectiveness of safety belts and the value of belt wearing. However, they do argue that belt use should be voluntary, not compulsory.

Effect of the Media on Public and Legislative Attitudes

Media influence on state legislators and the general public concerning restraint usage laws was hard to determine. Although most legislators claimed to stay abreast of the media's position on occupant restraint legislation, both legislative proponents and opponents perceived the media as having endorsed their positions. As a rule, it seems that the media's influence on legislators was determined primarily by the existing attitudes of the individuals involved. If the media's position (pro or con) agreed with the legislator's, then it tended to reinforce the legislator's existing attitude; if the media's position disagreed, then the media's position was ignored.

As for the general public, the media seemed to have had little influence on their attitudes regarding occupant restraint laws. Occupant restraint legislation seemed to generate a number of letters-to-the-editor, from a small fraction of the public, but otherwise the public seemed to ignore news coverage and editorials on the issue. In addition, legislators reported

receiving very few letters and comments about proposed safety belt usage legislation which suggests that the issue is not widely known.

The Media as a Resource

Proponents of occupant restraint laws generally failed to make effective use of the media as a resource for increasing public awareness and understanding of the issue. Proponents of occupant restraint legislation rarely hold press conferences to discuss proposed safety belt usage or child restraint laws, and most did not issue press releases on proposed occupant restraint legislation. In addition, no use has been made of public service advertising in connection with legislative efforts on behalf of safety belt usage or child restraint laws.

However, the ability of proponents to utilize the media as a resource for increasing public understanding of occupant restraint legislation is constrained by several factors. First, many newspapers as well as radio and television stations view news releases as self-serving; consequently, they rarely print or broadcast them. However, news releases are useful for generating media interest in the issue of occupant restraint legislation and for getting media coverage of press conferences. Overall, it appears that a few basic techniques and methods could considerably increase news coverage of proposed occupant restraint legislation.

On the other hand, the use of public service advertising is more problematic. The Federal Communications Commission (FCC) requires all radio and television stations to make available a certain amount of free "air time" for public purposes; however, newspapers are under no such obligation. Consequently, very few newspapers contribute space for public service advertising. In addition, under the FCC's "Fairness Doctrine," radio and television stations are required to provide equal time for the expression of opposing viewpoints on any political advertising. Since this would include announcements on behalf of occupant restraint laws, most stations refuse to carry such advertising. Their refusal also extends to paid commercials, since the FCC rule covers paid as well as unpaid advertisements.

Nevertheless, public service advertising can be used to increase public awareness of traffic safety countermeasures, to explain the benefits of wearing safety belts, and to encourage motorists to voluntarily wear lap and shoulder belts. Furthermore, research indicates that public information and education (P.I.&E.) campaigns to increase voluntary safety belt usage also have a positive effect on public acceptance of occupant restraint laws. One of the most interesting and significant findings of the research on the media was the fact that public information and education campaigns in both Ontario and Michigan succeeded in reducing public opposition to occupant restraint laws, although their content was strictly directed at changing knowledge and attitudes affecting belt use behavior itself. This raises the question of a possible inverse relationship between the individual's understanding of the value of safety belts and his or her opposition to safety belt laws.[1]

3.4 THE GENERAL PUBLIC TARGET AUDIENCE

Research activities pertaining to the general public target group were directed in two areas: (1) the attitudes of licensed drivers towards safety belts, and (2) their attitudes on laws requiring automobile occupants to use restraint devices. Previous research in each area was identified, reviewed, and analyzed. In addition, a series of focus group sessions were used to explore in-depth public attitudes on safety belts, highway safety issues, and occupant restraint laws. Public attitudes on safety belts and safety belt usage laws were also investigated as part of a national telephone survey of licensed drivers across the United States. This survey was part of another NHTSA project being performed by Teknekron, Inc. The results of these research activities are discussed below.

Public Attitudes on Safety Belts

Public attitudes on safety belts have been extensively investigated. This research suggests very different profiles for users and non-users of safety belts. Users tend to be better educated, have a higher income, be generally more safety minded, be more conservative in their driving, have a higher perception of accident risk, and believe in the effectiveness of safety belts. The literature also suggests that non-users tend to be higher risk drivers with poorer driving records, have fewer personal health care habits, be less concerned about the risks of driving, and be less convinced of the effectiveness of seat belts.

People cite many reasons for not using safety belts. Those who do not always fasten their safety belts give the following reasons for their behavior:

- 28 percent report that safety belts are uncomfortable.
- 27 percent feel that safety belts are not suited for their sporadic type of driving.
- 23 percent say safety belts are forgotten (no usage habit).
- 14 percent say safety belts are not necessary.
- 6 percent indicate fear of entrapment.[2]

In spite of these objections, public opinion concerning safety belts is generally favorable, though, as might be expected, regular safety belt users are more inclined to express positive attitudes than those who wear them occasionally or not at all.[3] But however favorable the general attitude toward safety belts is, the fact remains that only a minority of those who ride in cars regularly wear them. This has led to more in-depth studies of what factors influence people to wear lap and shoulder belts.

The individual's decision to wear safety belts is influenced by two key factors - driving situation and individual personality/attitude. Although few studies have comprehensively examined the safety belt use/non-use phenomenon, a number of situational and personality traits have been identified that seem to influence one's decision to wear safety belts. A brief analysis of these factors is presented below to illustrate the complexity of the safety belt issue.

Under certain conditions, the usage rate for safety belts will fluctuate. Studies consistently report a higher percentage of vehicle occupants using safety belts in interstate and highway traffic than in urban traffic. Also the longer the distance travelled, the more likely vehicle occupants are to fasten their safety belts. Some studies have reported that the relationship between frequency of safety belt usage and length of trip is linear. In addition, vehicle speed, sports car ownership, inclement weather, poor road conditions, and the degree of darkness are factors found to be positively related to safety belt use. (Note: a recent American study did not find a correlation between road condition or darkness and safety belt use). It has been inferred, based on the above findings, that safety belts are more likely to be used in situations perceived as hazardous.[4]

Several studies have reported differences in safety belt use by drivers and passengers. In general, passengers are less likely to use their belts than drivers, especially rear-seat passengers. On the other hand, the closer and more dependent the relationship between passenger and driver (e.g., a child, spouse, friend), the more likely the driver is to wear his safety belt. Driver usage of safety belts also tends to prompt passenger use. Also passengers will generally comply with a driver's request to use their belts regardless of their personal usage patterns; at the same time, the driver who asks passengers to fasten their safety belts is likely to be a habitual wearer.[5]

In addition to driving situations and general demographic characteristics, personality and attitudes are also key determining factors related to safety belt behavior. Findings based on a 1971 national survey of 1500 licensed drivers in the United States indicate that regular safety belt users tend to be logical, less emotional, perfectionists, methodical, orderly, precise, exact, and conservative. In general, they show an appreciation of and respect for the facts and statistics on automobile safety and the safety value of belts. In addition, the regular user of safety belts is conscious of his safety-minded attitude and has a keener perception of the risks involved in driving than non-users. The findings suggest that those who wear safety belts regularly tend to have made a rational decision to use them based upon an understanding of the safety value of belts and the physical dynamics of accidents. Finally, they deny feelings of confinement, discomfort, or inconvenience when wearing belts.[6]

Among people who <u>partially</u> accept the value of lap and shoulder belts, the decision to wear them is generally occasioned by situational factors. Thus belts are not a regular habit for this group, but are worn when the situation is perceived as hazardous. Under these circumstances, comfort and convenience become unimportant.[7] Individuals who <u>minimally</u> accept the value of safety belts are considerably less convinced of their safety value. They tend to rely on subjective feelings about when to wear them, and their pattern of belt usage

is erratic and unpredictable. There is a recurring complaint by members of this group that seat belts are too much of a bother, and they cite negative feelings associated with the physical and emotional discomfort of being restrained. Furthermore, they do not believe they are going to be in an accident. They tend to see themselves as good drivers and believe that good drivers do not have accidents. Therefore, they do not need to wear safety belts. Some have aesthetic objections to safety belts and comment on possible damage to clothing. Others give no particular reason other than forgetfulness, laziness, or general carelessness. [8]

The relatively small group of people who completely reject safety belts have generated much interest. These people apparently believe that lap and shoulder belts are ineffective and potentially dangerous. Specifically, they are not convinced of the protection offered by safety belts and feel that they may be injured by the belt itself. Many say that in the event of an accident, they would rather be thrown clear rather than being crushed, drowned, or burned. This group expresses considerable fear over being entrapped by safety belts. Others say safety belts remind them of the possibility of an accident and others say safety belts are a sign of weakness or of an incompetent driver. In short, people who completely reject safety belts have more fear of safety belts than of the consequences of an accident. Surprisingly, prior involvement in an accident is not a factor influencing belt usage for those who reject safety belts or who partially or minimally accept them. [9]

Public Attitudes on Occupant Restraint Legislation

Surveys of American public opinion on occupant restraint laws indicate that public attitudes on the issue are extremely variable. One recent national survey reported that a majority of the American public (57 percent) thought laws requiring the use of seat belts were a "poor" idea; [10] however, the Teknekron survey indicated that 54 percent of American drivers "favored" the enactment of a safety belt usage law (see Appendix B for the questionnaire used in this survey). [11]

At the state level, public responses to such laws have ranged from 55 percent in favor (Oregon) to 54 percent against (New Hampshire). [12,13] A survey of Michigan drivers indicated that 30 percent supported occupant restraint laws while some 64 percent opposed them. [14] A survey by the American Automobile Association (AAA) of its membership showed 41 percent favored safety belt usage laws, 48 percent opposed them, and 11 percent were undecided. [15]

The main reasons expressed in these surveys for opposing occupant restraint legislation are:

- The belief that occupant restraint laws are a violation of civil rights or an improper infringement by government upon private decisions,
- Public sentiment that safety countermeasures should be directed at problem drivers (i.e., the other guy),

- Inadequate knowledge regarding safety belt effectiveness (especially the fear that safety belts themselves are dangerous), and
- A low perception of accident risks.

Members of the general public who support occupant restraint laws usually do so because they believe that the laws will reduce deaths and injuries from highway accidents. Most supporters also state that occupant restraint laws will save the state money and eventually reduce automobile insurance premiums. A few cite the success of foreign countries that have passed occupant restraint laws as a reason for their support.

The above reasons for and against occupant restraint laws were also cited by members of the focus group sesssion. Furthermore, their opinions on the issue were as divided as those reflected in the surveys. As a rule, no hard and fast public opinion either for or against restraint usage legislation exists. Most members were unable to clearly articulate their reasons for supporting or opposing occupant restraint legislation. When probed, most admitted they did not know enough to make a decision on the issue.

Focus group members (even those opposed to occupant restraint legislation) did think that safety belt usage would increase if a law requiring their use were passed; nearly all said that they would obey such a law, and the majority indicated a preference for occupant restraint legislation over passive restraint systems. In general, members of the focus groups were ignorant of most traffic safety issues and unaware of previously proposed occupant restraint legislation. Most of those opposed to occupant restraint legislation were a lot less certain of their opposition once the merits of the issue were presented. In fact, some opponents had supported legislation similar to restraint usage laws (e.g., helmets laws for motorcyclists and mandatory installation of smoke detectors in homes).

Footnotes: Chapter III

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2. Yankelovich, Skelly, and White, Inc., A Summary Report of Driver Attitudes Toward Restraints for Greater Safety in the Operation of an Automobile, Motor Vehicle Manufacturers Association, September 1976.

3. For example, in the Yankelovich, Skelly, and White survey, 91 percent of all drivers surveyed indicated that in the case of an accident, safety belts effectively reduced injuries, prevented ejection from the vehicle, or prevented occupants from striking a car's interior.

4. Fhaner, G. and Hane, Monica. Seat Belts: The Importance of Situational Factors, National Swedish Road Safety Office, 1972.

5. National Analysts, Motivating Factors in the Use of Restraint Systems, 1971.

6. Ibid.

7. Ibid.

8. Ibid.

9. Knapper, C.K., et al. A Quasi-Clinical Strategy for Safety Research: A Case-Study of Attitudes to Seat Belts in the City of Regina, Saskatchewan, Canada, Ministry of Transport, Ottawa, Canada, November 1973.

10. Peter D. Hart. Public Attitudes Toward Passive Restraint Systems, U.S. Department of Transportation, National Highway Traffic Safety Administration, August 1978.

11. Teknekron, Inc. 1978 Survey of Public Perceptions on Highway Safety. U.S. Department of Transportation, National Highway Traffic Safety Administration, November 1978.

12. Richard L. Kennedy and Associates. Oregonians Look at Traffic Safety, Eugene, Oregon, December 1972.

13. New Hampshire Highway Safety Agency. Attitude and Opinion Survey Among New Hampshire Drivers, Concord, New Hampshire, April 1976.

14. Motorists Information, Inc. Seat Belt Education Program Post-Advertising Test Summary Report, Detroit, Michigan, 1977.

15. American Automobile Association. AAA Members' Opinion on Issues of Importance, Automobiles, Driving, and Travel Habits, Washington, D.C., March 1977.

CHAPTER IV

DEVELOPMENT OF COMMUNICATIONS MATERIALS

Four overall conclusions on the problems of enacting occupant restraint legislation emerged from the project's research; these conclusions guided the development of communications materials and strategies for overcoming state resistance to occupant restraint legislation. The materials were subsequently "pilot-tested" among members of appropriate target groups. The overall conclusions regarding the types of communications materials needed, the development of these materials, and the pilot-test activities are discussed below.

