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SEAT BELTS: A COMPARISON OF OBSERVED AND REPORTED USE

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MAY, 1969

CHAPEL HILL, NORTH CAROLINA

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A B S T R A C T

Questionnaires were sent out to North Carolina drivers who previously had been observed on the highway. The earlier observations included information concerning the driver's seat belt usage, approximate age range, race, and sex. Driving records were obtained from the North Carolina Department of Motor Vehicles so that it was possible to relate information from the earlier observations on the highway, information from the driving record, and information from the questionnaire when it was returned.

Approximately 85% of the drivers polled returned the questionnaire. When these responsents were compared with non-respondents there were no differences found related to age, sex, or observed belt usage in newer cars. However, it was found that non-respondents had poorer driving records and were more likely to have older cars.

A comparison of our sample with a national sample of drivers polled by the Auto Industries Highway Safety Committee showed that reported usage for short trips was lower for the North Carolina drivers. However, the national sample was self-selected in that it was made up of drivers who volunteered for an automobile inspection and thus may represent a more safety-conscious group. There were no significant differences between the national sample and the North Carolina sample on reported belt usage for long trips.

Reported usage in North Carolina showed no significant differences associated with age or sex. As in other studies, our population reported greater belt use on long trips than on short trips.

In some instances, it was possible to determine that the person returning the questionnaire was the same person observed driving in the earlier observations. When we considered this special subgroup, we found that drivers who were observed in town and who reported always using belts on local trips indeed were seen wearing them in 77% of the cases. For those persons who were observed out of town and who reported always using belts on long trips, only 46% were seen actually wearing them. Thus, it appears that there may be greater accuracy for reported belt usage for short trips than for long trips. In the original study, 24% of drivers observed in town were seen wearing belts, compared with only 27% of drivers observed out of town. Yet, respondents report much greater usage on long trips.

It may be hypothesized that the discrepancy represents the difference between what people do and what they intend to do. Since greater usage is reported for long trips, it may be assumed that many drivers consider belts important on long trips but not so important on short trips. Yet, if the driver does not develop the habit of using belts on short trips, our data suggest that he is unlikely to remember to use them on long trips, <u>even though he seems to consider belt use important under such circumstances</u>.

If our reasoning is correct, it may be that the driver's concern with belt use on long trips can be utilized as a means of promoting usage on short trips. If drivers can be convinced that long trip usage is unlikely to occur unless the seat belt habit is developed for <u>all</u> trips, short as well as long, then it may be possible to improve usage on all trips.

Eighty-six percent of our respondents report using belts at one time or another. The major reason given for non-use was failure to remember. This large proportion of the population apparently is not actively resistant to

belt usage and should be amenable to efforts to improve usage. Through improved automotive design which would provide reminders to use belts, plus promotional campaigns convincing the public of the importance of short trip usage, a substantial payoff in terms of reduction of injury and fatality on our roads may be achieved.

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SEAT BELTS: A Comparison of Observed and Reported Use

Patricia F. Waller and Patricia Z. Barry

INTRODUCTION AND METHOD

Most information available on seat belt usage comes from reports given in response to questions about such usage. However, there is good evidence that frequently there is a discrepancy between what people actually do and what they say they do. Consequently, it is of value to determine how accurately drivers are able to report their actual seat belt usage. Such information should be of importance in interpreting some of the reports available that are based on drivers' verbal responses to questions about belt usage. This study was concerned with relating observed seat belt usage to reported seat belt usage.

In June of 1967, observations were obtained concerning seat belt use by drivers throughout North Carolina. These observations were made while the driver was proceeding on the highway under normal driving conditions.[1] Data obtained included whether the car had an in-state or out-of-state license plate, and in the case of North Carolina cars, the identification letters and numbers on the plate were recorded.

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[1] Campbell, B. J., Waller, Patricia F., and Council, F. M., Seat Belts: A Pilot Study of Their Use Under Normal Driving Conditions. The University of North Carolina Highway Safety Research Center. Chapel Hill, North Carolina. November, 1967.

