UMTRI-87-39

77009 A02

MICHIGAN OMNIBUS STATE SAFETY SURVEY: SUMMER 1987

Alexander C. Wagenaar
Fredrick M. Streff
Richard G. Maybee

SEPTEMBER 1987

UMTRI The University of Michigan Transportation Research Institute

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
UMTRI-87-39		

4. Title and Subtitle	5. Report Date
Michigan Omnibus State Safety Survey: Summer 1987	September 1987
	6. Performing Organization Code
7. Author(s)	8. Performing Organization Report No.
A.C. Wagenaar, F.M. Streff, R.G. Maybee	UMTRI-87-39
9. Performing Organization Name and Address	10. Work Unit No. (TRAIS)
University of Michigan Transportation Research Institute 2901 Baxter Road Ann Arbor, Michigan 48109-2150	11. Contract or Grant No. MTR-87-007A
	13. Type of Report and Period Covered
12. Sponsoring Agency Name and Address	Final November 3, 1986 through September 30, 1987
Office of Highway Safety Planning Department of State Police 300 S. Washington Sq., Suite 300 Lansing, Michigan 48913	14. Sponsoring Agency Code
15. Supplementary Notes	

16. Abstract

The objective of this project was the development and testing of an interview instrument focused on multiple dimensions of highway safety. The instrument was designed for implementation with a probability sample of adult residents of the State of Michigan. Priority topics for inclusion in the survey were identified by conducting an exhaustive review of previous traffic safety surveys and semi-structured interviews with 35 key state decision makers in highway safety.

After several rounds of pretesting and revision, each item in the instrument was tested with a probability sample of about 200 adult residents of Michigan via telephone interviews. Response distributions for each item are reported, and will guide final revision of the instrument prior to full implementation with about 750 respondents across the state in the fall of 1987. We plan to conduct the Michigan Omnibus State Safety Survey annually. The majority of items will remain unchanged to provide longitudinal information, and selected items will be modified to incorporate newly emerging safety issues in Michigan.

17. Key Words	18. Distribution Statement
Traffic safety, Injury control, Telephone survey, Public opinion	Unlimited

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	119	

This report was prepared in cooperation with the Michigan Office of Highway Safety Planning and the U.S. Department of Transportation, National Highway Safety Administration. Support of these organizations is gratefully acknowledged.

Findings, conclusions, and recommendations in this report are solely the authors' and do not necessarily reflect the views of the Michigan Office of Highway Safety Planning or the National Highway Traffic Safety Administration.

Contents

List of Tables

List of Figures

Acknowledgements

We appreciate the assistance of several individuals who were essential to completion of this project. The survey data were collected using the technical facilities of the Institute for Social Research at The University of Michigan. Michael Traugott directed survey data collection, Steven Heeringa designed the sample, and ZoAnne Blackburn programmed the CATI system application and exercised overall direction of telephone interviewing. Finally, we thank Erika Engelhardt for supervising the word processing and graphics production of this report.

Alexander C. Wagenaar, Ph.D.
Fredrick M. Streff, Ph.D.
Richard G. Maybee, Ph.D.

September, 1987

1 Introduction

Timely and reliable information is essential when making major traffic safety policy decisions. There are three major types of data available to assist decision makers. First, there are "outcome" data such as numbers and rates of motor vehicle crashes, injuries, and fatalities. Second, there are data on important intermediate behaviors and activities, such as numbers and rates of observed seat belt and child restraint use, traffic citations, and vehicle miles traveled. Third, there are data on attitudes, perceptions, and self-reported behaviors of the state's residents. The need for these data is most obvious when new policies are being considered; however, this information is also useful to decision makers when considering policy modifications or evaluating the effects of existing programs. The purpose of this multi-year study is to provide periodic information on highway safety attitudes, perceptions, and reported behaviors of adult residents of the State of Michigan. Specific objectives of the 1987 project were to: (1) conduct a key informant semi-structured interview survey of state officials with responsibility or interest in highway safety, identifying issues they perceive to be most important for the next few years; (2) research published and unpublished literature for past highway safety surveys, and review the type and construction of questions used; and (3) design, pretest, and implement with a small (N=200) statewide probability sample a telephone survey on highway safety issues.

In order for survey data to be optimally useful to policymakers it should be accurate, representative of the entire state, and must be collected in such a way that those who favor or oppose any specific proposal believe the data were collected objectively. If steps are not taken to guarantee each of these data qualities, the resulting information may actually be detrimental to the decision making process. Inaccurate data may lead to decisions and policies that do not optimally use available resources to improve highway safety. Data not representative of the entire state may lead to decisions that are in the interest of one portion of the state, but may not be accepted by other portions of the state which were not interviewed. Data which appear to be collected for the purpose of supporting or opposing a specific policy or proposal will not be accepted by decision makers who think the data are biased.

Finally, longitudinal information on how the public's attitudes and perceptions have **changed** over time is critical for effective decision making on many of these issues. Therefore, we plan to implement the Michigan Omnibus State Safety Survey annually, with

the majority of specific items remaining the same from wave to wave, and new items added or deleted as new issues emerge and old ones are no longer relevant. The first full implementation of the survey is planned for the fall of 1987. Results presented in this report are based on a small-sample developmental survey, and should not be used as a basis for policy or program modification.

2 Key Informant Survey

Policymakers are in need of information on a wide range of issues. Unfortunately, resources do not permit collection of data on every issue that may be of interest. Therefore, we polled policymakers to identify issues for which they believe public opinion data would be most helpful. We also wanted to anticipate issues that are likely to emerge in policy debates over the next few years. If data are available about attitudes, opinions and self-reported behaviors both before and after the policy change is made, it is possible to evaluate the effects of the policy change on these attitudes, opinions and behaviors.

2.1 Key Informant Survey Methods

We developed a roster of persons and positions to interview for their insights into priority topics or issues (Table 2.1). Resources used to identify these individuals include: (1) the extensive experience of project staff with state highway safety officials, (2) consultation with staff of the Michigan Office of Highway Safety Planning, and (3) available directories (Michigan State Office Directory, National Directory of State Offices, United States Government Directory, and University of Michigan Transportation Research Institute directories).

Each of these individuals was administered a semi-structured interview by telephone. The objectives of the Michigan Omnibus State Safety Survey were initially described. We then asked several broad questions designed to initiate a discussion of the official's perceptions concerning highway safety issues currently deemed most important, likely to be important five years from now, and specific questionnaire items most useful to the official.

2.2 Key Informant Survey Results

All responses and comments by key informant interviewees were entered into a text database management system, permitting rapid categorization of key words and issues mentioned, and easy summarization of the number of times each issue was mentioned. Multiple individuals within a single organization typically provided similar responses. Therefore, only responses of the ranking member of the organization are included here. Most officials provided more than one response for each question; all such responses are included.