4.1 RESEARCH CONCLUSIONS

Four findings guided the development of communications materials and strategies for overcoming the resistance of the target groups towards occupant restraint legislation:

(1) Although a vast amount of data and information in support of occupant restraint legislation existed, it was disorganized and not readily available to proponents. In order to be useful, it had to be pulled together and compiled in a single reference. For example, a considerable amount of information was found to be available to support proponent contentions that the use of restraint devices (e.g., safety belts) effectively reduces the chance of occupant injury or death in the event of an automobile accident, but proponents needed to assemble this information from many sources. In many cases, the results were less than satisfactory. Very little data on the monetary benefits resulting from the passage of occupant restraint laws had been published in the U.S. This information was available only from foreign sources; as a result major parts of the proponent case for occupant restraint laws were frequently undocumented. In addition, almost no information was available to rebut the arguments of opponents against occupant restraint laws. In part, this was due to the philosophical nature of the main argument presented against occupant restraint laws, but some proponents had developed arguments to counter such objections. However, no information exchange process existed that enabled proponents to share these counter-arguments. Finally, information on procedures used in foreign countries to enforce occupant restraint laws was totally unavailable to American proponents, and very few proponents had access to the results of public opinion surveys on the occupant restraint issue.

(2) A second conclusion drawn from the research was that a definite need existed for a much broader spectrum of information than just data to support arguments on behalf of occupant restraint laws.

Specifically, there was a need for more process-oriented, organizational type information that proponents could use to mobilize support and resources on behalf of occupant restraint legislation. More guidance was needed on procedural matters and techniques to effectively convey the case for occupant restraint legislation to state legislators, traffic safety officials, interested individuals and organizations, the police, and the general public. In other words, information was needed on how proponents could organize an effective campaign on behalf of occupant restraint legislation.

(3) The third conclusion was that persuasive strategies designed to gain the support of national-level organizations interested in highway safety issues were unnecessary. Most of these organizations endorsed restraint usage laws, and the others were basically neutral. At the state level, the situation was much the same; however, here the support needed to be better organized. This was especially true with respect to individuals with a professional or civic interest in the issue (e.g., medical doctors, state and local traffic safety officials, and police officers). In those instances where the support of such individuals was obtained, it was very influential; however, their support was seldom requested.

Police officials were the only individuals in this target group to express any serious reservations concerning occupant restraint laws. Their objections centered on enforcement, and while they would not actively oppose proposed occupant restraint laws, unless it could be satisfactorily demonstrated to them that such laws could be enforced, they would not support them either. To overcome police resistance, it was necessary to convince them that occupant restraint laws could be enforced; consequently, the police are an exception to the third conclusion.

(4) Finally, the myriad legal and financial difficulties associated with the use of the mass media to promote restraint usage laws render this strategy impractical. However, it is possible to increase news coverage of proposed occupant restraint legislation and to use the media as a resource in gaining greater acceptance of proposed legislation. These, however, are much more modest objectives than originally envisioned.

4.2 THE DEVELOPMENT OF COMMUNICATIONS MATERIALS

The above conclusions and the specific research findings on each target group led to the development of two types of communications materials:

- A communications package designed to overcome public apathy regarding the benefits of using safety belts and other occupant restraint devices and to explain the need for and logic of occupant restraint legislation.

- A material package to guide proponents of occupant restraint legislation in organizing a comprehensive campaign on behalf of a general safety belt usage law or a child restraint law, in addressing the concerns and objections of key target groups, and in involving members of the respective target groups in efforts to enact occupant restraint legislation.

Information and materials on the benefits of using restraint devices were compiled from several sources, but the most significant source was a publication by Transport Canada, entitled The Human Collision[1]. Various illustrations from this booklet were made available by Transport Canada for the project's use. The materials on the need for and logic of occupant restraint legislation were developed by the project staff. Although most of this information was available from previously published sources, it had never before been compiled in a systematic manner.

The second set of materials was based on the experiences of the target group members contacted during the course of the study. The experiences of the state legislators were essential to the development of forceful procedures and tactics for overcoming legislative resistance. Police officials in Ontario, Canada provided invaluable information on techniques for enforcing occupant restraint laws, and members of the media gave considerable insight into how the media's resources could be utilized. Finally, the work of traffic safety professionals yielded many guidelines on communicating with the general public and for developing support among professional and civic groups.

4.3 PILOT-TEST ACTIVITIES

The package of communications materials developed for the purpose of increasing public understanding of and support for occupant restraint legislation was subjected to a pilot-test among state legislators and members of the general public. The objectives of the pilot-test were two-fold:

- To solicit general comments and reactions regarding the content and clarity of the materials, and

- To make a preliminary assessment of the persuasiveness of the materials in convincing state legislators and members of the general public to support occupant restraint legislation.

Due to the nature and size of the test groups, the results of the pilot test are not statistically valid. The purpose of the test was simply to determine whether the materials were understandable, clear and informative. A secondary purpose was to assess whether this information made a difference in the opinion of those receiving the materials on occupant restraint laws.

Results of the State Legislator Pilot-Test

The materials were submitted to a group of nine state legislators. A baseline measurement was made (via telephone) of the attitudes and opinions of these

legislators towards safety belts and occupant restraint laws prior to sending them the materials. A response was received from seven of the nine legislators.

Table 4-1 summarizes the responses of the legislators who participated in the test on the content and quality of the materials. Generally, they found the materials informative, understandable, and convincing, but the materials by themselves were not enough to convince most of them to support occupant restraint legislation. However, the legislators did agree that the materials gave them a much better understanding of the issue, and five of the seven found the arguments presented on behalf of occupant restraint legislation convincing.

Table 4-2 indicates that the materials were also persuasive, especially in overcoming misconceptions about the need for restraint usage, the public costs of traffic accidents, the success of occupant restraint laws in foreign countries, and the ability of police to enforce such laws. Nonetheless, the materials were unable to convince the majority of the legislative participants that occupant restraint laws were not an improper intrusion into the lives of private individuals. This shortcoming probably accounts for the failure of the materials to convince most of the legislators to support occupant restraint laws.

Results of the General Public Pilot-Test

The procedures for the general public pilot-test were as follows:

- Twenty-one people (10 men and 11 women) were shown the communications materials on occupant restraint legislation and three 60 second commercials on safety belt use.
- Before viewing any materials, the group's existing attitudes and knowledge toward belt use and occupant restraint laws were measured.
- Half the group saw the commercials first; the other half received the written materials first. A second test was administered in-between, and a final test was given at the end of the entire session. Part of the test was to measure the group's reaction to the three commercials on safety belts, however, those results are not reported herein.

Overwhelmingly, the response of the general public test group to the materials was positive (see Table 4-3). In addition, Table 4-4 indicates that the materials were effective in increasing public support for occupant restraint laws. The number of test participants who supported occupant restraint legislation increased from eight to eleven after presentation of the materials; more significantly, the number of participants opposed to the legislation declined from ten to two. The number of participants undecided on the issue also increased--from three to seven.

TABLE 4-1

SUMMARY OF LEGISLATOR RESPONSES TO CONTENT OF MATERIALS

Question	Legislator Responses		
	Yes	No	No Opinion
Did you read all the materials?	6	1	0
Were the materials easy to understand?	7	0	0
Did you find the materials convincing?	6	1	0
Did you get any new information about safety belts from the materials?	5	2	0
Has this information changed your opinion about wearing seat belts?	2	5	0
Did the materials provide you with a better understanding of the issues associated with compulsory belt usage laws?	7	0	0
Did the materials change your opinion about mandatory safety belt usage legislation?	2	4	1
Did you find the arguments presented on behalf of occupant restraint legislation convincing?	5	2	0
Would you support an occupant restraint law for your state?	1	5	1

TABLE 4-2

COMPARISON OF BASELINE AND POST-TEST RESPONSES OF THE STATE LEGISLATOR PARTICIPANTS

QUESTION	BASELINE RESPONSE			POST-TEST RESPONSE		
	Agree	Disagree	Don't Know	Agree	Disagree	Don't Know
If you were in a 30 mph crash, you could prevent injury to yourself by bracing yourself with your arms or legs, without needing a seat belt. Do you...	3	2	2	0	7	0
In an accident, you are usually better off to be thrown clear of the car than to remain inside the car. Do you...	0	5	2	0	7	0
In an accident which ends with the car submerged in water, safety belt wearers are usually better off than those who do not wear belts. Do you ...	5	2	0	6	1	0
In an accident, wearing a safety belt makes you less likely to be injured. Do you...	5	2	0	7	0	0
In many foreign countries, requiring people by law to wear their safety belts when driving has been effective in increasing safety belt use and reducing traffic deaths and injuries. Do you...	2	0	5	7	0	0
The impact of automobile accidents on state treasuries is minimal. Do you...	5	0	2	0	6	1
Mandatory safety belt usage laws are an "improper" intrusion into the lives of private individuals. Do you...	6	1	0	5	2	0
Safety belt usage laws are unenforceable. Do you...	5	0	2	1	6	0

TABLE 4-3

SUMMARY OF RESPONSES FROM THE GENERAL PUBLIC TO CONTENT OF MATERIALS

Question	Responses of General Public	
	Yes	No
Did you read all the materials?	19	2
Were the materials easy to understand?	20	1
Did you find the materials convincing?	20	1
Did you get any new information about safety belts from the materials?	18	3
Has this information changed your opinion about wearing seat belts?	12	9
Did the materials provide you with a better understanding of the issues associated with compulsory belt usage laws?	17	4
Did the materials change your opinion about mandatory safety belt usage legislation?	12	9
Did you find the arguments presented on behalf of occupant restraint legislation convincing?	18	3

TABLE 4-4

COMPARISON OF BASELINE AND POST-TEST RESPONSES OF THE GENERAL PUBLIC PARTICIPANTS

QUESTION	BASELINE RESPONSE			POST-TEST RESPONSE*		
	Agree	Disagree	Don't Know	Agree	Disagree	Don't Know
If you were in a 30 mph crash, you could prevent injury to yourself by bracing youself with your arm or legs, without needing a safety belt. Do you...	2	19	0	1	19	0
In an accident which ends with the car submerged in water, safety belt wearers are usually better off than those who do not wear belts. Do you...	15	6	0	17	3	0
In an accident, you are usually better off to be thrown clear of the car than to remain inside the car. Do you...	1	20	0	1	19	0
In an accident, wearing a safety belt makes you less likely to be injured. Do you...	18	3	0	19	1	0
	For	Against	Undecided	For	Against	Undecided
If an occupant restraint law was introduced in your state and you had to vote for or against the passage of such a law, how would you vote?	8	10	3	11	2	7
	Yes	No	Don't Know	Yes	No	Don't Know
If such a law were passed, would you obey it?	18	2	0	18	2	0

*One participant left before completing post-test.

However, test results were less conclusive in other areas, (e.g., changes in attitudes towards safety belts). The reason for this was that the test group tended to be exceptionally well-informed on the benefits of safety belts and about general traffic safety issues. For example, the baseline measurement indicated that only one of the twenty-one test participants held to the myth that a person was better off being ejected in an automobile accident rather than remaining inside the car. Consequently, very little movement was possible on the post-test, no matter how informative the materials.

4.4 PREPARATION OF THE HANDBOOK

The results of the pilot-test were encouraging; they indicated that both legislative and public support for occupant restraint legislation could be improved by a logical and thorough explication of the need for such legislation and its benefits. Moreover, the test results showed that misconceptions and knowledge gaps about the effectiveness of safety belts, the impact of automobile accidents on state taxpayers, and the enforceability of restraint usage laws could be overcome. The test results also indicated that the philosophical arguments on behalf of occupant restraint laws needed to be strengthened in order to convince state legislators that occupant restraint laws are not an improper intrusion into the private decisions of individuals. This was accomplished by adding an extensive discussion of widely accepted laws that are analogous to either safety belt usage or child restraint laws (e.g., helmet laws for motorcyclists, vaccination regulations applicable to small children, and ordinances mandating the installation of smoke detectors in private homes) to the communications package.

The project's next task was to refine the materials and find a way to make them available to interested individuals and organizations. A way had to be found also to transmit the organizational information that had been compiled. The most practical and cost-efficient alternative was to prepare a handbook that could serve as a working guide for proponents of occupant restraint legislation. The handbook contains information to assist its users in organizing an occupant restraint law campaign, in addressing the concerns and/or enlisting the support of various target audiences (e.g., state legislators, the police, and the general public), and in working with the media (e.g., newspapers, radio, and television). Data are also provided to support arguments made on behalf of occupant restaint laws and to answer the arguments of opponents.

The handbook has three specific objectives:

- To aid individuals and organizations at the state level in their efforts to gain passage of occupant restraint laws.
- To succinctly present and summarize the most effective data and information available in support of occupant restraint laws.
- To improve communications in the area of highway safety--particularly on the issue of occupant restraint legislation.

The handbook attempts to maximize the involvement of individuals and groups at the state level in efforts to pass safety belt usage legislation. Consequently, it was designed to be general and flexible enough to be applicable in different states with different resources. The information presented in the manual attempts to address the variety of individual state concerns, resources, and needs. In addition, great emphasis has been placed on organizational/process types of information throughout the text.

The handbook is published as a separate volume to this report--see Occupant Restraint Legislation Handbook: A Guide For Proponents.