A list of these license plate numbers was sent to the North Carolina Department of Motor Vehicles which provided the names and addresses of the owners of the tags. These owners were sent a questionnaire requesting information about their car (make, model, and year) and whether it was equipped with safety belts. Other questions concerned what the owner said about his use of seat belts. The complete questionnaire is shown in Figure 1. The recipients of the questionnaire were not informed regarding the basis for their being selected; that is, they were not aware of having been observed in the earlier study.

The North Carolina Department of Motor Vehicles supplied driving records for the people in the sample; from this source, information was obtained regarding sex and date of birth of the owner of the car. The driving records were coded to score the number of moving violations (e.g., running a red light), the number of administrative violations (e.g., driving without an inspection sticker), the number of accidents in which the driver was judged to be at fault, and the total number of accidents. The number of moving violations plus the number of administrative violations plus the total number of accidents were combined to arrive at a composite score for the entire driving record. This composite score was used in subsequent analyses. In addition to the data obtained from the questionnaire and driving record, information was available from the original study regarding whether or not the driver was wearing his seat belt when he was observed.

Five hundred eighty-two questionnaires were sent out with a cover letter requesting the cooperation of the recipient, and a stamped,addressed return envelope. If no reply was received within three weeks, a follow-up letter was sent with another questionnaire and return envelope.

Name: _____ License Plate # _____

Make of your car (Plymouth, Ford, Chevrolet, etc.): _____

Year of your car: _____

Is this car equipped with seat belts? Yes ____ No ____

Front Seat Belts - Yes ____ No ____

Back Seat Belts - Yes ____ No ____

If so, do you use the seat belts in local travel? Always _____

Sometimes _____

Don't Use _____

Do you use the seat belts on long trips? (25 miles or more) Always _____

Sometimes _____

Don't Use _____

Does your wife or husband ever drive this car? Yes ____ No ____

If so, does she (he) use the seat belts in local travel? Always _____

Sometimes _____

Don't Use _____

Does she (he) use the seat belts on long trips? (25 miles or more) Always _____

Sometimes _____

Don't Use _____

Approximately when did you acquire this car? Month _____ Year _____

Who else drives this car? Age _____ Sex _____

Age _____ Sex _____

Age _____ Sex _____

When you do not use a seat belt, what is the reason? (Please check as many as apply):

_____ My car is not equipped with belts.
_____ I do not think of it.
_____ They are too much of a nuisance.
_____ I do not consider them important.
_____ I feel safer without them.
_____ It gets in the way with the children in the car.
_____ They wrinkle my clothing.
_____ Other (Please explain): _____

To what extent do you think motor vehicle safety inspection, as practiced in North Carolina, helps reduce traffic accidents?

_____ It is of considerable value because it prevents a lot of accidents.
_____ It is of some value because it prevents a few accidents.
_____ It does not help because people would repair their cars anyway.
_____ It's a waste of time because it's the driver and not the car that causes accidents.
_____ Other (Please explain): _____

Did you feel more confident in the safety of your car after it passed safety inspection?

_____ Yes
_____ No

Figure 1. Questionnaire sent to owners of cars observed in original seat belt study.

In response to this procedure, we received 495 questionnaires, or 85% of the questionnaires which were sent. The questionnaire was deliberately designed so that the respondent could easily check the appropriate answers. However, many respondents went to great lengths to add their own ideas, comments, and opinions regarding the topics under discussion. In response to the question concerning reasons for not using a belt, 90 respondents (18%) added comments of their own; in response to the questions about motor vehicle inspection, comments were volunteered by 193 respondents (39%).[2] Such a large return of the questionnaires, coupled with a high rate of voluntary additional information, suggest that the public is keenly interested in the problems of highway safety and is willing to cooperate with efforts aimed at moving toward solutions.

RESULTS

Comparison of Respondents and a National Sample

The questions regarding seat belt use in our questionnaire followed the same format used in questionnaires of the Auto Industries Highway Safety Committee, which publishes figures based on national samples of drivers. It is important to note, however, that the Auto Industries Highway Safety Committee deals with a select group of drivers, namely, those who have voluntarily submitted their cars to a motor vehicle inspection. Their samples include drivers from coast to coast in both urban and rural communities. Figures from the Auto Industries Highway Safety Committee, published in

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[2] Analysis of motor vehicle inspection opinion questions will be published separately in an HSRC Bulletin.