Table 2.1: Key Informants Interviewed

Name	Organization
Richard Austin	Department of State
Ann Johnson	Department of State; Program Analysis
Phyllis Mellon	Department of State; Planning, Research, and Development
Homer Smith	Department of State; Bureau of Driver Improvement
Al Bard	Department of State; Bureau of Driver Improvement
Doug Savala	Department of State; Driver Licensing
Dick Caflin	Department of Education; Driver's Education
Tom Hampton	Department of Education; Motorcycle Safety
John Connelly	Department of Management and Budget
Richard Blost	Department of Transportation; Safety Programs
Karen Tarrant	Office of Highway Safety Programs
Tom Krycinski	Office of Highway Safety Programs
Inspector Fladseth	Michigan State Police
Captain Casperson	Michigan State Police
Dan Sparks	Michigan Liquor Control Commission
Wayne McKenna	Michigan State University; Department of Public Health
Dan Lee	Michigan State University; Accident Investigation
Fred von Osdall	Michigan State University; Traffic Safety Programs
Don Smith	Michigan State University; Traffic Safety Programs
Sheriff Stokan	Sheriff, Huron County
Sergeant Woodward	Huron County Sheriff's Department
Dale Davis	Michigan Sheriff's Association
Sergeant Wieczorek	City of Ionia Police Department
Undersheriff MacMillen	Ionia County Sheriff's Department
Ed Ziegenhagen	Michigan Trucker's Association
Pat Turner	Michigan Trucker's Association
Tom Reel	Traffic Safety Association of Michigan
Connie Soma	Michigan Seat Belt Coalition
Gerald Basch	Automobile Association of America
Bruce Madsen	Traffic Improvement Association of Oakland County
Judge Batchik	Michigan Court Judges Association
Tom Planek	National Safety Council
Dick Tippie	National Safety Council
Don McNamera	National Highway Traffic Safety Administration; Region V
Brian O'Neill	President; Insurance Institute for Highway Safety

Issues related to use of beverage alcohol and other drugs while driving were believed by these officials to be Michigan's number one traffic safety problem by a margin of over five to one (Table 2.2). Vehicle speeds and lack of safety belt use were cited as predominant problems, and issues concerning heavy trucks were also mentioned frequently.

Respondents believe that impaired driving will continue to be Michigan's most pressing traffic safety problem over the next five years. Highway conditions/design, and an aging driver population were also mentioned as possible problem areas in the near future.

We asked respondents what factors they thought contribute to these problems--what they thought cause these problems. Responses were impossible to categorize.

Table 2.2: What do you currently consider Michigan's number one traffic safety problem?

First Response	Number of Interviewees
Alcohol, other drugs, and driving	16
Seat belt nonuse	3
Heavy trucks	3
Speed	2
Funding for law enforcement and roads	2
Poor safety education of drivers	1
Traffic law violations	1
Second Response	**Number of Interviewees**
Speed	4
Seat belt nonuse	3
Young drivers	1
Alcohol, other drugs and driving	1
Traffic law violations	1
Third Response	**Number of Interviewees**
Speed	3
Automobile crashes	1

Table 2.3: What do you think Michigan's number one traffic safety problem will be five years from now?

First Response	Number of Interviewees
Alcohol, other drugs, and driving	13
Highway conditions/design	4
Speed	3
Aging drivers	2
Driver education/licensing	2
Car/heavy truck mix	2
Seat belt nonuse	2
Funding for enforcement and roads	1
Second Response	**Number of Interviewees**
Seat belt nonuse	3
Aging drivers	3
Car/heavy truck mix	3
Alcohol, other drugs and driving	3
Traffic volume	1
Speed	1
Third Response	**Number of Interviewees**
Aging drivers	2
Traffic volume	1
Fourth Response	**Number of interviewees**
Lack of traffic law enforcement	1

Table 2.4: What are the five public opinion, attitude or behavioral questions regarding traffic safety you would most like measured via a phone survey over the next 5 years?

Response	Number of Interviewees
Alcohol, drugs, and driving	17
Speed - 55 MPH law	15
Seat belt use	13
Driver education	12
Seat belt law	11
Drunk driving prevention/punishment	10

Response	Number of Interviewees
Traffic law enforcement	10
Heavy truck safety	9
Road conditions and funding	7
Age of driver issues (young and old)	7
Motorcycle safety and helmet law	5
Driving habits (courtesy, defensive driving)	4
Driver licensing	4
Passive restraints/airbags	3
Child restraint devices	3
Legal liability issues	3
Alcohol-impaired driving among youth	2
Repeat offenders	2
Off-road vehicle safety	2
Vehicle inspection	1
Sobriety checklanes	1
Alcohol consumption	1
Legal drinking age	1
Emergency medical services	1
Corporate seat belt programs	1
Risk assessment	1

Typically, respondents expanded by describing specific components of the problem. All of the responses were reviewed, and dimensions mentioned were considered when we constructed specific questions for the general population survey.

We also asked key informants "What are the five public opinion, attitude, or behavioral questions regarding traffic safety you would most like measured via a phone survey over the next five years?" The objective was to identify items particularly useful to decision makers. In implementation, however, the question essentially served as an alternative way to initiate additional discussion and thought from the respondent regarding significant safety issues. Responses generally paralleled responses to the previous more-general questions (Table 2.4).

Finally, we asked "What will or what could you or your agency do with data from a survey of this type?" Responses included: (1) use data in educational materials, (2) use to support safety legislation, and (3) use to forecast program needs and identify target populations. Those interviewed were extremely enthusiastic about the survey, requested a copy of survey results, and stated that these data would be used as soon as they became available.

3 Methods

3.1 Search for Extant Traffic Safety Questionnaire Items

An extensive, multi-stage process was used to thoroughly review published and fugitive transportation safety literature (eg., unpublished reports, presentation papers, government documents). To identify potential questionnaire items, we first searched the literature for documents that reported general population surveys on highway safety issues. In addition to the literature search, letters were mailed to the Governor's Highway Safety Representatives for each of the 50 states, the District of Columbia, and U.S. Territories requesting copies of recent state survey instruments. Documents were received from Alabama, Alaska, Arkansas, Colorado, District of Columbia, Florida, Illinois, Maryland, Minnesota, Missouri, Nebraska, Nevada, North Dakota, Oklahoma, Puerto Rico, and Wisconsin.

In total, we located 175 documents containing relevant survey items or instruments. All items were recorded on cards containing the verbatim item, source, population or sample surveyed, and mode of implementation (personal interview, phone interview, or mail survey). These documents contained 3,050 items, of which 141 were exact duplicates, leaving 2,909 unique items in the pool. Finally, all items were categorized by subject.

3.2 Survey Instrument Development

The 2,909 items were reviewed with respect to item content, wording, and appropriateness of response categories. From the total pool of extant items, we extracted all items that were possible candidates for inclusion in the survey instrument. We also developed a number of additional items to address issues considered important by state officials, but not included in previous surveys. Then, taking into account priorities identified in the key informant interviews, a prioritized list of 300 items was formed. This list of 300 potential items was reduced to 60 items for intensive development, testing, and revision. Sixty items were selected because more could not be included in the 15-minutes allotted for each interview.

Before formal pretesting, the 60 items were substantially revised and rewritten to improve item clarity, wording, and exhaustiveness and exclusivity of response categories.

each item addresses (e.g., one item assessed what respondents thought the speed limit on interstate freeways **should be**, not what it **currently is**). Item wording was checked to ensure that complex words, uncommon words, and words with double meanings were replaced with simple words which could be easily understood by all potential subjects. Response categories were revised to ensure unambiguity, independence from other response categories, and appropriate categorization of all possible subject responses.