Footnotes: Chapter IV

1. The Human Collision, Road and Motor Vehicle Traffic Safety, Ministry of Transport, Ottawa, Canada: September, 1974.

CHAPTER V

COMMENTS AND RECOMMENDATIONS

The objectives of the "Safety Belt Usage Attitudes Study" were:

- To identify and assess attitudes held by the general public, organized civic and professional individuals/groups, media representatives, and state legislators toward occupant restraint laws.
- To determine the basis for their support of or resistance to such laws.
- To determine whether negative attitudes towards occupant restraint laws can be reversed or neutralized by an appropriate presentation of relevant information.
- To design and validate appropriate communication strategies and materials helpful to proponents in seeking passage of occupant restraint legislation.

In most respects, the project has met its objectives and has produced a useful product to guide proponent efforts on behalf of occupant restraint legislation (i.e., the Occupant Restraint Legislation Handbook). Still the handbook is no substitute for the hard work that must be performed at the state level in order to achieve passage of an occupant restraint law. In this section, we comment on some of the problems that remain to be resolved with respect to occupant restraint legislation and offer some general recommendations on the subject. These comments and recommendations are organized into four sections.

- Prospects for occupant restraint legislation
- Additional research needed to support efforts on behalf of occupant restraint laws
- Communications problems in the highway safety area
- Passive restraints and occupant restraint laws

5.1 PROSPECTS FOR OCCUPANT RESTRAINT LEGISLATION

Although past state efforts to enact restraint usage laws have met with little success, occupant restraint legislation does not appear to be a dead issue. A few state legislators continue to press for such legislation, and recently proposed restraint usage laws have come closer to being passed than most previous attempts. For example, a 1977 safety belt usage bill was passed by the Oregon House of Representatives, and only a tie vote in the Senate Transportation Committee prevented it from being brought to a vote before

the Oregon Senate where it was expected to pass. In addition, Tennessee was recently successful in passing a child restraint law.

Still state efforts on behalf of occupant restraint laws are badly in need of a stimulus. The number of state legislatures considering occupant restraint laws dropped from a 1974 high of thirty-eight to only seven in 1977. Perhaps the Tennessee child restraint law or the handbook produced by this study can provide the needed stimulus, but at this point the future of occupant restraint legislation in the United States is uncertain. In many respects, the diminished attention being afforded occupant restraint legislation can be advantageous, as it allows proponents to carefully target their resources on those states most receptive to restraint usage legislation. But unless more support for the efforts of proponents is forthcoming, the chances of passage for occupant restraint legislation will continue to decline.

5.2 ADDITIONAL RESEARCH NEEDED TO SUPPORT EFFORTS ON BEHALF OF OCCUPANT RESTRAINT LEGISLATION

One way to support the efforts of proponents would be to provide additional research on the case for occupant restraint laws. Three areas particularly in need of more research are:

- Techniques and procedures for enforcing occupant restraint laws,
- Monetary costs associated with traffic accidents and associated savings resulting from restraint usage legislation, and
- Effects of occupant restraint laws on automobile insurance premiums.

Each of the above topics was investigated during the course of the "Safety Belt Usage Attitude Study" and found to be inadequately researched. Some information was available from foreign sources on enforcement techniques and the monetary savings resulting from restraint usage laws, however, this information was very preliminary. Surprisingly, very little data could be located on the financial consequences of accidents for individual states, and no documented evidence could be identified on the financial benefits of increased belt wearing for consumers. Increased information in these three areas would be especially beneficial to the proponent case.

5.3 COMMUNICATIONS PROBLEMS IN THE HIGHWAY SAFETY AREA

The general level of knowledge about highway safety issues among the general public and state legislators is very low. This fact is particularly discouraging with respect to state legislators who must often make important traffic safety decisions and indicates that the communications process between the traffic safety community and state legislators leaves a lot to be desired. In fact, the general interface between the technical and social components of traffic safety countermeasures is not completely understood. The legislative obstacles proponents face in simply presenting the case for occupant restraint legislation to state legislators (see Chapter III) is a prime example of this problem.

The problem is no less critical among members of the general public. We seem to communicate facts but not understanding. Consequently, traffic safety is viewed as relatively minor when compared to most other social issues; people recognize traffic accidents as a problem, but this makes no difference in their behavior or beliefs.

Communications between traffic safety professionals and the public, including state legislators, media representatives, and key professional groups, need improvement. New communications structures are required. One way to facilitate the exchange of information is to increase opportunities for public, legislative, and professional involvement in highway safety decisions and programs. Such an involvement would not only provide for a greater understanding of the importance of traffic safety problems, but experience indicates that involvement leads to an increased commitment on the part of participants to resolve problems and to an increased acceptance of proposed solutions.

Public involvement, however, is only a partial answer. The very concept of driver education needs to be expanded so that it encompasses more than simply teaching people how to drive safely. Driver education must also give the student an understanding of the public dimensions of traffic safety issues and of traffic safety countermeasures and programs.

5.4 PASSIVE RESTRAINTS AND OCCUPANT RESTRAINT LAWS

Beginning in 1982, new full-sized passenger cars sold in the United States must be equipped with front-seat passive restraint systems; by 1983, all new intermediate and compact cars must be so equipped; by 1984, all new cars will be required to have such passive restraint systems. However, the passive restraint requirements will not eliminate the need for occupant restraint legislation. Overall, airbags are most effective when used in conjunction with safety belts. In certain types of crashes, airbags offer limited protection (e.g., side impacts, roll-overs, and rear-end collision). Furthermore, unbelted occupants may still be ejected, and since airbags deflate rapidly, there is little protection should multiple crashes occur.

Automatic safety belts offer the protection of regular safety belts, but only the smaller cars (i.e., compacts and sub-compacts) are likely to be equipped with them. Other sized cars probably will come equippped with airbags. Moreover, it will take a period of ten years to get to a point where 90 percent of all cars are equipped with passive restraints. In the interim, restraint usage laws could be preventing an untold number of deaths and injuries.

In addition, this project's research indicates that the current high level of public acceptance for the passive restraint requirement is quite tenuous. During the course of this project, the subject of passive restraints frequently arose in discussions with state legislators, the media, and the general public. While most people tended to support the passive restraint requirement, there were many indications that this support could easily evaporate.

The major concern was cost but not installation costs; people wanted to know more about maintenance and repair costs. A second concern was accidental inflation; most people were toally ignorant of the mechanics of the airbags. Finally, many people were quite perturbed to learn that safety belts should be used in connection with airbags and that airbags offered very little protection in certain types of collisions.

The above conclusions should not be interpreted as representative of the general opinion of the public or even the general opinion of state legislators. The project's research did not focus on passive restraints, and these findings are only a by-product of it. Still these issues were mentioned frequently and indicate that public attitudes on passive restraints is variable.

Should public opinion on the passive restraint rule change, it would probably also harden public opinion against occupant restraint legislation. Such was the case with respect to the interlock controversy. Thus it is imperative that more effort be expended in educating people about passive restraints and increased efforts be made now to gain passage of occupant restraint legislation.

APPENDIX A

Annotated Bibliographies: Public Attitudes on Restraint System Usage and Public Information Campaigns on Restraint System Usage

UM-HSRI-77-32

Public Attitudes on Restraint System Usage: An Annotated Bibliography

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15. Supplementary Notes

16. Abstract

Fifty-two annotated citations on attitudes toward restraint systems are provided, grouped into two sections: U.S. studies on air bags or air bags and seat belts, and studies on seat belts only.

While the negative factors often associated with both air bags (cost) and seat belts (discomfort/inconvenience) tend to be consistent in the literature, studies dealing with approval of belt use laws show positive attitudes in countries having such legislation, while there is some disagreement on attitudes toward this type of legislation in the U.S. As expected, there is often a positive correlation between seat belt usage and positive attitudes toward them. A large percentage of the population agrees that belts are useful as a safety device; however, a very small percentage actually wears them.

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INTRODUCTION

This bibliography has been divided into two main sections: U.S. studies dealing with attitudes toward air bags or air bags and seat belts combined, and studies dealing with seat belts only. The later section is subdivided into U.S. and non-U.S. literature. All parts are then arranged chronologically.

In some cases, annotations have been taken directly from the authors' abstracts, occasionally revised or with additional comments. Generally, however, the comments and opinions are those of the compiler of this bibliography.

OBSERVATIONS

Interesting observations can be made from the literature on public attitudes toward safety belts or air bags. The usual negative reasons for not approving of seat belts come up time and again. These include the disbelief that belts actually protect you in a crash, their discomfort and inconvenience, and the idea that they can trap you in your vehicle.

In the few studies of people's reactions to air bags, the only repeated negative factor associated with air bags is their cost. However, one study (done by the Insurance Institute for Highway Safety) actually shows that many people would be willing to add up to $20 per month to their car payments (over 36 months, or $720) if 18,000 lives per year could be saved.

Canadian and Australian studies consistently show approval

of mandatory safety belt usage laws, with approval increasing following the law's enactment. Generally, there are no feelings in these countries that the government has no right to interfere with personal freedom. However, in countries where there are no use laws, such as the U.S., both usage patterns and attitudes have changed little over the years. (The exception to this is, of course, the period during which cars in the U.S. were equipped with ignition interlocks and usage rates increased; however, the public remained opposed to the interlock.)

As may be expected, in many studies one can see a positive correlation between seat belt usage and positive attitudes toward them. So while a large percentage of the population agrees that safety belts are a valid safety device, a very small percentage actually uses them.

Because public information campaigns encouraging safety belt usage have increased usage rates little -- if at all -- it would appear that the only means of actually increasing usage rates is by legislation. The previously-mentioned IIHS survey learned that 47% of those interviewed favored mandatory safety belt legislation for the U.S.

Clearly, the issue of personal freedom and government intervention plays a much greater role in influencing attitudes of U.S. citizens than it has in countries enacting mandatory safety belt legislation. A recent "call-in" poll taken by a Detroit newspaper showed over 80% objecting to such legislation for the U.S. While this was hardly a scientific study, and conflicts with what was

found by IIHS, it does indicate one sentiment of a vocal segment of the American public espousing personal liberty. This segment has already backed legislation which has struck down mandatory helmet use laws for motorcyclists in several states.

What is suggested by this, to the compiler of this bibliography, is the need for a public information campaign aimed not so much at getting people to "buckle-up," but at changing people's attitudes about the safety value of belts, as well as their increased comfort and convenience, in the hope of making people more receptive to use laws.

U.S. Studies -- Air Bags or Air Bags/Seat Belts

A consumer case for the air bag and the problem of public acceptance. L. Dodge. Center for Auto Safety, Washington, D.C. 1972. 7 p. 10 ref. Report Number: SAE 720427. Presented at the International Conference on Passive Restraints, 2nd, 22-25 May 1972, Detroit.

Impositions placed on vehicle occupants by safety belts and safety belt use are substantial and will increase as systems to encourage or force belt usage are incorporated. By comparison, the known impositions of air bags are minor, but to these must be added other requirements, the extent of which are not yet well-known. Substantial fleet testing of air bags will clarify most of these inconveniences. Automobile manufacturers and the National Highway Traffic Safety Administration have failed to generate public support for the air bag. Lack of consumer support will continue unless greater resources are allocated to equip fleet vehicles with air bag systems so that a reliable record of air bag efficacy can be compiled. Types of oppostion to air bags are outlined and possible sources defined.

A consumer viewpoint on car restraint systems. L. R. Barnes, Motor News, Detroit. 1972. 20 p. Report Number: SAE 720429. Presented at the International Conference on Passive Restraints, 2nd, 22-25 May 1972, Detroit.

A 1972 AAA survey of Michigan motorists revealed a strong dislike of airbags, a preference for seat belts/shoulder harnesses if choice must be made, and a strong feeling that it is not the business of government to mandate airbags or belt use. The author points out the need for a natural effort to persuade people to use seat belts, and attempts to forecast the future if airbags are mandated without explaining them.

Passenger car occupant restraint alternatives demonstration and display: a consumer research study. R. S. Baxter. Chrysler Corporation. 1972. 12 p. Report Number: SAE 720430. Presented at the International Conference on Passive Restraints, 2nd, 22-25 May 1972, Detroit.

Selected audiences of licensed drivers in Kansas City were subjected to demonstrations of three different restraint systems: lap/shoulder belts, extra crushable foam-filled panels, and air bags. Preferences were indicated before demonstrations, and at two later points. Initially, 40% preferred belts, 19% air bags, and 27% foam panels. This shifted to 82% for belts, 5% for bags, and 11% for panels after the filmed performance demonstrations. Inflatable air bags were the last choice for 69%.

Consumer attitudes toward automobile safety measures: a cluster analytic approach. F. Wiseman, R. Lieb and M. Moriarty. Northwestern University. In E.D. Goldfield, ed. American Statistical Association. Social Statistics Section. Proceedings. 1973. American Statistical Association, Washington, D.C., 1974. Pp. 438-442.

A national survey was conducted in 1973 to determine consumer attitudes toward a number of existing and proposed automobile safety programs. Fifty percent of those surveyed indicated that they would pay $750 for a package that would make their car "fatality proof." 70% were opposed to the 1976 air bag requirement; while they were divided as to whether they would purchase an optional air bag at a cost of $100.

Air cushion restraint system - national consumer research study. Market Research Group, Inc., Farmington Hills, Mich. 7 May 1975. 50 p. Sponsored by General Motors Corporation, Market Research Department, Detroit.