1967[3] (the same year that our observations were made and questionnaires mailed out), show that 38.2% of their respondents who have seat belts report they always use their belts in local travel. In the North Carolina sample, 24.8% of our respondents in cars equipped with belts report always using them in local travel. This difference is statistically significant ($p < .001$). For long trips, the corresponding percentages are 55.1% and 52.8%, respectively, and the difference is not statistically significant. Tables 1 and 2 show the national figures compared with figures obtained from North Carolina.

Both our sample and the national sample are similar in that reported use for long trips is consistently higher than for short trips. It appears that the driving public considers belts most important for high-speed driving on the open highway.

Comparison of Respondents with Non-Respondents

In order to be able to generalize our findings, it was necessary to compare the respondents to the questionnaire with the non-respondents. Since we had driving records on most of the recipients, we were able to determine that there were no differences between respondents and non-respondents with regard to either sex or age (see Tables A-1 and A-2 in the Appendix). However, as can be seen in Table 3, there were highly significant differences between the respondents and the non-respondents with respect to driving records. Most of this difference is accounted for by males in the non-respondent sample who tended to have higher scores on the driving records (indicating poorer records) than the respondents.

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[3] Auto Industries Highway Safety Committee, News Release, October, 1967.

Table 1. Comparison of North Carolina Sample and National Sample on Reported Belt Use in Local Travel

	Reported Use			
Sample	Always	Sometimes	Never	Total
North Carolina	97 (25%)	208 (53%)	86 (22%)	391
National	196,271 (38%)	200,442 (39%)	116,754 (23%)	513,467
Total	196,368	200,650	116,840	513,858

X^2 (2df) = 38.56, $p < .001$

Table 2. Comparison of North Carolina Sample and National Sample on Reported Belt Use in Long-Distance Travel

	Reported Use			
Sample	Always	Sometimes	Never	Total
North Carolina	206, (53%)	130 (33%)	54 (14%)	390
National	277,757 (55%)	142,276 (28%)	83,980 (17%)	504,013
Total	277,963	142,406	84,034	504,403

X^2 (2df) = 5.82, n.s.

Table 3. Comparison of Respondents and Non-Respondents on Driving Records

	Average Driving Record Score[a]		
	Respondent	Non-Respondent	P-Value[b]
Males	2.34 (N = 373)	4.23 (N = 75)	<.001
Females	1.23 (N = 81)	1.55 (N = 11)	NS
Total	2.14 (N = 454)	3.88 (N = 86)	<.001

[a] Higher scores denote poorer driving records.

[b] Test of difference between means, W. J. Dixon and F. J. Massey, Jr., Introduction to Statistical Analysis. New York: McGraw-Hill, 1957, page 124.

Table 4. Comparison of Respondents and Non-Respondents on Age of Car

Car Age	Respondent	Non-Respondent	Total
Pre-1964	169 (34%)	33 (48%)	202
1964+	325 (66%)	36 (52%)	361
Total	494	69	563

X^2 (1df) = 4.88, $p < .05$

There was also a significant difference between respondents and non-respondents in regard to the age of the car owned. Non-respondents were more likely to own a pre-1964 automobile (on the basis of the judgment made of car age in the original study), thus making it more likely that non-respondents would not have seat belts available (see Table 4). Also the fact that there were more older cars among non-respondents suggests a socioeconomic factor associated with returning the questionnaire.

Because non-respondents were more likely to have older cars which were unlikely to have seat belts in them, it was necessary to restrict an analysis of seat belt usage to the newer cars only. When this was done, there were no significant differences found in belt usage for respondents and non-respondents (see Table A-3 in Appendix).

While respondents and non-respondents did not differ in regard to age, sex, or observed seat belt usage, the fact that there were significant differences found in driving records (non-respondents had poorer records) and age of car owned (non-respondents had a larger proportion of older cars) means that any generalizations made on the basis of information from our respondents must take into consideration that the non-respondents probably represent a somewhat lower socioeconomic level and possibly constitute a sample of poorer drivers.