Each questionnaire item was pretested in several iterations to ensure appropriate, understandable item and response wording; to assess smoothness of flow from topic to topic and specific question to question; and to measure total interview time. Prior to formal pretesting, all questionnaire items were input into the Computer Assisted Telephone Interview system (CATI) of the University of Michigan Institute of Social Research. A complete description of the CATI system is provided in Appendix A.

The complete survey instrument was pretested twice. Each pretest included interviewing 30 individuals by phone, using the CATI system exactly as it is used for regular production interviewing. Senior project staff simultaneously monitored phone interviews and unobtrusively observed all computer screen prompts and responses typed by the interviewer in a special room designed for this purpose. Although interviewers were aware that they could be observed, they were not aware when they were actually being observed. Simultaneous monitoring of actual interviews and actions of interviewers greatly facilitated identification of questions not fully understood by some respondents, transitional phrases needed, and areas of clarification in the instructions to interviewers.

Following each pretest session of 30 subjects, interviewers met with senior project staff for a thorough debriefing session where problems encountered during interviewing were identified, and suggested revisions and solutions were discussed. In addition to item clarity, wording, and response category adequacy, pretesting provided information used to revise the order in which items were presented to subjects, transition statements between groups of similar items, and skip patterns created by subject responses (i.e., a subject's response to one item may make other items inappropriate, and they are therefore skipped). In addition, pretesting provided information that was used to construct question by question objectives and notes for use by the interviewers during survey implementation. These question-specific notes provide interviewers with guidelines about the purpose of each item and how to handle anticipated questions that might arise during interviews (Appendix B).

After two rounds of pretesting, thirty-six interviewers participated in training sessions. All interviewers were regular employees of the Institute for Social Research interviewing facility and had previous experience with telephone interviewing. As a result, preparation sessions focused on: (1) describing the goals and objectives of this study, (2) a careful review of the survey instrument, and (3) special instructions for this survey which deviate from standard practices for other surveys. Each question in the instrument was discussed in detail to ensure that interviewers understood its requirements.

3.3 Sample Design

Our objective was to survey a probability sample of adult (age 18 and over) residents of the entire State of Michigan. A dual-frame sampling method was employed to maximize response rates. In the dual-frame sample, a fraction of the telephone households was selected from a list of potential telephone households, and was sent a letter announcing that interviewers may call and ask them to complete a brief survey (Appendix C). All other subjects were selected using random digit telephone dialing techniques. Compared to random digit dialing alone, dual-frame samples improve response rates from eight to thirteen percentage points (Traugott, Groves, and Lepkowski, 1986). Within each household contacted, a listing of all adults was made. A random selection was made from this listing using an algorithm in the CATI system. This designated respondent was called as many times as feasible during the designated field period for the study. Interviewing took place between June 10 and July 15. A total of 601 interviews were completed for a response rate of 63% of the original sample. All results presented in Section 3 were weighted to take into account the dual-frame design. Because the design called for representing all adult residents of the state, each repondent was also weighted by the number of adult occupants in the respondent's household.

This initial survey wave included about 200 respondents for each question, rather than the 750 respondents planned for subsequent full-implementation waves. Objectives of this preliminary wave included further testing of the interview instrument and associated procedures, and review of response distributions for each item so that items with little variance or unusual distributions might be revised or discarded. To reduce costs for this preliminary wave, the Michigan Omnibus State Safety Survey was implemented simultaneously with a survey designed to query Michigan residents about their knowledge of and opinions about the superconducting-supercollider project proposed by the U.S. Department of Energy. The total time allocated for each interview was 20 minutes. Items related to the supercollider took 15 minutes, leaving five minutes for the highway safety items. The Omnibus State Safety Survey, designed for a 15-minute interview, was divided into three cohesive five-minute sections. Since the supercollider

survey required 600 respondents, about 200 respondents were randomly assigned to each of the three five-minute sections of the highway safety instrument (total N=601). A copy of the highway safety instrument is in Appendix D.

4 Results

4.1 Demographic Characteristics of Sample

Proportions of respondents for various age, sex, income, and education categories were similar to statewide census distributions (U.S. Bureau of the Census, 1986). The actual number of respondents within each subcategory, along with weighted percentage distributions, are provided in Table 4.1. As noted in the introduction, results presented here are based on a small-sample developmental survey, and should not be the basis for policy or program modification.

4.2 Major Highway Safety Issues

The survey instrument can be divided into seven sections containing related items. These sections are: (1) vehicles, police and roads; (2) speed limits; (3) driver licensing and education; (4) heavy trucks; (5) alcohol consumption and alcohol-impaired driving; (6) occupant protection; and (7) driving patterns. Because only about 200 respondents were asked each item, sampling error is relatively large and these results should not be used as a basis for policy or program modification.

4.2.1 Vehicles, Police, Roads

Respondents overwhelmingly favored requiring all cars to pass an annual safety inspection of items such as brakes, lights and tires (Figure 4.1).[1] Fifty-seven percent of respondents thought the condition of Michigan's expressways was average, with only 14% rating them poor (Figure 4.2). In the case of major roads (other than expressways), the proportion rating them poor increased to 30% (Figure 4.3). In terms of police, over half thought there were enough police patrolling the road, but 44% believed there should be more; only 3% felt there should be fewer police (Figure 4.4).

---

1. Note that percents and Ns in the figures may not correspond exactly because all percents are based on weighted analyses, while the Ns reflect the actual number of cases interviewed.