A telephone survey of Oldsmobile owners was designed to collect data on people's attitudes about potential purchase of air bags and perception of degree of safety provided by air bags. Although there was disagreement on overall perception of comparative car safety, there was virtual uniformity of opinion on benefits of air bags. The effect of accident involvement had only a modest effect on improving attitudes toward air bags. Maximum buying interest (33%) occurred at a suggested price of $100, but decreased dramatically (to 6%) at a $200 suggested price. Finally, only 23% agreed that air bags should be pushed hard for general use. The majority of the document is composed of statistical tables.

T.J. Hooper and the air bag. A.R. Hricko. Insurance Institute for Highway Safety. (1976?). 16 p. 14 ref.

Several arguments put forth by automobile manufacturers against air bags - including their reliability and their cost - are taken to task by this representative of IIHS, whose pro-air bag stand is well-known. Also mentioned are legal precedents, including recent court cases, which have a bearing on air bags.

Increased motor vehicle crash protection: public preferences and willingness to pay. L.S. Robertson. Insurance Institute for Highway Safety. Aug 1976. 13 p. 19 ref.

In a national poll taken in July, 1976, 77% of new car buyers expressed a preference for passive occupant protection. Only 15% exclusively preferred increased active protection. New car buyers expressed a willingness to add $12 per month to their car payments to save 6,000 lives, and up to $20 per month to save 18,000 lives. 47% of the respondents favored state belt use laws, 50% were opposed.

Driver attitudes toward restraints for greater safety in the operation of an automobile. A summary report. Yankelovich, Skelly, and White, Inc., New York. Sept 1976. 106 p. Sponsored by Motor Vehicle Manufacturers Association.

This summer 1976 national survey measured level of knowledge and information about auto restraint systems, attitudes toward those restraints, and reactions to alternatives such as belt use laws, air bags, and nonpayment of insurance claims if belts are not fastened at time of accident. 43% found none of those alternatives acceptable, 26% chose use laws, 15% chose air bags at a significant price increase, and 7% chose the insurance claim clause. Included are interesting statements on public perception of what air bags and seat belts can do for you or to you.

General Motors Corporation response to proposal to amend MVSS 208--occupant crash protection. OST docket 44, notice 76-8. General Motors Corporation. 17 Sept 1976. 300 p. approx.

A section in this docket submission deals with GM's perception of public attitudes on restraint systems. GM believes that public acceptance of restraint systems depends on how comfortable and convenient they are to use. Usage rates are higher on later model cars with better restraint systems. GM also feels that higher belt usage rates would be achieved if the public were better informed on the advantages of seat belts. Need for public support before mandating belts or air bags is stressed.

Decision concerning motor vehicle occupant crash protection. W. T. Coleman Jr. U.S. Transportation Department, Secretary of Transportation. 6 Dec 1976. 84 p.

One of the items considered in Secretary Coleman's decision was public acceptance of restraint systems. He concluded that such acceptance would be significantly increased by providing an opportunity for people to become familiar with these systems before a decision is made as to whether to require them in every car. The experience of the seat belt interlock is cited as an example of not assessing public opinion before mandating an occupant protection system.

Submissions to Secretary Adams' Passive Restraint Docket 74-14, Notice 8. Insurance Institute for Highway Safety. 31 May 1977. 69 p. 7 ref.

A small section of this docket submission deals with opinion polls of public preferences for crash protection. Cited is a Harris poll which showed increasing willingness to pay the cost of good crash protection. Another poll conducted for IIHS revealed that prospective new-car buyers would add up to $20 per month to their car payments to save 18,000 lives per year. Detailed statistical tables are not provided; only conclusions are given. (See August 1976 paper by L.S. Robertson for details on this poll.)

U.S. Studies -- Seat Belts

A comparison of attitudes toward several cross-chest safety belt systems after operational experience. R.K. McKelvey. U.S. Public Health Service, Environmental Control Administration, Washington, D.C. 1970. 30 p.

Through questionnaire responses obtained after 3 months' experience, a comparison was made of the attitudes of Arizona Highway Patrol officers toward several conventional factory-installed cross-chest safety belt systems and an inertia reel mounted system. The weight of positive responses was received by the inertia reel system. This system was apparently less inhibitive of normal movements in operation of the vehicle. Moreover, by more convenient coupling and uncoupling, the inertia reel system permitted the officers to get in and out of these cars more rapidly and contributed to a lessened concern about the restrictive aspects of the equipment.

Effectiveness of safety belt warning and interlock systems. Final report. J.B. Cohen and A S. Brown. National Analysts, Inc., Philadelphia. April 1973. 76 p. Report Number: DOT/HS 800 859. Sponsored by National Highway Traffic Safety Administration.

Rental cars in Fayetteville, North Carolina were equipped with four different seat belt systems: (1) detachable shoulder and lap belt, no warning system; (2) same with warning system; (3) non-detachable shoulder and lap belt with inertial reel, warning and logic system; and (4) same with starter/interlock system. Drivers of cars with systems (1) and (2) voiced more favorable attitudes toward seat belts and warning systems than did other system respondents.

"Why I don't weat seat belts." R. Bauman. California Highway Patrolman, Vol. 37, No. 8, Oct 1973, pp. 16, 38-39.

The author lists reasons commonly given for not using seat belts, then presents arguments against these reasons.

An attempt to measure and change drivers' attitudes and behavior toward seatbelt use. W. Butynski. Vermont University, Burlington. Oct 1973. 176 p. 154 ref. Order Number: University Microfilms, 74-2812. Sponsored by National Safety Council, Chicago.

The aims of this study were to develop an attitude questionnaire and an unobtrusive behavior measure technique useful in repeated assessment of attitudes and behaviors related to seatbelt use and to develop and test the effectiveness of different persuasive communications on seatbelt attitudes and behavior. Attitude measures were obtained 14 days before and 14 days after exposure to one of five types of persuasive communication. A change was demonstrated in seatbelt behavior for drivers in the experimental groups as compared to the control group. The behavior changes evidenced offer encouragement to investigators concerned about the possibilities for developing more effective persuasive communications. Seatbelt behavior was found to be significantly and positively related to the intention to wear seatbelts even though seatbelt use was not related to drivers' feelings about whether they "should" wear seatbelts.

Vehicle occupant restraints; a review of legislation, public attitudes, use requirements and the cost-effectiveness of motor vehicle occupant restraint systems. V. J. Perini. Highway Users Federation for Safety and Mobility, Washington, D.C. Nov 1973. 12 p.

The author reviews several past surveys of driver seat belt attitudes, citing many of the stated reasons for non-use of restraining devices. He concludes that the public will not buckle-up voluntarily, and adds that Congress appears convinced that mandatory laws are the most effective means to increase safety belt use. Estimates on number of lives saved by using restraint systems are included.

National safety belt usage conference. 28-30 November 1973, Washington, D.C. Proceedings. 1974. 127 p. Sponsored by National Highway Traffic Safety Administration.

Several papers in these proceedings deal with consumer views on belt use laws and on achieving citizen support, including legislative support, for such laws. Means of changing attitudes are also discussed. One panel is devoted to physicians' views on belt usage.

Ohioans tell how they feel about safety belts. Traffic Safety, Vol. 74, No. 1, Jan 1974, p. 21.

Results of an attitude survey on a random sample of Ohio residents are described in brief. 61.8% were in favor of a belt use law; 38.2% against. 91.4% would favor the law if their insurance rates dropped. Only 8.5% of the people who reported not using belts said that safety belts do not help if they are involved in an accident.

An attitudinal study of seat belts in school buses. D.E. Hinkle and J.W. Dillon. Virginia Polytechnic Institute and State University, Blacksburg. Journal of Traffic Safety Education, Vol. 21, No. 3, April 1974, pp. 27-28, 39, 8 ref.

While this study analyzed people's attitudes regarding mandatory seat belt usage in school buses, it is unique in that it looked at different populations - drivers, parents, and students. In general, drivers felt buses were safe and did not favor belts; parents and students, on the other hand, thought belt usage would increase bus safety. Generally, the three groups were nearly evenly split on the issue of whether mandatory use of seat belts is an infringement on their rights (for students: 44%, is infringement; 56%, is not infringement).

Buckle up - the smart thing to do. V. J. Perini Jr. Highway Users Federation for Safety and Mobility. Highway User Quarterly, Winter 1974, pp. 18-24.

The author first reviews various means of encouraging seat belt use--public information programs, legislation, etc. He then describes a recent Hartford Automobile Club survey on mandatory belt usage. 26% of the respondents believed there should be a belt usage law. A New York Auto Club Survey showed 64% opposed mandatory belt use legislation. The low survey response rate indicated a high degree of apathy concerning this issue. Included also are figures from various sources on suggested life savings by belt usage, and statistics on accidents involving belted and non-belted occupants.

Safety belt usage: survey of cars in the traffic population. Opinion Research Corporation, Princeton. Dec 1974. 41 p. Report Number: DOT/HS 801 331. Sponsored by National Highway Traffic Safety Administration.

Following observation of seat belt usage, interviews were conducted with a sub-sample of the observed population. On overall attitude toward the interlock system, the population was nearly split (42% for; 54% against). Reasons for defeating the ignition interlock, perceived belt comfort, and other factors are also considered. The report is comprised entirely of tables with no interpretation of the statistical data.

Safety belt interlock system: usage survey. Final report. A Westefeld and B.M. Phillips. Opinion Research Corporation, Princeton. May 1975. 148 p. Report Number: DOT-HS 801 594. Sponsored by National Highway Traffic Safety Administration.

This research measured the effectiveness of the interlock system in increasing safety belt usage. Three studies were conducted: (a) among rental car customers at U.S. airports (to obtain data early in the 1974 model year); (b) among rental car customers at Toronto Airport, where different types of use-inducing systems were studied; and (c) among owners of private cars in the general vehicle population. Customers returning 1974 model rental cars at airports were observed for safety belt usage, and a subsample of nonusers interviewed to determine the circumstances and attitudes surrounding their nonusage. Study (c) was conducted in 19 U.S. cities by having observers note the usage patterns and sex of the driver and right outboard passenger. License numbers afforded a means of conducting a follow-up telephone interview with the driver, covering practices and attitudes with regard to safety belt usage and the interlock system. Opinions on belt discomfort and negative interlock attitudes correlated with belt usage.

Factors associated with safety belt use in 1974 starter-interlock equipped cars. L.S. Robertson. Insurance Institute for Highway Safety, Washington, D.C. Journal of Health and Social Behavior, Vol. 16, No. 2, June 1975, pp. 173-177, 15 ref.

Interview data were obtained from 394 drivers whose belt use or non-use had been observed in 1974 starter-interlock equipped cars. Usage was not related to education, race, comfort-convenience rating of belts, or having a friend injured in a crash--factors that had been found related to belt use in previous research. Despite favorable ratings of the efficacy of belt use, over 40% of 1974 car drivers were not using belts and 29% claimed the interlock was one of the least liked features of their new cars.

Restraint system use and misuse. J.R. Cromack and R.L. Mason. Southwest Research Institute, San Antonio. In D.F. Huelke, ed. American Association for Automotive Medicine. 20th Conference. Proceedings. AAAM, 1976. Pp. 367-381, 6 ref. Sponsored by National Highway Traffic Safety Administration.

Objective and subjective data pertaining to utilization of restraint systems in a carefully drawn sample of 1973-1976 model year cars in traffic accidents in south central Texas were collected. Occupants' attitudes and practices regarding restraint systems were fairly consistent, with slightly less than half both utilizing restraints and expressing acceptance for belt restraints. Restraint system preferences, attempts to defeat restraint systems, reasons for attempts, and who accomplished the defeat are also discussed.

Consumer reaction to seat belt comfort and convenience. W. E. Woodson. Man Factors, Inc., San Diego. 13 July 1976. 46 p. Presented at the National Motor Vehicle Safety Advisory Council, meeting, 12-14 July 1976, Washington, D.C.

The purpose of the study was to point out that seat belt discomfort and inconvenience fall high on the list of reasons most people give for not wanting to wear seat belts. The author suggests that while it should be relatively easy to improve belt systems, the automobile industry has not been responsive to changing the systems to fit people instead of car interior design.

Passive vs. active safety belt systems in Volkswagen Rabbits: a comparison of owner use habits and attitudes. Final report. A. Westefeld and B.M. Phillips. Opinion Research Corporation, Princeton. Aug 1976. 90 p. Report Number: DOT/HS 801 958. Sponsored by National Highway Traffic Safety Administration, Office of Driver and Pedestrian Research.

The overall objective of this research was to measure usage of, and attitudes toward, the passive restraint system, compared with the active restraint system on 1975 Volkswagen Rabbits. Interviews were conducted with two samples of VW Rabbit owners--those who purchased a Rabbit with the passive system and those who purchased a Rabbit with the active system. One phase of interviews measured safety belt usage after purchasers had owned their Rabbits for eleven months or longer. Results show that belt usage was about 80 percent in cars sold with passive belts and operating interlock systems after almost one year of ownership. As with usage, owners of passive systems have more favorable attitudes toward belt usage than owners of active systems.

Safety belt interlock system usage survey. Final report. A. Westefeld and B.M. Phillips. Opinion Research Corporation, Princeton. Aug 1976. 75 p. Report Number: DOT/HS 801 957. Sponsored by National Highway Traffic Safety Administration, Office of Driver and Pedestrian Research.

This research was intended to measure the effectiveness of various use-inducing systems in increasing safety belt usage. Drivers' reactions to systems on 1975 model cars were studied. A telephone interview among owners/drivers of observed 1975 model cars was conducted along with telephone interviews with a sample of Spring/Summer registered owners of 1975 model cars. Drivers' attitudes toward the use of safety belts, and perceived comfort of both the lap belt and shoulder harness are also key factors which are correlated with usage.