Reported Seat Belt Use by Sex, Age, and Driving Record

Analyses of seat belt usage were restricted to those cars which were equipped with belts. Driving records were available for 364 of the respondents who owned such cars. With regard to reported belt use for both long and short trips, there were no significant differences found which were related to sex, age, or driving record of the respondent. Thus, it was found that

men reported essentially the same degree of belt usage as women, young respondents reported the same usage as older respondents, and poor drivers (in terms of driving record) reported about the same usage as better drivers. Tables A-4 through A-9 in the Appendix describe these comparisons.

Reported Seat Belt Use Compared with Original Observations

Because the questionnaire was sent to the person in whose name the observed car was registered, it was not possible to say a priori that the driver was the same person who filled out the questionnaire. The driver could have been the owner's spouse, child, or someone else. The original observations included information on sex, race, and approximate age of the driver, as well as the identifying characteristics of the vehicle, and the questionnaire included information on all other persons who ever drove the car, so that in 250 cases it was possible to determine that the observed driver was very probably the same person who responded to the questionnaire. Driving records were available for 207 of these respondents. Within this subgroup where we knew the respondent and the driver to be the same, a comparison of the driving records of people observed wearing a belt and people observed not wearing a belt showed no significant differences (Table A-10 in Appendix).

For 163 members of this sub-population we knew definitely whether or not they were wearing seat belts in the original study. Furthermore, we knew the location of the earlier observation, i.e., whether it was in town or on the highway, so that we were able to compare his reported belt use with his observed belt use. Those who had been observed in town were analyzed according to what they said about belt usage on short trips, while those who had been observed out of town were analyzed according to what they said about belt usage on long trips.

There is some difficulty in attempting to relate observed, non-urban use with reported use for long trips. The question asked regarding long trips was, "Do you wear your belt on long trips -- twenty-five miles or more?" We have no way of knowing how many of the cars we observed on the highways were, in fact, on trips of that length. However, because most of the original observations were made throughout the state on 4-lane highways which were major arteries between cities, we have reason to believe that a high percentage of the cars we observed were on trips over 25 miles long.

Results of comparisons between observed and reported use are indicated in Tables 5 and 6. Table 5 concerns drivers who were spotted in urban locations and compares their reported use in local travel with what was observed. Table 6 deals with the reported use of drivers for long trips with the observations made on those drivers on the highway.

In both instances, drivers who said they always wore their seat belts were, indeed, much more likely to have been observed wearing them than other respondents. However, there are marked differences between the urban observations and the non-urban observations. In urban observations, 77% of the respondents who said they always wore their seat belts in local travel were seen with belts on. By contrast, only 46% of the respondents who said they always wore their seat belts on long trips were actually observed on the highway wearing belts. Figure 2 shows this comparison. Table 7 indicates that the difference in consistency is significant.[4]

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[4] In considering these data, it should be pointed out that the subsample of drivers observed in town and judged to be the same person returning the questionnaire is somewhat atypical in that a high proportion was observed wearing belts in the earlier study and reported always wearing belts on the questionnaire. In both instances, the proportions ran higher than for the total population observed in town. Such a discrepancy was not apparent for the subsample of drivers on long trips who were judged to be the same as the respondent; that is, the reported and observed belt usage for the subsample was not appreciably different from the total population observed out of town.

Table 5. Comparison of Reported Belt Use and Observed Belt Use on Local Trips [a]

	Reported Use		
Observed Use	Always	Not Always	Total
Yes	10 (77%)	1 (6%)	11
No	3 (23%)	15 (94%)	18
Total	13	16	29

[a] Respondent and observed driver are the same person.

X^2 (1df) = 15.22, $p < .001$

Table 6. Comparison of Reported Belt Use and Observed Belt Use on Long Trips[a]

	Reported Use		
Observed Use	Always	Not Always	Total
Yes	31 (46%)	9 (14%)	40
No	37 (54%)	57 (86%)	94
Total	68	66	134

[a] Respondent and observed driver are the same person.