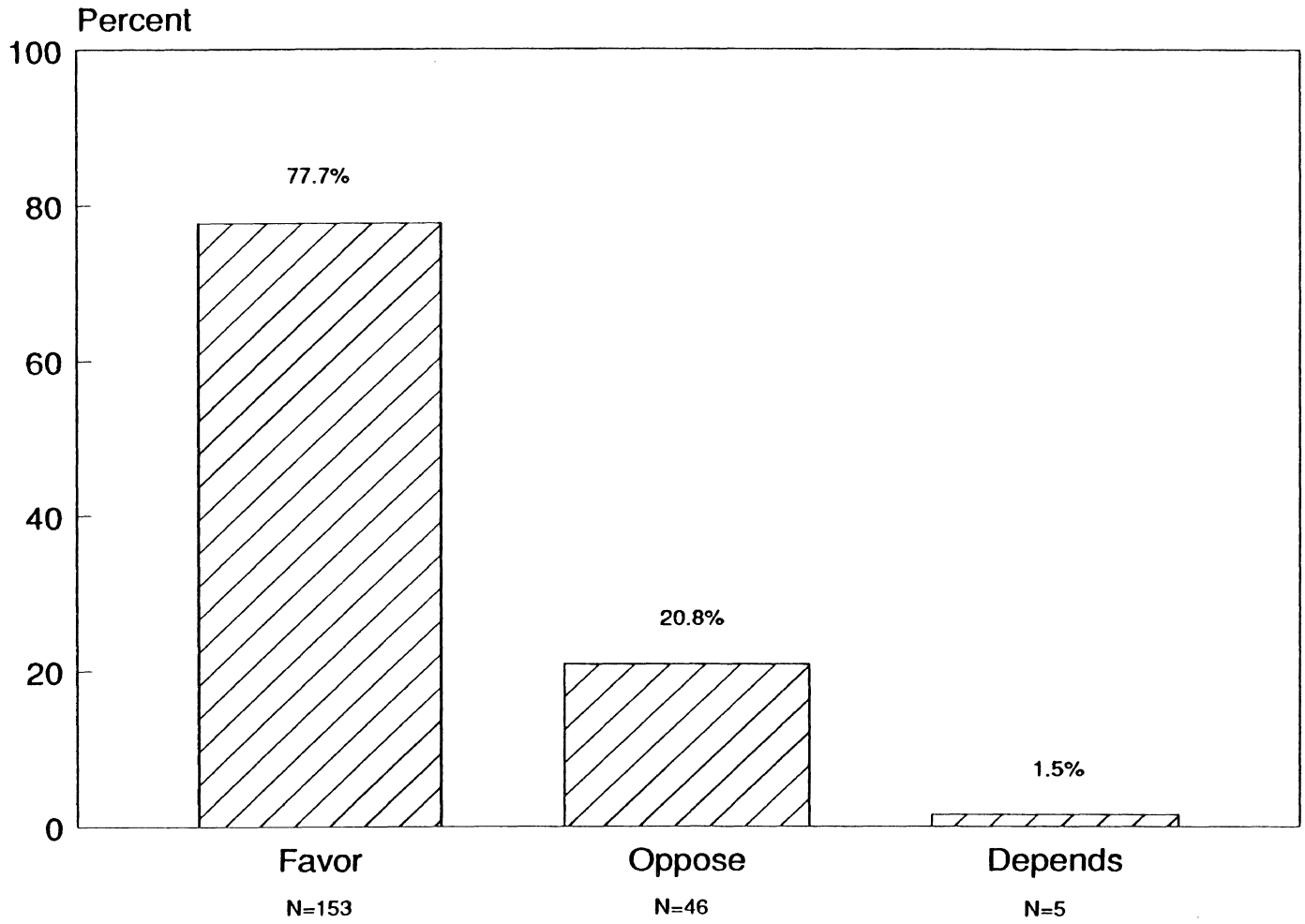

Figure 4.1: Would you favor or oppose a law that would require all cars to pass an annual safety inspection to check things like their brakes, lights, and tires?

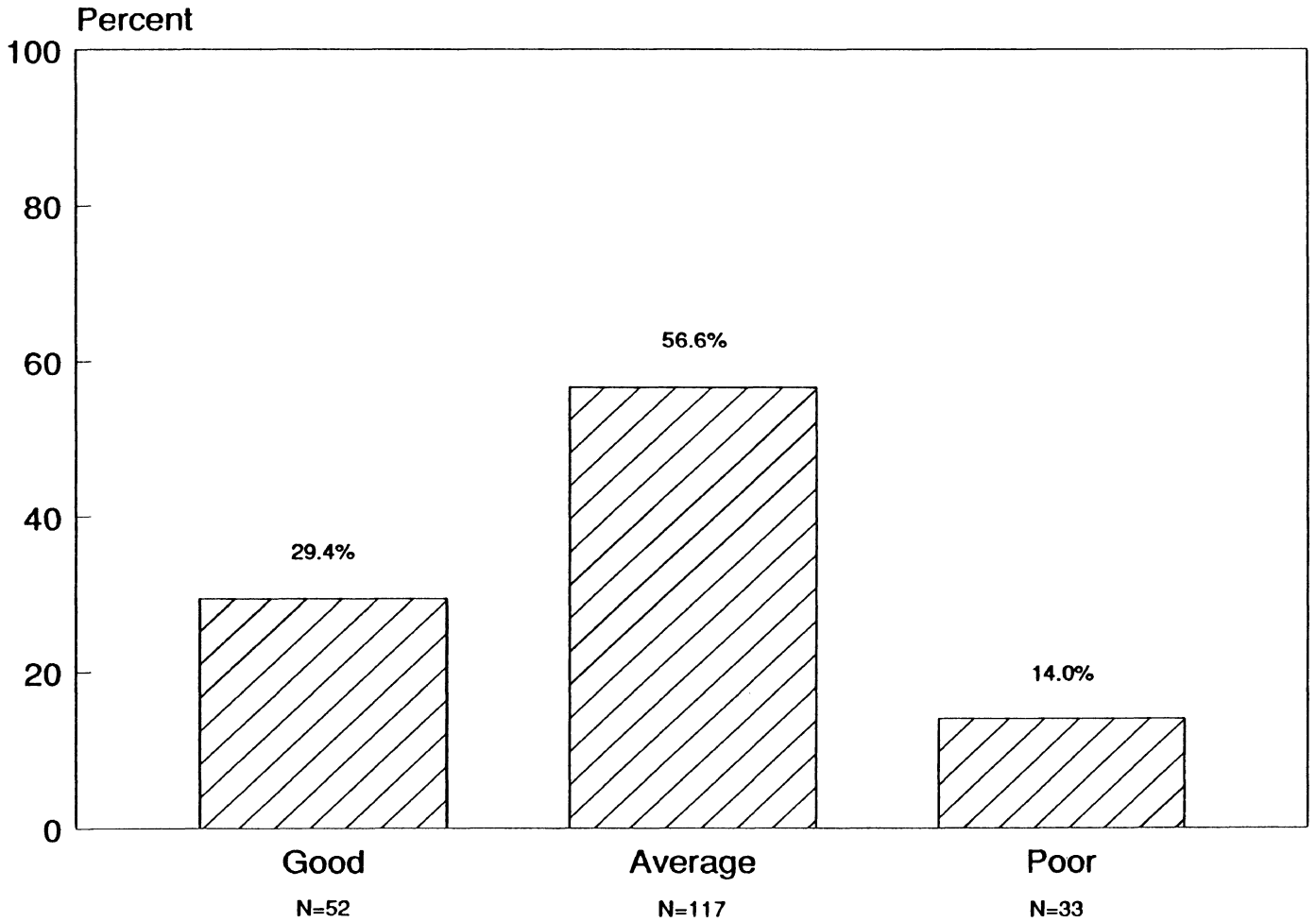

Figure 4.2: In general, do you think the expressways in Michigan are in good condition, average condition, or poor condition?