Analysis of comfort and convenience factors in improved restraint systems. Technical report (final). S. Gordon, A. Kondo and D. Breedon. National Highway Traffic Safety Administration, Safety Research Laboratory, Riverdale, Md. Dec 1976. 65 p. 12 ref. Report Number: DOT/HS 802 113.

Thirty volunteer subjects tried and evaluated six different occupant restraint systems. Judgments were made on their relative comfort and convenience. Most of the test subjects found the restraint systems tested were better than those in their own cars. With these improved restraints, there was a projected 21% increase in belt usage.

Seat belt education program. Post-advertising test summary report. Lincorp Research, Inc., Southfield, Mich. June 1977. 24 p. Sponsored by Motorists Information, Inc., Detroit.

The advertising campaign conducted in Grand Rapids, Michigan created more favorable attitudes toward safety belts, belt use, development of safe driving habits, etc., according to a mid-point survey. The final attitude study showed that this trend continued to increase.

NON-U.S. STUDIES -- SEAT BELTS

Seat belts: contextual factors and bias of reported use; an experimental study. G. Fhanér and M. Hane. Statens Trafiksakerhetsverk, Solna. 21 Aug 1972. 41 p. 17 ref. Sponsored by Swedish Renault.

It was hypothesized that if the observed discrepancy between reported and observed belt use was due to a social desirability response, the discrepancy would be reduced if respondents knew their use was being observed. Several studies to test this were untertaken, but it was concluded that knowledge of observation had no effect on reported use or on opinion of a usage law. It was suggested that a social desirability response was, therefore, not very important for reports of belt usage or attitude.

The effect of mandatory seat belt use in New South Wales, Australia. J.M. Henderson and K. Freedman. New South Wales Department of Motor Transport, Traffic Accident Research Unit. In American Association for Automotive Medicine. 17th Conference. Proceedings. AAAM, 1973. Pp. 53-69, 5 ref.

Public reaction and attitudes towards seat belts and a mandatory seat belt law were surveyed and compared with a similar pre-law survey. The main change has been that people now perceive the benefits of belts to be higher than used to be the case. However, people still believe belts should be made more comfortable and convenient to use.

Investigation into use of safety belts. L. Oranen. LIIKENNETURVA, Helsinki. 1973. 14 p.

The purpose of the study was to investigate the percentage of use of safety belts and the opinions of drivers about factors related to their use, as well as making the use of safety belts obligatory. The study determined that belts are used infrequently--7% to 28% in highway driving. According to the opinion survey, the majority of drivers using belts use them mainly on long trips or at higher speeds. Making belt use mandatory was supported by 62% of those interviewed, more often by young people than by old, and by those with more driving experience.

A quasi-clinical strategy for safety research: a case-study of attitudes to seat belts in the City of Regina, Saskatchewan, Canada. C. K. Knapper, A. J. Cropley, and R. J. Moore. Saskatchewan University, Regina, Department of Psychology. 1973. 276 p. 76 ref. Sponsored by Canadian Ministry of Transport, Ottawa.

The investigation began with a series of interviews with experts or opinion leaders in the traffic safety area (city officials, police, safety councils members, etc.). This provided an initial source of hypotheses on belt usage and on experts' attitudes toward seat belts. Second came interviews with select subjects at the University of Regina. Finally, a representative sample of the Regina population was interviewed. These phases are described at length. Overwhelming evidence was found of people's acceptance of the safety value of seat belts, despite the small percentage of people who actually wear them. The two usual negative opinions occurred: seat belts are a nuisance or are uncomfortable, and people fear being strapped down. Findings suggest that if people are told to fasten their belts (as on a commercial airplane), they will comply with little argument. Many other aspects of belt usage and general traffic safety attitudes are discussed.

Sicherheitsgurte aus psychologischer Sicht. (Safety belts from psychological point of view.) K. J. Höfner. Kuratorium für Verkehrssicherheit, Verkehrspsychologisches Institut, Wien. Zeitschrift für Verkehrssicherheit, 19. Jahrgang 1973, III. Quartal, Heft 3, pp. 163-175, 29 ref. (English summary.)

Included among the topics discussed in this German article are the problems arizing in connection with mandatory seat belt legislation.

Seat belts: relations between beliefs, attitude and use. G. Fhaner and M. Hane. Statens Trafiksäkerhetsverk, Driver License and Research Department, Solna. 15 Feb 1973. 87 p. 31 ref. Sponsored by Swedish Renault, Inc.

Using a model of attitudes toward seat belt use, a questionnaire was constructed to obtain beliefs relevant for seat belt usage. Analysis yielded a belief pattern that was interpreted in terms of five factors, "discomfort," "worry," "risk," "effect," and "inconvenience." The model appeared useful since an independent measure of attitudes could be predicted from a linear combination of individual factor scores. The belief pattern model was validated by a series of five observations. On the basis of the obtained relationships, a model of seat belt use was suggested in which conceptions about belt discomfort and about effects of belts in accidents were regarded as determinants of usage.

L'introduction de l'utilisation obligatoire de la ceinture de sécurité - l'historique d'un cas. [The introduction of mandatory safety belt usage - a case study.] J. Lefranc. France, Délégation à la Sécurité Routière, Paris. Oct 1973. 22 p. 4 ref. Presented at the International Conference on Driver Behaviour, 1st, 8-12 Oct 1973, Zurich.

Public opinion regarding seat belt usage was surveyed, using a sample of 1000 drivers over the age of 21, before the introduction of a mandatory belt use law. 79% were in favor of seat belts, while only 57% said they usually wore them. Opinions on acceptance of the law were not gathered.

Seat belts: "A good idea but they are too much bother." An analysis of the relationship between attitudes toward seat belt and reported seat belt use. Final report. B.W.E. Bragg. Toronto University, Department of Psychology. Dec 1973. 87 p. 31 ref. Sponsored by Canadian Ministry of Transport, Road and Motor Vehicle Traffic Safety Office, Ottawa.

The first goal of this survey was to examine the relationship between attitudes toward seat belts and reported usage and see if additional information about an individual's perceived likelihood of being in an accident or an individual's perception of the expectations of others' reactions to seat belt users increased the correspondence between attitudes and behavior. An increase in the relationship between attitudes and reported behavior occurred when the accident factor was considered; there was no change when the other factor was involved. The survey results did show, however, that emphasis should be placed on developing a more convenient belt system.

Society's seat-belt switcharound. Autosafe, No. 13, 1974, pp. 21-24.

Results of a post-seat belt law survey show that Australians now regard the wearing of seat belts as perfectly normal behavior, compared to the anti-belt feelings in years before the law went into effect. The article goes on to analyze how this change in attitude came about, and mentions data collected on usage and attitude patterns over the past several years.

Verbraucherurteil über das passive Gurtsystem von Volvo. [Consumer opinion concerning passive belt system of Volvo.] N. Bohlin and S. Pilhall. ATZ, 76. Jahrgang, Nr. 5, May 1974, pp. 157-160, 2 ref.

Passive, three-point belt systems were fitted in two cars and tested by a cross-section of the Swedish population, whose opinions were subsequently recorded, studied and evaluated. Most of the 325 test subjects found the system extremely comfortable and preferable to conventional seat belts.

Compulsory seat belts: a survey of public reaction and stated usage. D. Freedman, R. Wood, and M. Henderson. New South Wales Department of Motor Transport, Traffic Accident Research Unit, Sydney. June 1974. 30 p. 5 ref.

Eighteen months after seat belt use became mandatory in New South Wales, people were interviewed on their seat belt usage and attitudes. This survey was a repeat of one taken prior to the law, with a comparable sample. The follow-up survey was designed to determine the extent to which the law influenced wearing habits and attitudes. Reported wearing rate had increased dramatically. The high level of compliance with the law was found in every group examined. Attitudes expressed by respondents indicated that seat belts are now fully accepted by the majority of the community. After the law, people were more likely to believe seat belts to be important to safety; negative attitudes were rare. In addition, 8 out of 10 people were in favor of the law. Reasons for the law's impact on behavior and attitudes, the relevance of enforcement activity, and the future role of propaganda are discussed in the light of these survey results.

A review of three studies attempting to relate reported seat belt usage to seat belt attitudes and other variables. (Examen de trois études visant à trouver les correlations entre ce que l'on sait de l'utilisation des ceintures de sécurité et les attitudes vis-a-vis la ceinture de sécurité et d'autres variables.) R.M. Heron. Canadian Ministry of Transport, Road and Motor Vehicle Traffic Safety Office, Ottawa. Oct 1975. 84 p. 9 ref.

A review of three studies found reported seat belt use associated with presence of a warning system, good belt design, higher education or occupational status, newer cars, or attendance at driving school. An economic analysis showed that the less well educated driver, having a lower occupational status and less income, owns an older car equipped with an uncomfortable belt; at the same time he is less inclined to expose himself to or to absorb accurate information on belts. The belt user is safety and risk conscious, while the nonuser reports discomfort and noneffectiveness. Data on seat belt legislation suggest that most people favor compulsory seat belt usage and that, of those who are not habitually wearing belts now, most would increase usage under a law.

Seat belts: changing usage by changing beliefs. G. Fhanér and M. Hane. Uppsala University. Journal of Applied Psychology, Vol. 60, No. 5, Oct 1975, pp. 589-598, 11 ref.

A model to predict seat belt use, based on a linear combination of beliefs about discomfort when wearing a seat belt and beliefs about injury-reducing effects of seat belts, was tested. Employees of a large steel company, nonusers of seat belts, were randomly assigned to one of six groups receiving one or a combination of the following treatments: (a) verbal information stressing the role of seat belts in reducing injury; (b) nonverbal practice in seat belt use; (c) verbal information irrelevant to seat belt use; or (d) receiving no treatment. Groups receiving seat belt information had the most favorable posttest beliefs and displayed the greatest increase in seat belt usage, although the effects generally decreased over time.

Evaluating the effects of seat belt information and legislation in Ontario. L.P. Lonero, N. Gardner, H. Pang, J. Pierce, M. Toomer, and P. Young. Ontario Ministry of Transportation and Communications, Systems Research Branch, Toronto. In D.F. Huelke, ed. American Association for Automotive Medicine. 20th Conference. Proceedings. AAAM, 1976. Pp. 416-429, 3 ref.

This paper discussed the effect of a public information campaign on changing people's attitudes toward proposed mandatory seat belt legislation in Ontario. Acceptance of the law went from 40.9% in March 1975 (pre-law) to 48.1% in January 1976 (when the law went into effect). Usage in Toronto, on the other hand, went from 19.3% in October 1975 to 79% by March 1976. The article concentrated on usage rates and accident statistics, rather than on attitude changes.

A quasi-clinical strategy for investigating attitudes in the transportation domain. C.K. Knapper and A.J. Cropley. Regina University, Department of Psychology. In P. Stringer and H. Wenzel, eds. Transportation Planning for a Better Environment. New York, Plenum Press, 1976. Pp. 349-360, 18 ref. Sponsored by Canadian Ministry of Transport, Ottawa.

In this article, the authors concentrate on explaining their methods in attitudinal measurement; specifically, by means of pre-pilot and pilot studies before an actual survey. Validation of this method was done using the seat belt issue as an example. One conclusion made was that a high proportion of the public accepted that the government is a legitimate authority which has a right to issue directives concerning driver behavior.

Adoption of shoulder belt use and changes in driver attitudes in response to the Ontario seat belt legislation: report on aggregate data. G.J.S. Wilde and L. Cunningham. Queen's University, Kingston. May 1976. 31 p. 13 ref. Sponsored by Ontario Ministry of Transportation and Communications, Downsview and Canadian Ministry of Transport, Ottawa.

Shoulder belt use of drivers was observed in periods preceding and following the Ontario seat belt wearing legislation. Changes in shoulder belt use over time were studied in relation to changes in drivers' opinions of the probable effectiveness of the law in saving lives and attitudes towards implementation of the law. It was seen that both believed effectiveness and favorability with regard to the seat belt law dropped when December 1975/January 1976 responses were compared with those of a year earlier. However, compliance with the behavior stipulated in the law showed a significant increase in that same period of time. The findings gave rise to several suggestions for future mass media education and information programs as well as for subsequent studies of driver behavior and attitudes.

Ontario's buckle-up law is paying off. P.G. Green. Canada Safety Council, Ottawa. Traffic Safety, Vol. 76, No. 7, July 1976, pp. 8-11, 34-35.

In conjunction with Ontario's impending seat belt use legislation, a nationwide poll of public opinion was taken. Throughout Canada, 77% of those responding approved of the government protecting people from themselves. Some credit for making the usage law acceptable to people is given to an extensive public information campaign and to media support. Opposition to the law was led by a small, but very vocal, minority; average citizens complained at first, then complied.

Attitudes of Canadians towards legislation requiring mandatory use of seat belts. R.M. Heron. Canadian Ministry of Transport, Road and Motor Vehicle Traffic Safety Office, Ottawa. Sept 1976. 107 p. 18 ref.

A telephone survey of 4,107 Canadians was carried out in the fall of 1975 to determine the extent of acceptance of legislation which would make the wearing of seat belts compulsory. In all provinces, except Nova Scotia, the majority of citizens reported that, given the opportunity, they would vote for the introduction of such a law. Loss of freedom of choice and fear that seat belts are dangerous were the first and second most frequently cited of four possible reasons for objecting to a seat belt law. It is noted that discomfort and inconvenience have been mentioned as the primary reasons for non-use in previous studies.