X^2 (1df) = 16.33, $p < .001$

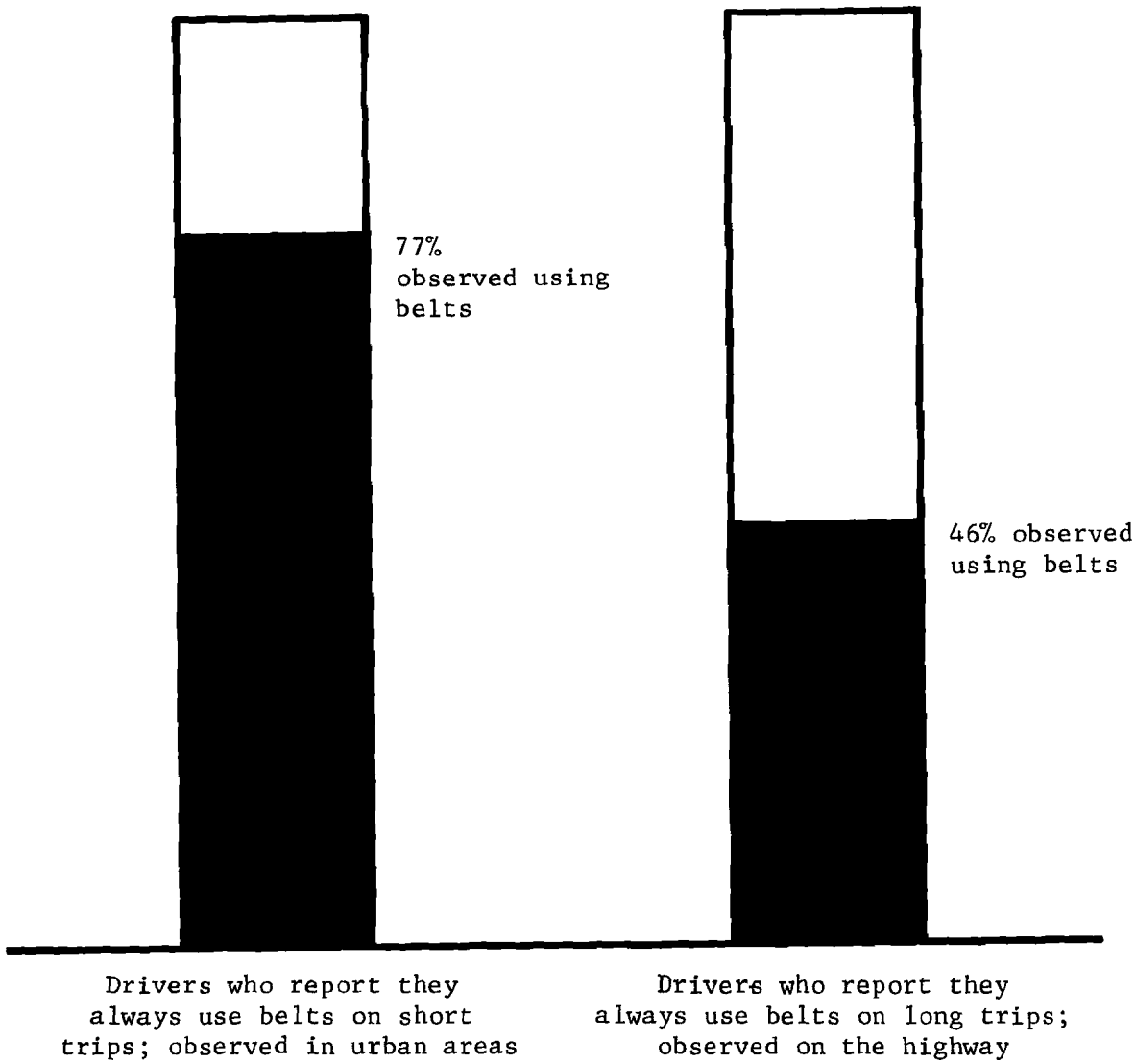

Figure 2. Comparison of observed and reported belt use. Driver and respondent the same person.

Table 7. Comparison of Consistency Between Observed and Reported Use for Short and Long Trips

	Drivers Reporting Always Use Belt[a]		
Observed Use	Short Trips	Long Trips	Total
Yes	10 (77%)	31 (46%)	41
No	3 (23%)	37 (54%)	40
Total	13	68	81

[a] Respondent and observed driver are the same person

X^2 (1df) = 4.29, $p < .05$

These data suggest that reporting for short trips may be more accurate than for long trips.