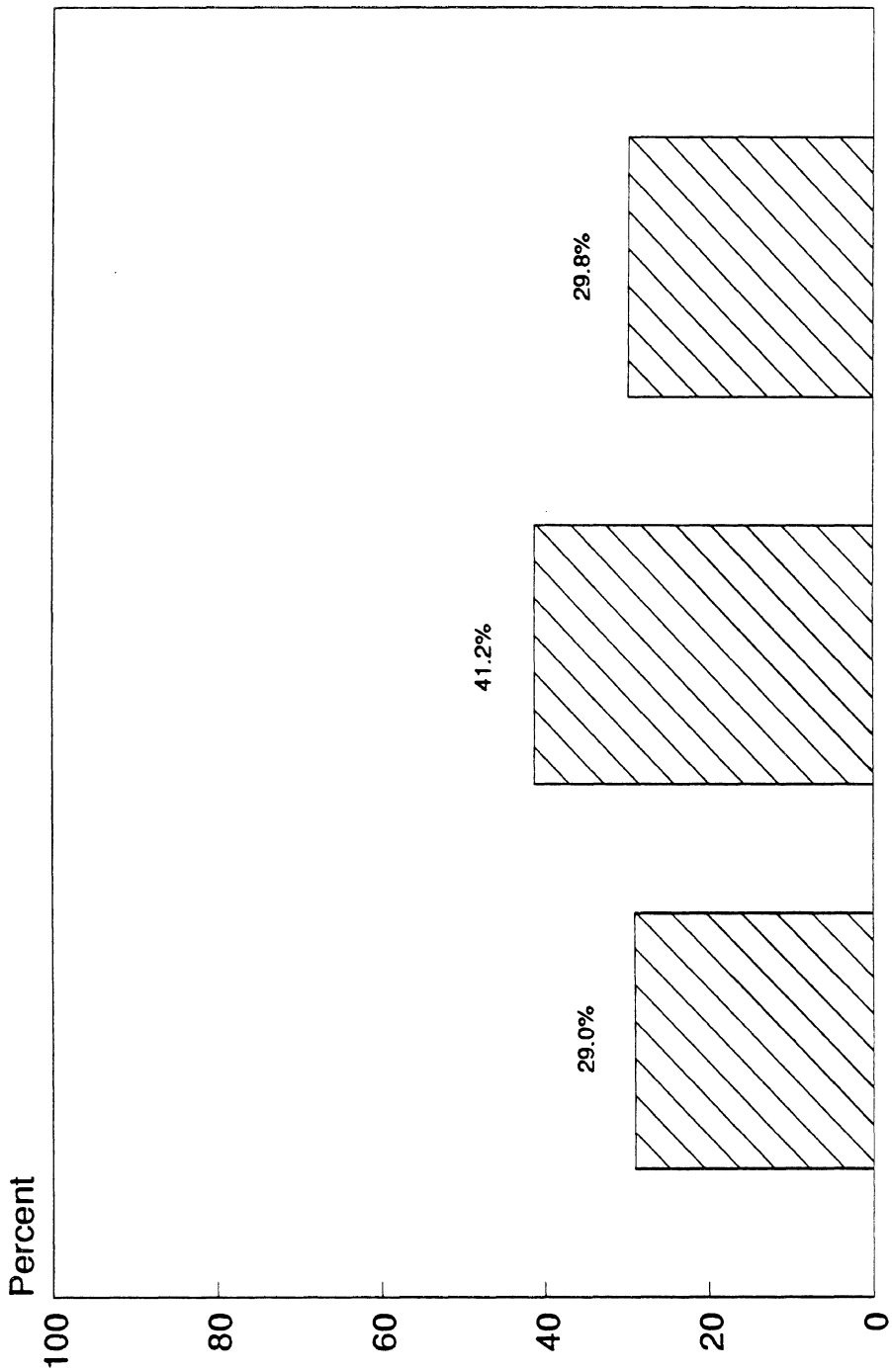

Figure 4.3: In general, do you think the major roads in your area are in good condition, average condition, or poor condition?

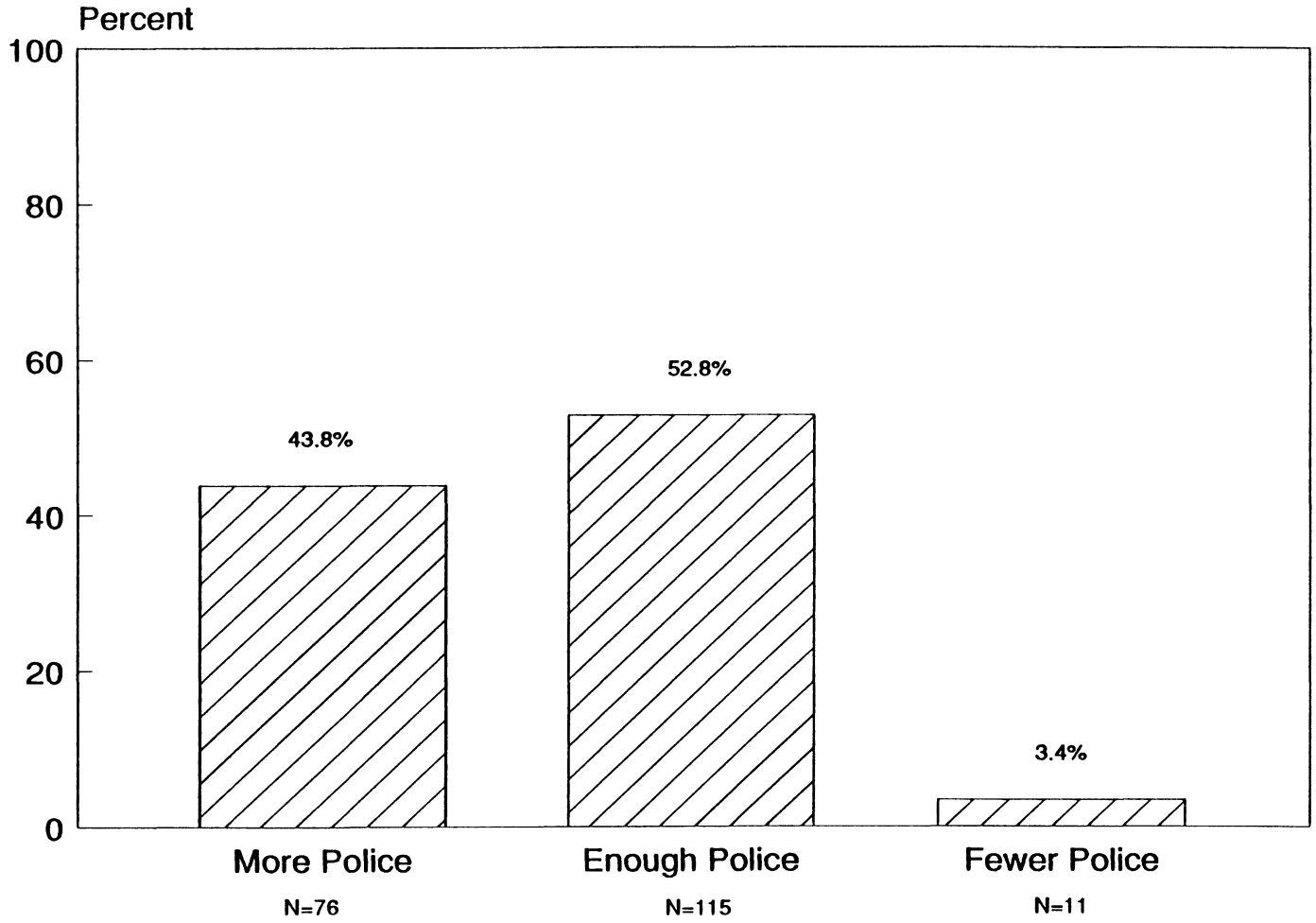

Figure 4.4: Do you feel that there are enough police patrolling the roads in Michigan looking for traffic violations, or should there be more police or fewer police patrolling the roads?