Drivers use of seat belts as a function of attitude and anxiety. S. Ashton and P. Warr. Sheffield University, MRC Social and Applied Psychology Unit (England). British Journal of Social and Clinical Psychology, Vol. 15, No. 3, Sept 1976, pp. 261-265, 8 refs.

It is shown that drivers' reported and actual use of seat belts are predictable from their opinions about the comfort and effectiveness of belts. These relationships are, however, moderated by anxiety about possible accidents, in that low-anxiety drivers exhibit a stronger association between attitude and behavior than do high-anxiety drivers.

Attitudinal factors in the non-use of seat belts. C.K. Knapper, A.J. Cropley and R.J. Moore. Regina University, Department of Psychology. Accident Analysis and Prevention, Vol. 8, No. 4, Dec 1976, pp. 241-246, 13 ref.

A method for the assessment of public opinions was developed and used to investigate attitudes towards seat belts. It was found that most people accept that seat belts are effective, despite the fact that a large majority usually or always drive with belts unfastened. This failure to use seat belts appeared to result primarily from a failure to acquire the habit of buckling up. It did not reflect distrust of seat belts or any very deep-seated systems of attitudes and beliefs. It was concluded that public-education programs will not increase use of seat belts, but that measures are called for which take the decision to wear a belt out of the hands of individual drivers and passengers.

Victoria and the seat belt law, 1971 on. D.C. Andreassend. Road Safety and Traffic Authority, Victoria. Human Factors, Vol. 18, No. 6, Dec 1976, pp. 593-600, 2 ref.

This reports studies the effects of the compulsory seat belt wearing law on wearing rates, driver attitudes, and accident patterns. Of those interviewed who always wear belts, 46.1% said they did so for safety reasons; 20.9% said they wore belts because it is the law. There was a tendency for more female drivers to give the law as a reason for wearing a seat belt.

The acceptability of car seat belts I.A.R. Galer. Loughborough University of Technology, Institute for Consumer Ergonomics. 1977. 7 p. 12 ref. Report Number: SAE 770186. Sponsored by Transport and Road Research Laboratory, Crowthorne. Presented at the Society of Automotive Engineers, International Automotive Engineering Congress and Exposition, 28 Feb-4 March 1977, Detroit.

A program is described which sought to establish why seat belt usage is low, the reactions of people to restraint systems, and ways to increase usage. It was concluded that, despite the acceptance of their safety value, usage would not be even close to 100% without the impetus of legislation. In conjunction with this legislation, however, the public feels the need for improvement in belt design. The report also concluded that effective propaganda may reduce antagonism, and some forms of passive restraint system may provide the best solution for certain occupant restraint problems.

The Canadian approach to the seat belt problem. R.M. Heron. Queen's University, Kingston, Department of Psychology. 1977. 5 p. 7 ref. Report Number: 770153. Presented at the Society of Automotive Engineers, International Automotive Engineering Congress and Exposition, 28 Feb-4 March 1977, Detroit.

This report reviews five projects relating to Canadian seat belt usage. On the basis of seat belt attitude surveys, national campaigns were mounted leading up to the mandatory usage law. A legislation survey revealed that most Canadians favor compulsory seat belt usage.

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Public Information Campaigns on Restraint System Usage: An Annotated Bibliography

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15. Supplementary Notes

16. Abstract

This annotated bibliography on restraint system public information campaigns provides fifty-four citations grouped into three sections: U.S. studies, Canadian studies, and studies from other countries.

While it is impossible to draw any conclusions from this bibliography, a few positive trends may be noted. The greatest of these may be the realization of the need to evaluate public education campaigns. The need for campaigns, because of their expense, is still debated; however, it is generally agreed that well-designed and executed programs do influence people's attitudes.

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INTRODUCTION

The order of this bibliography has been established in what is, hopefully, the most useful form. Initially, the literature has been divided into three sections: U.S. studies, Canadian studies, and studies from other countries. Within each section, the literature is divided into three additional parts. The first is general literature about campaigns (that is, not pertaining to a particular program). The second contains literature regarding specific campaigns which have been evaluated. The final part contains citations on specific campaigns which have not been evaluated. Within each part items are in chronological order.

In some cases, annotations have been taken directly from the authors' abstracts, occasionally revised or with additional comments. Generally, however, the comments and opinions are those of the compiler of this bibliography. No effort has been made to assess the quality of the campaign design or evaluation. Those items judged to have been more substantive in discussing campaign elements or evaluation techniques often have longer annotations than do those shorter or less substantive works.

OBSERVATIONS

In the literature on restraint system public information campaigns, several consistent points are made. It is often suggested that the greatest benefit of campaigns is not the increase in seat belt usage, but the change in attitudes about their usefulness. In Ontario, in particular, campaigns leading up to the seat belt usage law certainly facilitated the introduction and acceptance of that law.

In most cases, campaign evaluations are performed over a short period of time at the conclusion of the campaign, with no concern given to long term effects. When long term effects are studied, however, we see a decline in the gains initially made by them. Therefore, a need to study the long term effectiveness of public information programs is mentioned frequently as a necessary element in campaign evaluation planning.

Finally, it is generally agreed that a campaign should not be developed without including plans for its evaluation. All too often a campaign is run without consideration for whether it is reaching the correct target group or is even conveying the right information. Baseline, midpoint, and post-campaign surveys will provide the best assessment of success.

The literature also reveals disagreements. The question of whether the expense of public information programs is justified, noting the limited effectiveness in modifying behavior, is often discussed. The use of "fear" as an appeal continues to be debated, and examples of both success and failure can be seen. And, of course, there are a wide variety of opinions regarding which media to use for different audiences.

While it is impossible to draw any conclusions from an annotated bibliography, a few positive trends are obvious. The greatest of these may be the realization of the need to evaluate public education campaigns. So while the need for campaigns may be debated, most seem to agree on the value of well-designed and executed programs in influencing people's attitudes.

Seat belts - one year later. Traffic Safety, Vol. 61, No. 2, Aug 1962, pp. 10-11.

Early article on seat belt usage which mentions the need for public information programs to increase belt usage.

You can help belt America. Public Health Service, Division of Accident Prevention, Bethesda. 1964. 40 p.

This manual describes how to plan and conduct a seat belt use campaign. Examples of radio spots, print advertisements, and various suggested slogans are given.

Automotive restraint systems - development and use. D. C. Lhotka. National Safety Council, Traffic Department, Chicago. Oct 1971. 18 p. Presented at the Human Factors Society, 15th annual meeting, 18-21 Oct 1971, New York.

This document describes the history of safety belt development and of early public information campaign efforts. The need for continuing promotional effort is stressed.

National safety belt usage conference. 28-30 November 1973, Washington, D.C. Proceedings. 1974. 127 p. Sponsored by National Highway Traffic Safety Administration.

In the papers contained in this proceedings the importance of public information campaigns is often mentioned, particularly as a factor in increasing public acceptance of usage laws.

Motor vehicle safety belt use laws on the national and international scene. C.H. Pulley. American Safety Belt Council, New Rochelle. In International Congress on Automotive Safety. Fourth. Proceedings. Washington, D.C., National Highway Traffic Safety Administration, 1975. Pp. 561-575, 24 refs.

This report uses examples of various reports on effectiveness of public information campaigns in looking at usage increases. No new statistics are introduced relating to public information programs, nor are conclusions offered regarding their effectiveness.

Seat belts in the occupant protection system - an American viewpoint. P.R. Knaff. National Highway Traffic Safety Administration, Office of Driver and Pedestrian Programs. In Seat Belt Seminar. Melbourne, Australian Commonwealth Department of Transport, 1976. Keynote Address, 13 p.

Reviewed in brief are several past efforts at increasing seat belt usage by means of public education campaigns. Differences among the various techniques used are mentioned.

Inducements to increased safety belt usage. R.H. Shackson. Ford Motor Company, Dearborn. 13 July 1976. 6 p. Presented at the National Motor Vehicle Safety Advisory Council, meeting, 12-14 July 1976, Washington, D.C.

The author suggests the implementation of an intensive multi-media public education campaign in one or two target cities. He concludes that such previous efforts along these lines have been inconclusive, perhaps because of the short duration, limited media use, or the fact that there are now more comfortable restraint designs. Better usage data could enable the design of a campaign directed at specific demographics and attitudes of the target city. He also suggests enlisting the aid of television and motion pictures in portraying the use of safety belts.

Media policy can save lives; a plea to communicators. Draft report. Grey Advertising, Inc., Washington, D.C. 20 July 1976. 8 p. Sponsored by National Highway Traffic Safety Administration.

The article suggests the need for long-range, sustained media efforts that will lead to a real change in the way people drive and in their sense of responsibility. It also suggests that companies issue policy statements to reinforce people's attitudes, and support public service commercials reflecting those statements.

Psychological resistance to seat belts. G. W. Blomgren Jr., and T. W. Scheuneman. Northwestern University Traffic Institute, Evanston. 1961. 42 p.

Pamphlets using two different themes were distributed to staff at 5 IBM offices in the Chicago area. The first approach involved the identification of seat belts with race car drivers; the second approach relied on anxiety and fear. Employees were also offerred a discount on purchase of seat belts. Results showed the race driver approach most effective, the scare approach least effective.

An investigation of the effects of the Oakland County multi-media safety belt campaign. A. Pryor. Highway Safety Research Institute, Ann Arbor. Oct 1970. 21 p.

A seat belt campaign using all media was designed to increase the percentage of seat-belt users among automobile drivers. The campaign was based on three surveys--attitudinal and behavioral surveys of adult populations and a small-scale interview survey of elementary school children who reported parental seat belt usage habits. Scant evidence in support of an increase in seat-belt usage was found, yet the data clearly show that the mass media messages were comprehended by a large segment of the adult population.

An experiment in the use of broadcast media in highway safety: systematic analysis of the effect of mass media communication in highway safety. Final report. G.A. Fleischer. University of Southern California, Department of Industrial and Systems Engineering. Dec 1971. 141 p. 24 refs. Sponsored by National Highway Traffic Safety Administration. Order Number: PB 208 538. (See also: Journal of Safety Research, Vol. 5, No. 1, March 1973, pp. 3-11.)

A broadcast media campaign was developed in the spring of 1971. Materials, selected in part on the basis of reviews by expert and lay panels, were distributed to selected radio and TV stations for subsequent broadcast as public service announcements. Observations of seat belt usage were made in two California communities prior to the campaign, during the campaign, and immediately after the campaign. Community attitudes towards safety belts were determined through telephone interviews. On the basis of over 22,000 vehicle observations and 2,000 telephone interviews, it was concluded that the PSA's had little significant effect on safety belt usage or related attitudes.

Nine months and no results; how do these TV commercials grab you? Autosafe, Vol. 1, No. 2, Sept 1972, pp. 18-20.

This article examines the cable television campaign developed by the Insurance Institute for Highway Safety. It concludes that nine months of hard-hitting television commercials (one of which won an advertising award for excellence) made not a bit of difference to the use of seat belts afterwards by the viewers exposed to this bombardment of propaganda.

Evaluation of the effects of a seat belt education program among elementary school children in Loudoun County, Virginia. Final report. S. A. Senk, and S. L. Schwartz. National Analysts, Inc., Philadelphia. Nov 1972. 49 p. Sponsored by National Highway Traffic Safety Administration. Order Number: PB 218 080/0.

Elementary school children were exposed to a program whose purpose was to acquaint them with the need to wear seat belts. The program appeared to produce a significant increase in the use of seat belts among 6 to 11 year old children. There was a strong relationship for all groups between the use of seat belts and the display of bumper stickers, although it is not known whether children who wore seat belts were more likely to request that their parents display the stickers on the cars, or whether the decision to display them actually served to reinforce compliance with the program. It is important to note that the level of self-reported seat belt use was considerably higher than observed usage. It is possible that much of the discrepancy between observed and self-reported increases represents an increase in intention to wear belts rather than an undetected change in actual behavior. Also the levels of observed seat belt use obtained during the 8-week measurement period may not reflect long-term effects.

A controlled study of the effect of television messages on safety belt use. L.S. Robertson, A.B. Kelley, B. O'Neill, C.W. Wixom, R.S. Eiswirth, W. Haddon Jr. Insurance Institute for Highway Safety. American Journal of Public Health, Vol. 64, No. 11, Nov 1974, pp. 1071-1080, 25 refs.

Television messages, based on a preliminary study, were developed and shown on cable television for 9 consecutive months. Seat belt usage of drivers in control and experimental groups was observed before and during the campaign. Results showed that the apparent failure of the campaign does not mean that it is impossible to create a successful campaign, but that such success has yet to be proven.

Pediatric automotive restraints, pediatricians, and the Academy. H.M. Lieberman, W.L. Emmet II and A.H. Coulson. California University, Los Angeles, School of Public Health. Pediatrics, Vol. 58, No. 3, Sept 1976, pp. 316-319, 9 refs. Sponsored by Mead Johnson Laboratories, Evansville, Ind.

Two groups of pediatricians were exposed to promotional material encouraging them to teach parents about child restraint system usage. One group was mailed a pamphlet; the other group received a brief oral presentation by a pharmaceutical representative. Survey response data showed that 61% of the mail group and 49% of the interview group claimed that their teaching on this subject increased since original contact.

Social learning approaches to health education: utilization of infant auto restraint devices. D.B. Allen and A.B. Bergmen. Children's Orthopedic Hospital and Medical Center, Seattle/Washington University, Seattle. Pediatrics, Vol. 58, No. 3, Sept 1976, pp. 323-328, 12 refs. Sponsored by U.S. Health, Education, and Welfare Department and Consumer Product Safety Commission, Bethesda.