Reported Use: Long Trips versus Short Trips

Table 8, showing a breakdown of responses to the belt use questions, offers evidence that drivers who habitually use belts in trips around town are more likely to use belts on the highway than other drivers. Column one of the table demonstrates that every respondent who reported always wearing a belt on a short trip also reported always wearing a belt on a long trip.

Since the categories of both variables under consideration (i.e., use of seat belts in local travel and use on long trips) are ordered, the Goodman-Kruskal rank correlation coefficient, G, was obtained. The correspondingly high, positive index, G, shows clearly that those respondents who say they always wear a seat belt in local travel also say they always wear a belt on long trips. Correspondingly, the respondent who indicates he never wears a belt for local trips is most likely to say he also never wears a seat belt on long trips.[5]

The table also indicates that 86% of the respondents report that they use belts at one time or another. It may be assumed that among these people resistance to belts is not so great that it could not be overcome. Only 13.5% report that they do not use belts at any time. This figure is interesting in that, when we look at the reasons people give for not using belts when they are available (see Table 9) 12% report that they feel safer without them. It is unlikely that we can very readily do much to improve the seat belt wearing behavior of this segment of the population.

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[5] Quade, D. A Computer Program for the Analysis of Two-Way Contingency Tables. Institute of Statistics, University of North Carolina, Mimeo Series No. 567, February, 1968.

Table 8. Responses to Seat Belt Use Questions[a]

Do you use seat belts on long trips? (25 miles or more) \ Do you use seat belts in local travel?	Always	Sometimes	Never	Total
Always	95 (24.6%)	98	11	204 (52.9%)
Sometimes	0	106	23	129 (33.4%)
Never	0	1	52 (13.5%)	53 (13.7%)
Totals	95 (24.6%)	205 (53.1%)	86 (22.3%)	386 (100%)

[a] All percentages are percentages of the total sample.

G = 0.92, s(G) = 0.023 (Quade, 1968, p. 14)

Reasons Given for the Non-Use of Belts

The questionnaire included questions regarding the reasons for non-use of seat belts. Table 9 indicates how these questions were answered. Respondents were asked to check as many of the answers as applied.

Eighteen percent of the respondents checked the "Other" option and volunteered opinions concerning seat belts. These responses are classified and shown in Table 10.

The major reason given for non-use is failure to remember to put them on. While it may be that there are some people who have basic resistance to the use of seat belts (12% of our respondents indicated that they feel safer without belts on), and that "forgetting" to use them may be an indication of an underlying resistance, it nevertheless is possible that some improvement in overall belt use may be achieved by improved automotive design which will remind the driver to buckle his belt. Some cars are already equipped with lights on the dash board which do not go off until the belt is buckled. A study of the effectiveness of such devices may provide useful information for seat belt promotion.

DISCUSSION AND SUMMARY

Of 582 questionnaires sent out, 495, or 85%, were returned. This high rate of return in itself indicates considerable interest in the problems of highway safety. Further evidence of interest on the part of the respondents was indicated by the fact that many voluntarily added comments and suggestions of their own. Such interest expressed by a sampling of drivers from throughout

Table 9. Reasons Given for Non-Use of Seat Belts

I do not think of it.	42%
They are too much of a nuisance.	12%
I feel safer without them.	12%
I do not consider them important.	6%
They wrinkle my clothing.	5%
It gets in the way with children in the car	3%
Other	18%

Table 10. Categorization of Comments Volunteered Regarding Seat Belt Use
(N = 90)

Expressions generally favorable toward seat belts	17%
Reasons for non-use of belts:	
Trip is too short to bother	22%
Feel safer without them	17%
Not comfortable	14%
Laziness or negligence	11%
Believe other things cause accidents	4%
Feel as safe without them	3%
Miscellaneous (e.g., "I am a rural letter carrier and have to sit in the center of the car," "I am a fireman, and when I answer alarms, I don't take time to buckle up")	11%

the state should be given serious consideration when plans are being made for highway safety programs.