Table 4.1: Demographic Characteristics of Sample

	Unweighted N	Weighted Percent
Age		
18-20	24	8.1
21-30	127	21.8
31-40	145	25.3
41-50	101	16.5
51-60	78	12.9
61+	126	15.1
Sex		
Male	264	47.3
Female	337	52.7
Income		
Less than $5,000	29	3.8
$5,000-14,999	84	10.8
$15,000-24,999	106	15.3
$25,000-34,999	119	23.2
$35,000-49,999	114	25.0
$50,000 or more	110	21.9
Education		
Less than 13 years	307	53.4
13-16 years	229	38.1
17 or more years	61	8.6

4.2.2 Speed Limits

When asked how fast they usually drive on Michigan's expressways and highways, respondents gave answers between 55-59 mph (33%), 60-64 mph (34%) and 65-69 mph (28%; Figure 4.5). A small proportion of respondents reported driving below 55 mph (1%) or 70 mph or greater (2%). Almost half of the respondents support a 65 mph speed limit on expressways (49%), followed by 29% supporting 55 mph, and 11% supporting 60 mph (Figure 4.6). The predominance of respondents reporting 65 mph as the preferred speed limit may be due in part to the recent publicity over possibly raising the limit on rural interstates to 65 mph. When asked at what speed they thought they would be pulled over and given a ticket when traveling on expressways with a limit of 55 mph, almost 60% believe they have to be traveling 65 mph or faster before risking a citation (Figure 4.7). A majority of respondents thought that radar detectors should be legal (58%; Figure 4.8).

4.2.3 Driver Licensing and Education

The majority (61%) of respondents thought the minimum age for getting a driver's license should be 16 years old, the current law (Figure 4.9). However, almost 20% thought the minimum age should be 18 years, and an additional 11% believed 17 years of age was an appropriate minimum age for driving. At the other end of the age spectrum, a majority (56%) were opposed to a law which would establish a maximum age for driving, 28%

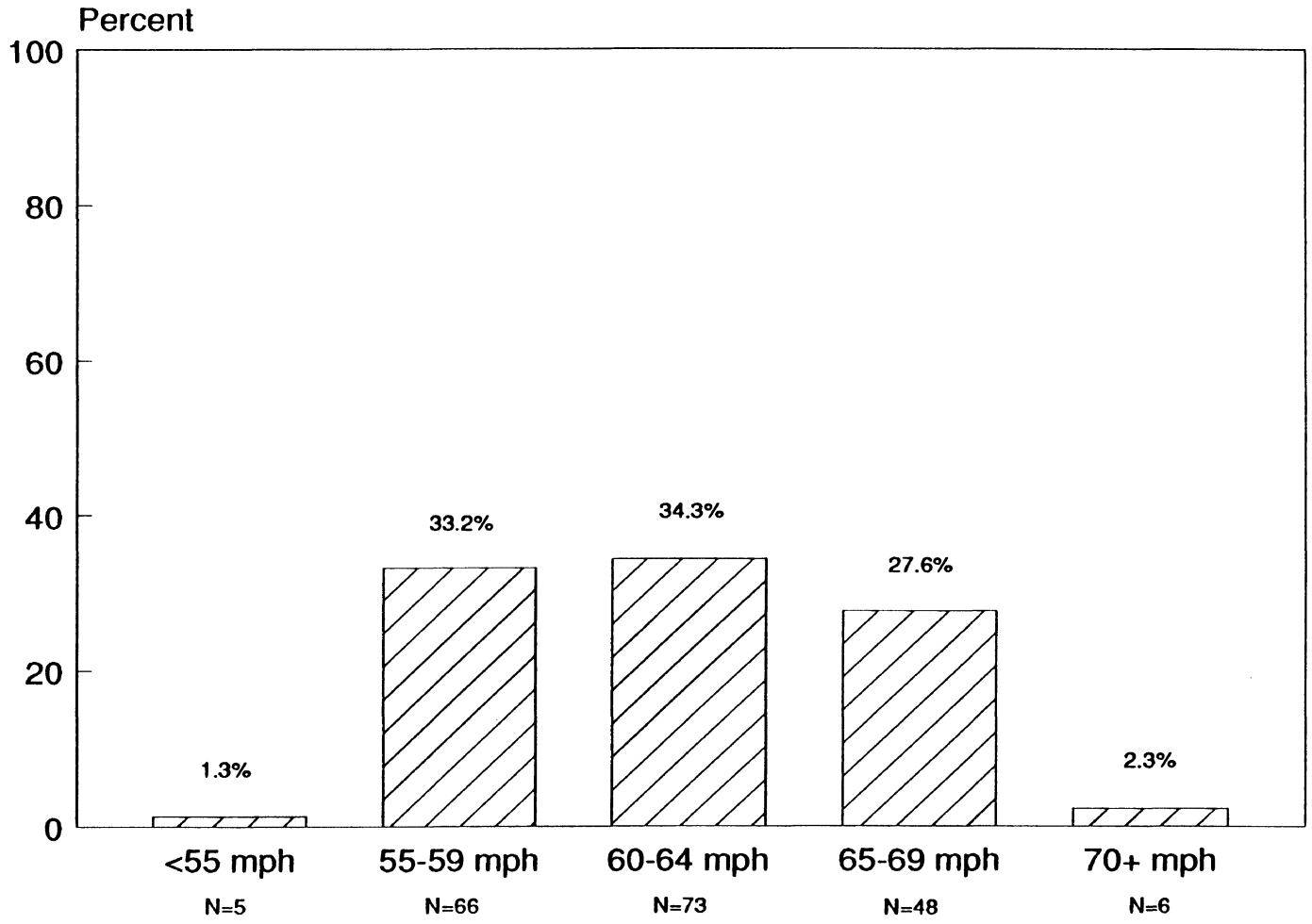

Figure 4.5: How fast do you generally drive on Michigan's expressways and highways?