There has been little critical evaluation of which methods achieve desired results in health education. Using purchase of infant auto restraint devices as an objective, we assessed the effectiveness of three educational approaches. Only 37% of control families had purchased an acceptable car seat, compared to 54% of those who received literature and had been shown a descriptive film, and 60% of those who were given literature, shown the film, and been provided with a demonstration of the seat. Purchase of car seats was positively correlated with social class and knowledge of auto safety, but not with a history of auto accidents. Utilization of auto restraint devices is an example of how social learning theory can be applied in health education.

Seat belt education program. Post-advertising test summary report. Lincorp Research, Inc., Southfield, Mich. June 1977. 24 p. Sponsored by Motorists Information, Inc., Detroit.

In April, 1977, a campaign designed to increase public understanding and awareness of the value of safety belts and to provide more positive attitudes toward safety belt usage was initiated in Grand Rapids, Michigan. Pre-, mid-, and post-campaign telephone surveys were conducted in both Grand Rapids and the control city, Milwaukee. Results indicate that the advertising has continued to create more favorable attitudes toward safety belts and belt usage.

The use of safety posters and other mass media in highway safety. T. W. Planek. National Safety Council, Chicago. (1969). 30 p. 21 ref. Presented at the International Symposium of Psychology of Driving, 7-10 Jan 1969, Brussels.

Several techniques used in public information campaigns--among them fear and realism--are discussed. Various campaigns, including one on seat belt usage, are used as examples.

Developing a radio/TV campaign for public service broadcast. L.M. Dick and G.A. Fleischer. University of Southern California, Department of Industrial and Systems Engineering. Oct 1971. 27 p. Sponsored by National Highway Traffic Safety Administration. Contract Number: DOT-HS-010-1-012.

This report deals with the development of radio/TV materials for a seat belt usage campaign. The first step was a review of previously issued spots on the subject prior to developing new materials. Evaluation of the materials--including pretesting by lay and expert panels--is described. Based on these findings, spots were selected for release in 2 experimental communities. Results of that campaign are not given.

Safety belts say "I love you." Traffic Safety, Vol. 73, No. 1, Jan 1973, pp. 22-25.

The National Safety Council billed this campaign as a "totally emotional appeal" to get people to fasten their safety belts. Research showed that while past campaigns may have communicated the importance of seat belts, they did nothing to increase actual use. Research also indicated that driver motivation was the key element. The campaign, therefore, was designed to appeal to the strongest positive emotion - love. No indication of potential campaign evaluation is mentioned, nor are any results given.

Wisconsin launches childsafe program. J. Fernan. Wisconsin Division of Highway Safety Coordination, Madison. Traffic Safety, Vol. 75, No. 3, March 1975, pp. 22-24.

The purpose of Project Childsafe was to encourage parents to use proper child restraints and to warn consumers that not all restraints are crash-tested and safe. The program consisted of a 10-minute slide/sound series with accompanying posters and brochures. The program will be made available largely to women's groups and will be shown in hospitals to expectant mothers.

Inereasing safety belt use through structured educational programs - is it possible? J.D. DeLellis. American Automobile Association, Falls Church. Highway Safety Literature, No. 76-4, 30 April 1976, pp. A.1-A.12, 36 refs. (See also: Journal of Traffic Safety Education, Vol. 23, No. 4, July 1976, pp. 29-30, 34, 7 refs.)

Various measures to improve vehicle occupant protection are currently being proposed, including mandatory safety belt use laws and passive restraint standards. This paper suggests an alternative approach, utilizing an educational program in high school driver education classes. Increased usage rates by driver education students and improved cost-benefit values for driver education courses are suggested as potential outcomes. Objectives and a content outline for a model safety belt program are defined, as are characteristics of "target" audiences. The paper concludes that it is possible for a properly-designed and implemented safety belt instructional program to result in cost-effective increases in safety belt usage. A theory on why the campaign conducted by the Insurance Institute for Highway Safety may have failed to have had an impact is also presented.

CANADIAN STUDIES -- GENERAL

The seat belt argument. M.J. Taylor. Canadian Ministry of Transport, Road and Motor Vehicle Traffic Safety Office, Ottawa. July 1974. 30 p. 50 refs. Report Number: CTS-4-74. (See also: Scientific Conference on Traffic Safety. Proceedings. Ottawa, Traffic Injury Research Foundation of Canada, 1974. Pp. 48-71.)

This document includes a brief review of several seat belt campaigns, drawing the conclusion that such campaigns may change attitudes, but have not been shown to change behavior substantially. The need for campaigns to encourage acceptance of belt use laws is also mentioned.

Social interaction patterns in driver behaviour: an introductory review. G.J.S. Wilde. Queens University, Kingston. June 1975. 34 p. 58 ref. Presented at the Improving Driver Performance; Research Colloquium, 4-5 June 1975, Ann Arbor.

This paper discussed techniques used in various public information campaigns covering a wide range of topics involving driver behavior.

CANADIAN STUDIES -- CAMPAIGNS, EVALUATED

Road safety campaigns: design and evaluation. The use of mass communications for the modification of road user behaviour. G. J. S. Wilde, J. L'Hoste, D. Sheppard, and G. Wind. Organisation for Economic Co-Operation and Development, Road Research Group, Paris. Dec 1971. 75 p. 90 refs.

Several campaigns are described in this major report. One of them is that of the Alberta Safety Council in 1969 on seat belt usage. The campaign involved radio, TV, and print media. Data were collected on before, during, and after wear-rates by means of interviews. The campaign failed to have a demonstrable effect.

Seat belt study. 1971 - 1972. Volume I. F. R. Wilson. New Brunswick University, Department of Civil Engineering, Fredericton. Feb 1975. 75 p. Sponsored by New Brunswick Department of the Provincial Secretary, Fredericton and New Brunswick Ministry of Transport.

Two separate surveys of restraint system usage were taken, the second after a public education campaign. Survey results show that the effect of the promotional campaign on seat belt usage was relatively slight, and most definitely shortlived. The results do not appear to warrant a campaign of this type when costs/benefits are considered. The results from the type of campaign forming part of this study should not be interpreted to justify the elimination of publicity on seat belt usage. Any general safety campaign should include reference to benefits of seat belt usage. It appears that the best media for this type of advertising, if continued, are billboards, highway signs, and radio, where the person is exposed to the message while in the vehicle.

Increasing seatbelt use through a program presented in elementary schools. W.T. Wilson, L.P. Lonero, and D. Ish. Ontario Ministry of Transportation and Communications, Systems Research Branch, Toronto. In American Association for Automotive Medicine. 16th Conference. Proceedings. SAE, New York, 1973. Pp. 372-387, 12 refs. (See also: The Seatbelt Education Project. Same authors. Ontario Ministry of Transportation and Communications, Research and Development Division, Toronto. Aug 1973, 19 p. 19 refs.)

In seeking a more effective public information approach, a prototype seat belt educational program for school children was developed and its effect on seat belt use was tested. The prototype program consisted of a lengthy, varied session in which the children actively participated. Immediately after the program, parent's seat belt use was observed in two different locations. Parents of treated children used their belts at substantially higher rates than other parents. The true time course of the effect can be only very roughly estimated from the present study, which shows the effect to be no longer detectable six months after treatment.

Evaluation of the effect of seat belt legislation in Ontario: preliminary report. J.A. Pierce, M. Toomer, N. Gardner, H.C. Pang, and C. Orlowski. Ontario Ministry of Transportation and Communications, Downsview. 1976. 41 p. 6 ref. Presented to the Traffic Injury Research Foundation of Canada, 13th annual meeting, 6-8 Oct 1976, Ottawa.

Soon after the announcement of Ontario's intention to mandate seat belt usage, it was decided to introduce an extensive public information program to try to convince the public to buckle up voluntarily. This education program commenced in March 1975 and continued through the summer and fall. A wide range of media were used. In order to determine the effectiveness of this approach, roadside surveys of belt use and telephone surveys to measure knowledge of and attitudes toward belt use were carried out. While some changes in knowledge and attitudes from March to October 1975 were shown, belt use remained virtually unchanged at 17%.

Evaluating the effects of seat belt information and legislation in Ontario. L.P. Lonero, N. Gardner, H. Pang, J. Pierce, M. Toomer, and P. Young. Ontario Ministry of Transportation and Communications, Systems Research Branch, Toronto. In Huelke, D.F., ed. American Association for Automotive Medicine. 20th Conference. Proceedings. AAAM, 1976. Pp. 416-429, 3 refs.

The Ontario seat belt information program in 1975 was intended to develop a basis of correct information about seat belts within the general public and to change attitudes and behaviour toward seat belts. Early evaluation of the program's impact showed that, while the program's penetration was measurable, it had not yet achieved measurable progress towards most of its goals after half a year's operation. Clearly more time is needed if such a program is to markedly influence the popular wisdom on seat belts. Attitudes toward seat belt legislation seemed to shift rapidly during the program, but it is not clear that the shift was caused by the program. The later effects of the program are obscured by the introduction of belt use legislation.

Adoption of shoulder belt use and changes in driver attitudes in response to the Ontario seat belt legislation: report on aggregate data. G.J.S. Wilde and L. Cunningham. Queen's University, Kingston. May 1976. 31 p. 13 ref. Sponsored by Ontario Ministry of Transportation and Communications, Downsview and Canadian Ministry of Transport, Ottawa.

One year before mandatory seat belt usage went into effect, only about eight percent of Ontario drivers were of the opinion that a seat belt law would save no lives. Thus, it may be argued that mass education informing the public of the effectiveness of seat belts in preventing injury does not contain information the public does not already have and is not directed at the pre-eminent decision-making processes of individual drivers. It would seem desirable to design mass education programs aimed at cognitive and attitudinal components that are, in fact, crucial in drivers' decision making. It is recommended that seat belt observation and attitude studies be conducted at regular intervals. This information is necessary as a data base for the design of public education, as well as for the factual evaluation of their effects.

Ontario's buckle-up law is paying off. P.G. Green. Canada Safety Council, Ottawa. Traffic Safety, Vol. 76, No. 7, July 1976, pp. 8-11, 34-35.

To advise citizens of the new safety belt use law, an intensive educational campaign in the news media was developed. While the news media gave dissenters ample opportunity to air their views, they backed the law 100 per cent. Newspapers published educational material on the value of belts; they ran editorials; they published reports, with photographs, of serious accidents in which people were saved from severe injury by seat belts. Support from the media certainly aided in public acceptance of the new legislation.

Ontario seat belt law. H.J. Aiken. Ontario Ministry of Transportation and Communications, Downsview. 13 July 1976. 27 p. Presented at the National Motor Vehicle Safety Advisory Council, meeting, 12-14 July 1976, Washington, D.C.

The author details the public information program which pre-dated introduction of the Ontario seat belt usage law. The major aim of the program were to increase public understanding of the value of seat belts, to produce positive seat belt attitudes, and to increase seat belt use. All forms of media were used and 2 films were produced for showing to organizations throughout Ontario. Local action programs were encouraged. For use in public schools, a teaching package consisting of a film and other audio-visual aids, plus a series of children's television spots was developed. While the actual increase in belt use was not shown, the author feels that the campaign did facilitate acceptance of the law.

The Canadian approach to the seat belt problem. R.M. Heron. Queen's University, Kingston, Department of Psychology. 1977. 5 p. 7 refs. Presented at the Society of Automotive Engineers, International Automotive Engineering Congress and Exposition, 28 Feb-4 March 1977, Detroit, Mich. Report Number: SAE 770153.

Educational television, radio, and newspaper materials were exposed on a nationwide basis in a dual wave campaign in December, 1975 and April 1976. Results indicate that the campaign successfully transmitted its messages and also induced some positive attitudinal effects. Television was most effective; radio least effective.

Evaluation of safety campaigns in terms of behavioural change. K. Spolander. Statens Trafiksäkerhetsverk, Solna. Oct 1971. 12 p. Presented at the International Conference on Road Safety Campaigns, 13-15 Oct 1971, Rome.

This report describes the process called effect measurement which is used to determine the extent to which campaign objectives have been achieved. The measurements, in themselves, do not allow the claim that the campaign has brought about a change in the use of seat belts. The measurements are, however, supplemented by attitude measurements on a representative sample of road users. The report concludes that if one can observe parallel changes at attitude and behavioral levels, then a change in behavior is more likely to be due to the campaigns.

Aspects méthodologiques de l'étude de l'efficacité d'une campagne de securité. (Methodological aspects of the study of the efficiency of a safety campaign.) Y. Prigogine. Technical Aspects of Road Safety, 48, Dec 1971, pp. 2.1-2.30. (English summary.)

Although for several years road safety campaigns have been conducted with the object of reducing the number of accidents, little attention has been given as to whether these campaigns really achieved that purpose. We now know that each road safety campaign should be accompanied by a measure of its efficiency. This report has determined the conditions to be met in order to carry out such a study. A safety belt campaign was chosen as an example. The object was to build a sociological model in the form of hypotheses permitting the analysis of the efficiency of a campaign and, if this model should prove correct, to forecast its efficiency with simple methods.

Efficiency and effectiveness of road safety campaigns. Summary of papers presented at the International Congress, 19-20 October 1972, The Hague. Veilig Verkeer Nederland, Hilversum. 1972. 68 p.