A comparison of those drivers who returned the questionnaire with those who failed to do so showed no differences on the basis of age, sex, or belt usage in new cars. There were, however, two notable differences found between the respondents and non-respondents. The first was related to driving record; non-respondents had higher scores on their driving records, indicating more violations and/or accidents. Since we do not have information on the relative driving exposure of respondents and non-respondents, we cannot conclude that non-respondents are necessarily poorer drivers. However, whatever the reasons, the non-respondents do have poorer driving records than the respondents. The second difference between the respondents and non-respondents concerns the age of the car owned. Non-respondents had a higher proportion of older cars, suggesting that the non-respondents may represent a lower socioeconomic level than the respondents.

These two factors should be kept in mind when generalizing our findings to the state as a whole. However, because belt use was found to be independent of driving record, and because the 85% of the population who did return the questionnaire comprise a majority of the population polled, we believe that conclusions drawn from this study may be considered to have general application.

A comparison of our sample of drivers with a national sample polled by the Auto Indistries Highway Safety Committee showed the reported use for short trips in the North Carolina sample to be significantly lower than reported short-trip use in the national sample. However, the national sample is self-selected in that it is made up of drivers who volunteered for an auto inspection. Such drivers may comprise a population which is more safety-conscious than

the population at large. No significant differences were found between the North Carolina sample and the national sample with regard to reported belt use on long trips. Both samples report considerably higher usage for long trips than for short trips, indicating that the driving public considers belt usage more important on the longer trip.

When we examined data concerning reported seat belt use in North Carolina, we found no differences associated with age, sex, or driving record. Our earlier observations made on the highway indicated that men are more likely to be wearing seat belts than women. In North Carolina cars equipped with belts, 33% of the men and 18% of the women were observed wearing seat belts. Of North Carolina drivers whose cars are equipped with belts, 25% of the men and 22% of the women report always wearing belts in local travel, while 52% of the men and 53% of the women report always wearing them on long trips. Since most of the observations in the original study were made in non-urban areas, the discrepancies between actual and reported use suggest that everyone may overestimate the use of seat belts, and that women, in particular, may report that they wear belts more than they actually do.

In those cases in which we were able to determine that the respondent to the questionnaire was very probably the same person observed in the original study, we could compare observed belt usage with reported belt usage. When we consider such drivers who were observed in town and who reported that they always use belts on short trips, we find that 77% were indeed observed wearing them. However, when we consider such drivers observed on the highway (non-urban) who reported that they always use belts on long trips, we find only 46% were seen wearing belts in the original study.

Thus, it appears that reporting of seat belt usage may be more accurate for short trips than it is for long trips. Reports of seat belt use indicate that drivers consider belts more important on long trips than on short trips (there is evidence that they are erroneous in this belief, but nevertheless they apparently feel this way). Yet, observed belt usage for long trips is not that high. We consider this difference between reported long trip usage and observed long trip usage to be a discrepancy between intent and actual behavior. There are many similarities between the beginning of a short trip and the beginning of a long trip. If a driver is not in the habit of buckling up for all trips, he is unlikely to remember to buckle up for long trips, even though he seems to consider belt usage important under such circumstances.

A breakdown of the responses to the seat belt use questions tends to substantiate this hypothesis (see Table 8). Every respondent who says he always wears his seat belt in local travel also says he always uses belts on long trips. These drivers apparently have "the seat belt habit" and are likely to use belts on all trips.

The implications for seat belt promotional campaigns are obvious. National figures show that most accidents occur within 25 miles of home. Use of seat belts for short-distance travel is necessary for this reason alone. Yet, even though this information has been widely publicized, drivers do not appear convinced of the importance of belt use on short trips. However, since they do appear to consider belt usage important on long trips, it may be that their concern for long trips can be used as a means of promoting usage on short trips. If drivers can be convinced that long trip usage is unlikely to occur unless the seat belt habit is developed for all trips, short as well as long, then it may be possible to improve usage on all trips.

Our data indicate that 86% of the population report that they use belts at one time or another; among these people, resistance to belts is not so great that it cannot be overcome. Through improved automotive design which would provide reminders to use the belts, plus promotional campaigns convincing the public of their effectiveness, a substantial pay-off in terms of reduction of injury and fatality on our roads may be achieved.