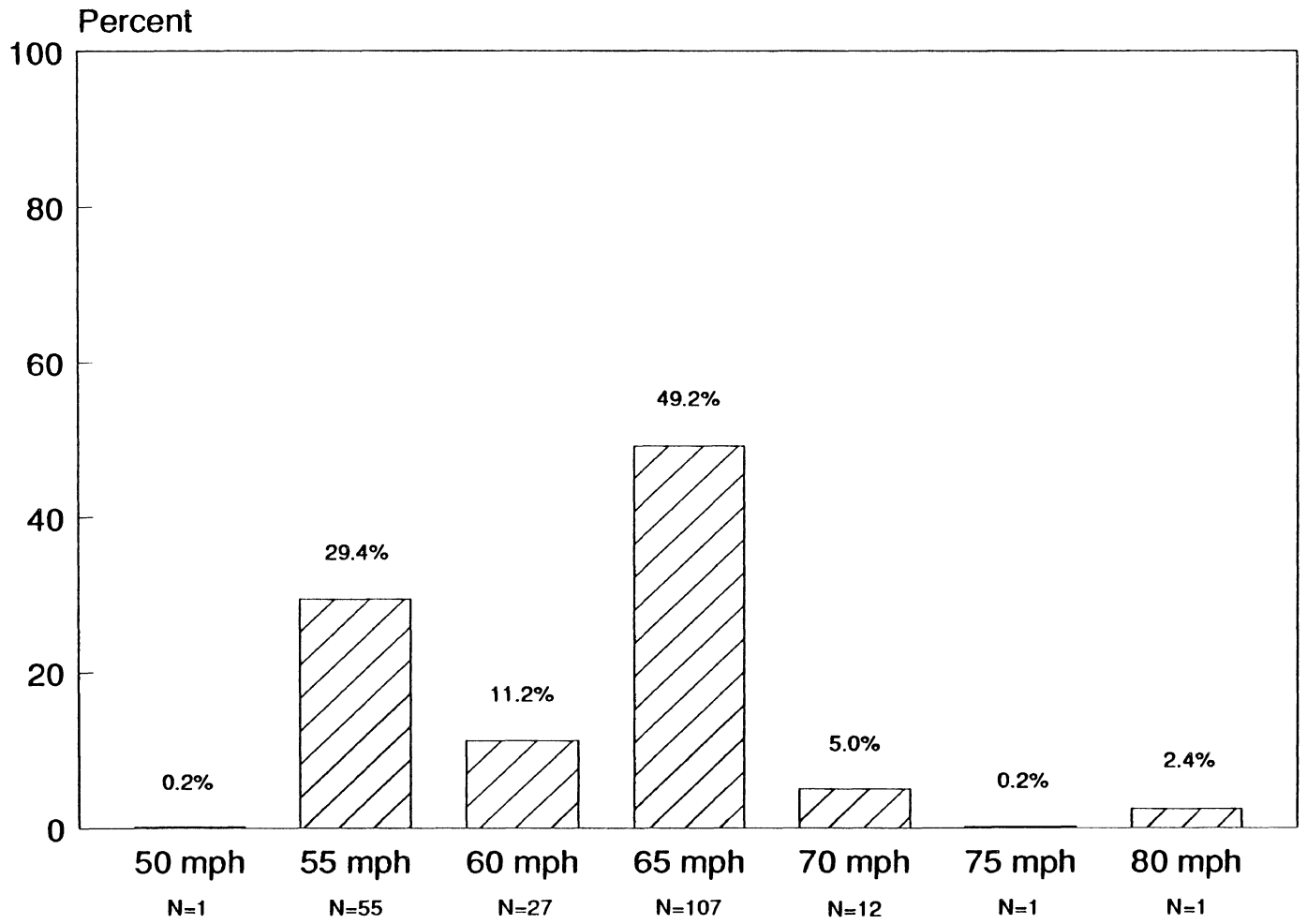

Figure 4.6: What do you think the speed limit should be on most Michigan expressways?

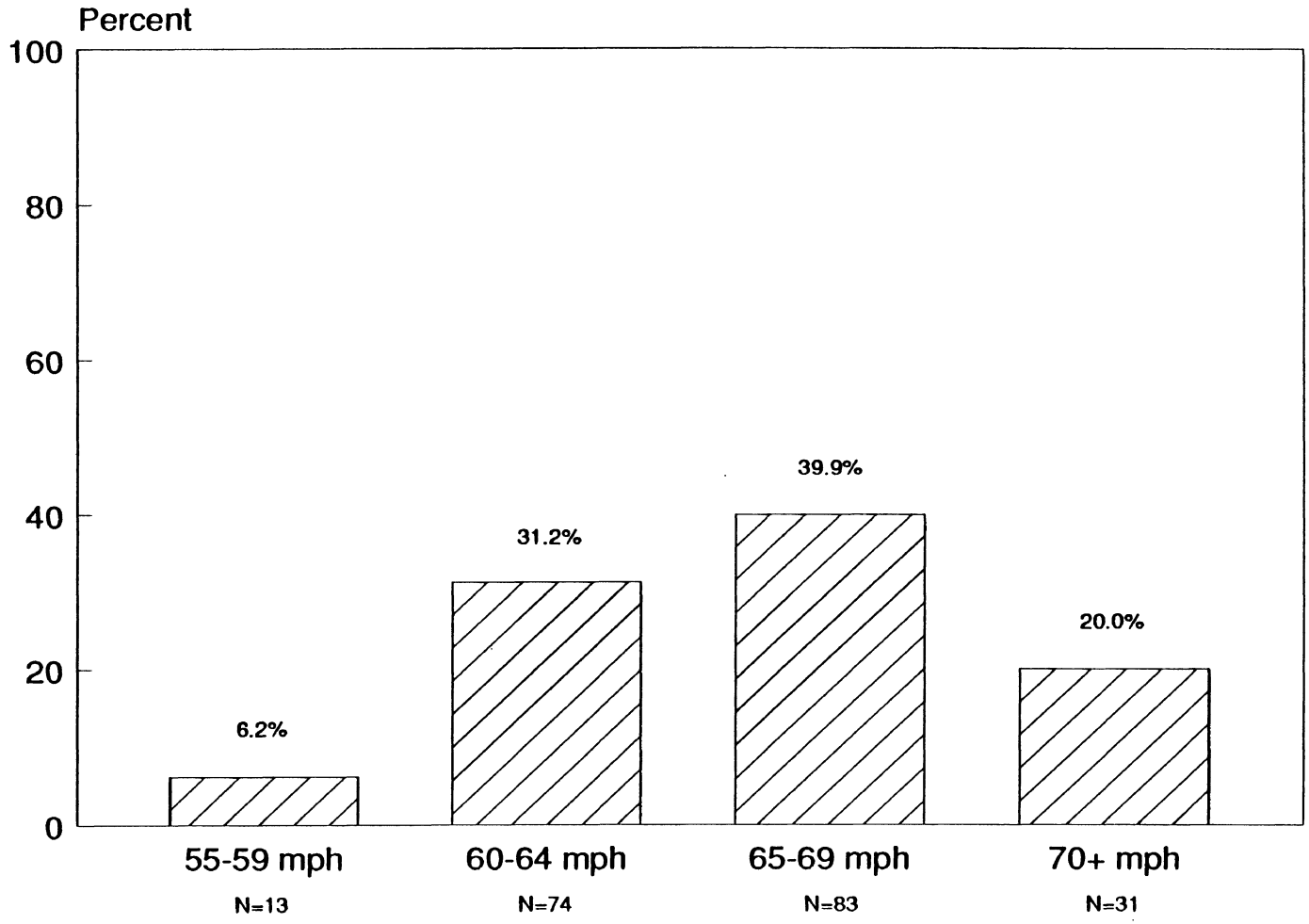

Figure 4.7: Where the limit is 55 mph, how fast do you think you have to be driving before police using radar at the roadside will decide to stop you and give you a ticket?