This group of papers includes 6 discussing seat belt campaigns. Authors are G. Wilde (on effectiveness of various safety campaigns), J. Nijstad (on an inexpensive way of costing and assessing road safety campaigns), A. Mackie (studying different appeals to motivate the audience), J. Morris (a case study of a British campaign), J. L'Hoste (on the influence of posters on driver behavior), and G. Fleischer (studying the effectiveness of a radio and TV campaign on safety belt usage.) Most of these papers are covered by more extensive documents; abstracts are found separately.

Sicherheitsgurte aus psychologischer Sicht. (Safety belts from psychological point of view.) K.J. Höfner. Kuratorium für Verkehrssicherheit, Verkehrspsychologisches Institut, Vienna. Zeitschrift für Verkehrssicherheit, 19. Jahrgang 1973, III. Quartal, Heft 3, pp. 163-175, 29 refs. (English summary.)

Measures necessary for planning, execution, and control of effective publicity campaigns, and the efficiency of various media are described.

A view of traffic behaviour modification. K. Rumar. Uppsala University, Traffic Safety Research Group. In International Road Federation World Meeting. VII. Documentation. Washington, D.C., IRF, 1973. Paper C1, 2 p., 5 refs.

The use of public information campaigns in modifying driver behavior--particularly self-protection--is encouraged. No specific suggestions are given.

Road safety: the French experience. C. Gérondeau. Traffic Engineering and Control, Vol. 16, No. 2, Feb 1975, pp. 68-71, 74.

The author suggests the need for an alliance of information campaigns and the implementation of methods of control or enforcement.

Seat belts: factors influencing their use. A literature survey. G. Fhanér and M. Hane. Uppsala University, Department of Psychology. Accident Analysis and Prevention, Vol. 5, No. 1, April 1973, pp. 27-43, 42 refs.

A section of this study summarizes past experience with seat belt campaigns in various countries. Effectiveness of types of campaign materials--posters, television or radio spots, etc. -- is studied. It is suggested that campaigns be run for a longer period of time and that they be carefully evaluated.

Preventive measures; educational methods. J. Shaoul, P. Kielholz, P.C. Noordzij, H.T. Zwahlen, B. Chichignoud, R.J. Poté, I.D. Brown, A. K. Copeman. In Driver Behaviour; Principal Conclusions and Recommendations of the First International Conference on Driver Behaviour. Courbevoi, International Drivers' Behaviour Research Association, Feb 1974. Pp. 45-60.

A general review of various campaigns is given. Issues for future study in the area of public information are outlined.

Effectiveness of different "appeals" in road safety propaganda. A.M. Mackie and S.D. Valentine. Transport and Road Research Laboratory, Crowthorne. 1975. 12 p. 21 ref. Report Number: TRRL LR 669.

This report examines the effect of motivating appeals as used in road safety propaganda, and compares them with a plain factual technique. Much of the work is concerned with use of horror in propaganda but seven other appeals are also dealt with. The study makes use of subjective assessment and objective measurements of changes in behavior. In subjective tests some of the emotional appeals received higher ratings than the factual technique, but they did not cause any greater change in behavior. The studies were, however, carried out with "captive" audiences and there was no need to attract their attention. On the basis of the limited knowledge available it appears that the most effective appeal for road safety propaganda is likely to be basically factual with some content of serious emotion such as horror or family responsibility, preferably presented in a novel way to aid memorability.

Influencing road users' behaviour. P.C. Noordzij. Institute for Road Safety Research SWOV, Voorburg. 1976. 34 p. 76 ref.

One chapter of this document reiterates the model for campaign development described in the 1971 OECD report. It also considers six points in campaign design: target groups; contents of the message; appeal of the message; source of the message; communication media; intensity, phasing, and duration. Another chapter discusses several past seat belt usage campaigns and draws the conclusion that it seems possible to obtain slight improvement in seat belt use by means of publicity by concentrating on small groups. This idea is not described in detail.

Säkerhetsbältens användning i personbilar sommaren 1970. Studier rörande effekten av ökad information. (Use of safety belts in private cars summer 1970. A study on the effect of increased information.) L. B. Kritz, H. Mohlin, E. Westerberg, and S. Widén. Official Swedish Council on Road Safety Research, Stockholm. Sept 1970. 14 p. (English summary.)

One of the aims of this 1970 campaign was to increase the use of safety belts. Observations were carried out before and after the campaign. The number of drivers and front seat passengers in private cars using/not using safety belts respectively was recorded. It was not recorded whether the cars were equipped with safety belts or not. It was found that the use of safety belts in rural traffic had increased after the campaign in only a few cases. Otherwise the frequency of safety belt utilization had not changed appreciably. Similarly the use of safety belts in urban traffic had not changed appreciably after the campaign. As a conclusion it may be stated that the campaign had no measurable effect on the use of safety belts in private cars.

The effectiveness of publicity. R. R. Schrader. Australian Department of Shipping and Transport, Canberra. In National Road Safety Symposium. Papers Presented. Australian Department of Shipping and Transport, Canberra, 1972. Pp. 574-578.

Among the many campaigns on numerous subjects covered by the article is the first national campaign on seat belts, launched in 1964. According to this evaluation, the campaign caused both sales and wearing rate to increase significantly.

Campaign case history. Seat belts 1971. R. Fabry. Great Britain Department of the Environment, London. 1973. 7 p.

This television and print campaign lasted 6 weeks during the summer - fall of 1971, in an isolated area of Great Britain. Campaign evaluation included pre and post campaign interview and pre, mid, and post campaign observations. Observation showed a marked increase (pre-campaign 14%; post-campaign 29%) in seat belt wearing among drivers and a comparable increase among front seat passengers.

Seat belts: changing usage by changing beliefs. G. Fhanér and M. Hane. Statens Trafiksäkerhetsverk, Driver License and Research Department, Solna. 17 Sept 1973. 65 p. 17 ref. Sponsored by Swedish Renault, Inc.

Seat belt information was designed on the basis of a model of seat belt use. Workers in a large steel company, having been observed as consistent non-users, took part in the information testing. The belt information groups (N=85) had more favorable posttest beliefs than the control groups. The belief effects were paralleled by behavior effects. The strongest effects were obtained for the unpretested belt information group where almost 45% of the subjects were observed as users, i.e. had a belt on at least once during the fourteen week post-treatment period. The usage effects decreased over time, but seemed to increase again after the belief follow-up. The results were taken as tentative support of the proposed model.

L'introduction de l'utilisation obligatoire de la ceinture de sécurité - l'historique d'un cas. (The introduction of mandatory safety belt usage - a case study.) J. Lefranc. France, Délégation à la Sécurité Routière, Paris. Oct 1973. 22 p. 4 refs. Presented at the International Conference on Driver Behaviour, 1st, 8-12 Oct 1973, Zurich. (Document is in French.)

This campaign, run in early 1973, used print, radio, and television, as well as special television interviews, movie shorts, and press releases. Interviews were conducted on seat belt usage habits before, during, and after the campaign. Results showed an increase in belt usage by drivers from 9.4% before the campaign to 14.2% one month after the campaign. However those who never wear seat belts remained relatively constant. There was no change in people's opinions on seat belt protection.

Conception et experimentation d'une campagne d'incitation au port de la ceinture de securite. (Conception and experimentation with a campaign to induce seat belt usage.) J. L'Hoste and M.J. Labadie. Organisme National de Sécurité Routière, Paris. Oct 1973. 11 p. Presented at the International Conference on Driver Behaviour, 1st, 8-12 Oct 1973, Zurich. (Document is in French.)

A controlled campaign on seat belt usage was focused on a brochure and questionnaire mailed to inhabitants of one town. Observations were made before, during, and after the campaign. Seat belt usage doubled during the campaign, then fell again upon its termination.

The application of research in the planning and evaluation of road safety publicity. G.E. Levens and E. Rodnight. Research Services Ltd., London/ Central Office of Information, London. In Road Accident Reduction for Highway Engineers and Police; Proceedings of the Seminar. London, PTRC, (1974). Pp. 17-47, 18 refs.

This paper reviews a program of research studies designed to evaluate the effectiveness of publicity campaigns aimed at promoting road safety in general and the use of seat belts in particular. A series of controlled-area experiments in the use of media advertising, which aimed to indicate the optimum weight and pattern of advertising in order to achieve maximum returns in relation to expenditure, are described. They were continuously monitored by surveys and other research studies, the results of which indicated a direct and positive relationship between the deployment of advertising and the resulting extent of seat belt wearing. Data have also been utilised to examine underlying attitudes toward seat belts and their use on the part of motorists, and some evaluation has been made of the relative success of alternative themes used in the advertising.

The effectiveness of compulsory wearing of seat-belts in casualty reduction (with an appendix on chi-square partitioning-tests of complex contingency tables). L.A. Foldvary and J.C. Lane. Australian Commonwealth Department of Civil Aviation, Melbourne. Accident Analysis and Prevention, Vol. 6, No. 1, Sept 1974, pp. 59-81, 15 refs. Sponsored by Insurance Institute for Highway Safety.

At the end of 1970, Victoria introduced a law making seat belt usage mandatory. This article examines the effect of a newspaper safety campaign being run during that period. By looking at data gathered in 1971 (during the campaign), the authors conclude that the newspaper campaign had no effect on fatalities.

Report on some of the traffic safety activities arranged by Ansvar Mutual Insurance Company of Sweden. Ansvar International Insurance Company, Ltd., Stockholm. 10 Oct 1974. 13 p.

One of the campaigns described in this paper was released in 1970 and utilized a combination of print advertisements and direct mail to encourage safety belt usage. A "fear" approach (photograph of a badly injured face) was used along with a strongly-worded message. Ads were carried by major national newspapers. Results showed that the majority interviewed looked at the ad and appreciated that belts should always be worn; 10% - 14% would not read the ad because of the photo. Use of seat belts after the campaign, among Ansvar insurance personal injury claimants, increased from a reported 26% to 36%.

OTHER STUDIES -- CAMPAIGNS, NOT EVALUATED

Organization of the seatbelt campaign. A. Thorson. Swedish National Traffic Safety Society. International Road Safety and Traffic Review, Vol. 9, No. 2, 1961, pp. 46-48.

To encourage installation and use of seat belts, the National Society for Road Safety conducted an educational campaign in the spring of 1959 using radio, television, print, and speaker presentations. Evidence showed the radio appeals to have been most effective; however, no statistical data on installation, use, or accident rates are given.

Safety belts and child restraints - the proportion of cars fitted and of occupants using them. B. N. Farr. Transport and Road Research Laboratory, Crowthorne. 1974. 15 p. 1 ref. Report Number: TRRL LR 644.

Some of the credit for an increase in seat belt usage by 1973 is given to a large national advertising campaign on the subject. The campaign itself is not described.

APPENDIX B

Protocol Outlines For Discussions with State Legislators and Moderator's Outline for Focus Groups

PROTOCOL FOR DISCUSSIONS WITH STATE LEGISLATORS

Three groups of state legislators were contacted about the occupant restraint legislation issue: legislative supporters, legislative opponents, and neutral legislators. Open-ended unstructured discussions were held with legislators in each group. Although the topic of each discussion was the same, their focus varied according to legislative group.

Legislative proponents of occupant restraint laws were asked about the legislative history of restraint usage laws in their state and about future prospects for such legislation. Most of the proponents contacted had been past sponsors of safety belt usage laws. During these discussions, the following topics were explored:

- The main arguments presented in favor of occupant restraint laws.
- Data utilized to support the proponent case for occupant restraint legislation.
- The main arguments or criticisms posed by legislative opponents.
- Arguments or information used by legislative proponents to counter opponent objections.
- The existence of outside support or opposition to proposed restraint usage legislation.
- Media reaction ot the proposed legislation.
- Legislative obstacles encountered by proponents.
- Additional data and support needed by legislators to enhance the future prospects for occupant restraint legislation.

Legislative opponents of occupant restraint legislation were asked to explain their objections or reservations regarding restraint usage laws and to assess the proponent position. In addition, they were asked to respond to specific proponent arguments on behalf of occupant restraint laws. Other topic explored with the opponent legislators were:

- The existence of outside support or opposition to occupant restraint legislation.
- The position of their constituents on the issue.
- Media reaction to proposed occupant restraint laws.
- What it would take to convince them to support restraint usage laws.
- Their personal attitudes toward safety belts.

The neutral group of state legislators were selected at random from six legislatures: Georgia, Massachusetts, Michigan, New Jersey, Oregon, and Tennessee. These legislators were first questioned about their attitudes toward and knowledge of safety belts and highway safety problems. They were then asked about the issue of occupant restraint laws, including:

- Reservations about such laws,
- Specific arguments on behalf of occupant restraint laws,
- The type of information they would need in order to make an informed decision on the issue,
- How such information should be structured.

MODERATOR'S OUTLINE FOR FOCUS GROUPS

Four focus group sesssions were conducted as part of this study. Two groups were composed of male licensed drivers and two groups were composed of female licensed drivers. All participants were over age eighteen.

The moderator's outline was designed to lead the group through a discussion of the following issues:

- Driving risks and driver behavior
- Individual and government responsibilities in the area of highway safety
- Safety belt usage
- Airbags and occupant restraint devices
- Attitudes toward occupant restraint legislation
- Specific arguments on behalf of occupant restraint laws
- Group preferences on occupant restaint requirements.

Probing techniques used during the focus group sessions included game playing, role simulations, and open-ended debate questions. Each session was recorded, and its content subsequently analyzed. Findings from these sessions are discussed in Chapter III.