APPENDIX

Supplementary Tables

Table A-1. Comparison of Respondents and Non-Respondents on the Basis of Sex

	Respondent	Non-Respondent	Total
Male	303 (83%)	76 (78%)	379
Female	60 (17%)	21 (22%)	81
	363	97	460

X^2 (1df) = 1.38, n.s.

Table A-2. Comparison of Respondents and Non-Respondents on the Basis of Age

Age	Respondent	Non-Respondent	Total
18-27	41 (11%)	14 (14%)	55
28-37	74 (20%)	25 (26%)	99
38-57	184 (51%)	44 (45%)	228
58+	63 (17%)	15 (15%)	78
Total	362	98	460

X^2 (3df) = 2.23, n.s.

Table A-3. Comparison of Respondents and Non-Respondents on Belt Use in 1964+ Cars

Belt Use	Respondent	Non-Respondent	Total
Yes	64 (26%)	8 (30%)	72
No	187 (74%)	19 (70%)	206
Total	251	27	278

X^2 (1df) = .22, n.s.

Table A-4. Comparison of Male and Female Respondents on Reported Belt Use for Local Trips

Reported Use	Male	Female	Total
Always	77 (25%)	13 (22%)	90
Sometimes	156 (51%)	37 (62%)	193
Never	72 (24%)	10 (17%)	82
Total	305	60	365

X^2 (2df) = 2.38, n.s.

Table A-5. Comparison of Male and Female Respondents on Reported Belt Use for Long Distance Trips

Reported Use	Male	Female	Total
Always	160 (52%)	31 (53%)	191
Sometimes	98 (32%)	22 (37%)	120
Never	47 (15%)	6 (10%)	53
Total	305	59	364

X^2 (2df) = 1.33, n.s.

Table A-6. Comparison of Age Groups on Reported Belt Use for Local Trips

	Age Groups				
Reported Use	18-27	28-37	38-57	58+	Total
Always	8 (20%)	21 (28%)	49 (27%)	12 (19%)	90
Sometimes	25 (61%)	40 (54%)	90 (49%)	36 (57%)	191
Never	8 (20%)	13 (18%)	45 (24%)	15 (24%)	81
Total	41	74	184	63	362

X^2 (6df) = 4.55, n.s.

Table A-7. Comparison of Age Groups on Reported Belt Use for Long-Distance Trips

Reported Use	Age Groups 18-27	28-37	38-57	58+	Total
Always	22 (54%)	40 (54%)	97 (53%)	31 (50%)	190
Sometimes	14 (34%)	24 (32%)	60 (33%)	20 (32%)	118
Never	5 (12%)	10 (14%)	27 (15%)	11 (18%)	53
Total	41	74	184	62	361

X^2 (6df) = .79, n.s.

Table A-8. Comparison of Reported Belt Use on Local Trips, on the Basis of Driving Record

Reported Use	Summary Score on Driving Record[a] 0	1	2	3	4	5	6-7	8-10	11+	Total
Always	31	13	21	10	4	3	5	3	0	90
Sometimes	48	43	34	19	21	6	13	7	2	193
Never	29	24	8	9	5	0	5	0	2	82
Total	108	80	63	38	30	9	23	10	4	365

[a] Higher scores denote poorer driving records.

X^2 (16df) = 10.61, n.s.

Table A-9. Comparison of Reported Belt Use, Long Distance Trips, on the Basis of Driving Record

	Summary Score on Driving Record[a]								
Reported Use	0	1	2	3	4	5	6-7	8-10	11+	Total
Always	62	36	38	21	12	6	11	3	2	191
Sometimes	29	31	18	11	13	3	8	7	0	120
Never	16	13	8	6	4	0	4	0	2	53
Total	107	80	64	38	29	9	23	10	4	364

[a] Higher scores denote poorer driving records.

X^2 (16df) = 20.25, n.s.

Table A-10. Comparison of Observed Belt Usage and Driving Record when Driver and Respondent are the Same

	Summary Score on Driving Record[a]							
Observed Belt Use	0	1	2	3	4-5	6-7	8+	Total
Yes	14		17	4	4	3	2	52
No	44	34	27	21	15	7	7	155
Total	58	42	44	25	19	10	9	207

[a] Higher scores denote poorer driving records.

X^2 (6df) = 6.57, n.s.