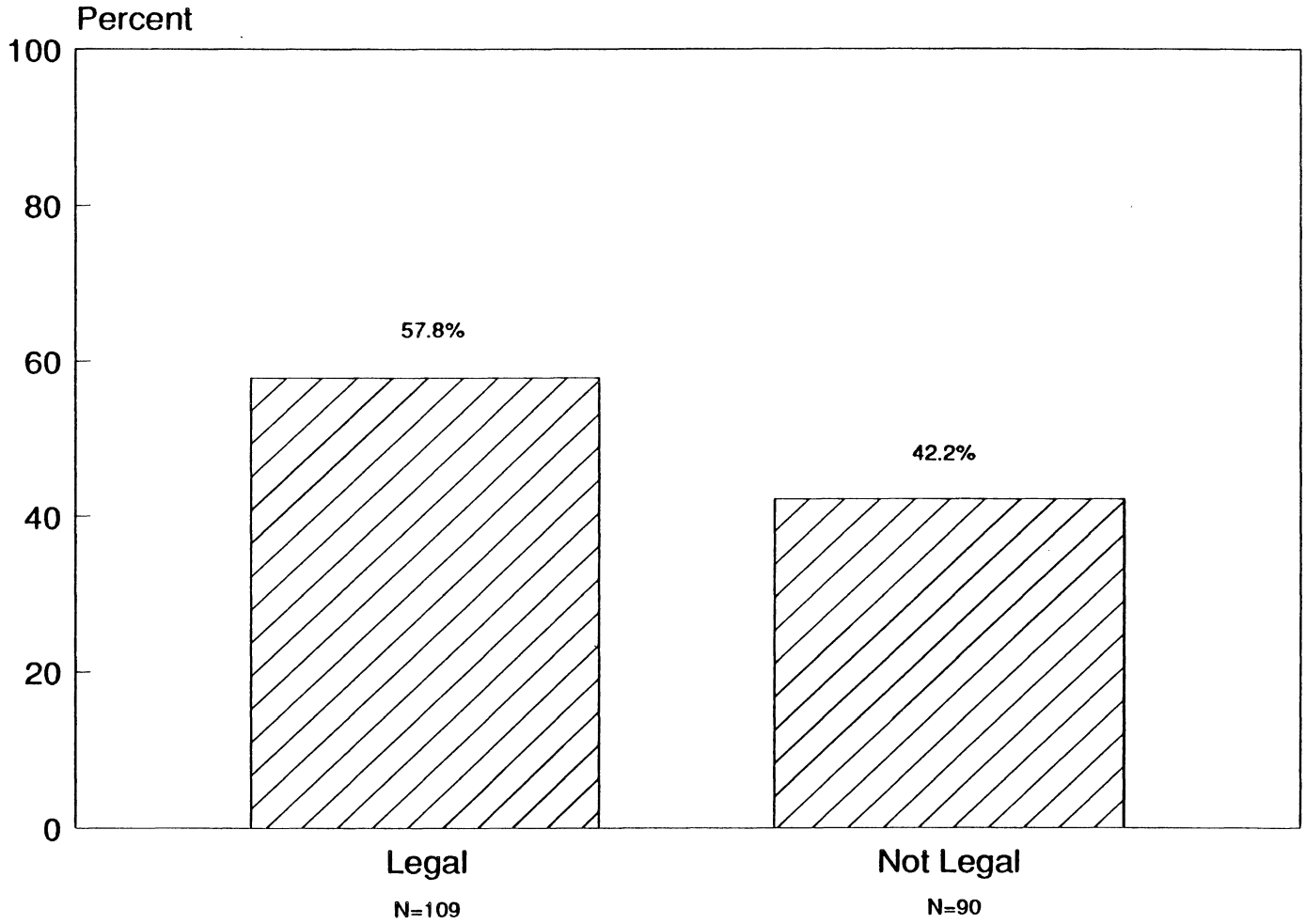

Figure 4.8: Do you think that the use of radar detectors--also called "fuzz busters"--should or should not be legal in Michigan?

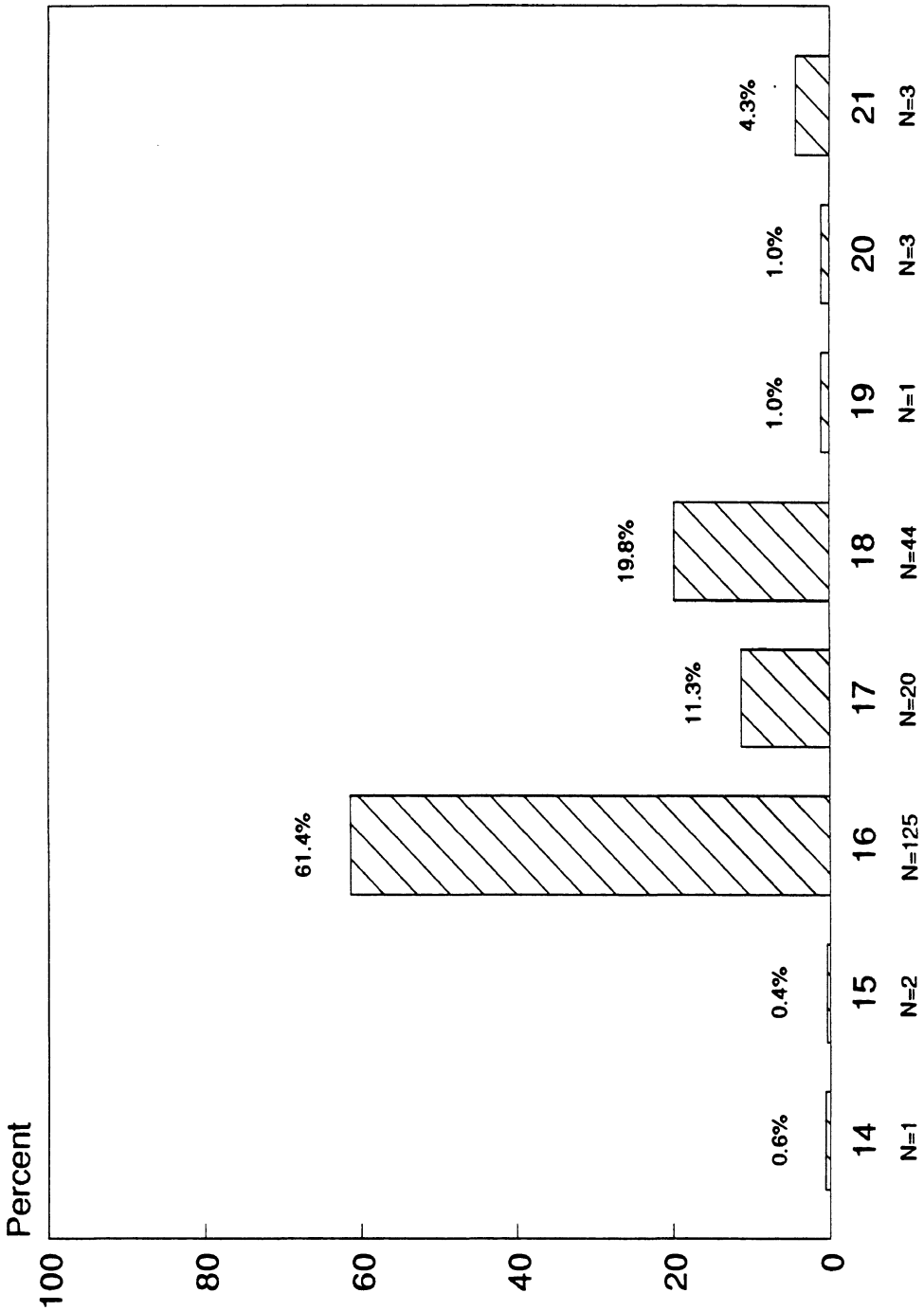

Figure 4.9: What do you think should be the youngest age at which a person can get a driver's license?

appropriate minimum age for driving. At the other end of the age spectrum, a majority (56%) were opposed to a law which would establish a maximum age for driving, 28% favored such a law, and 16% reported that it depended on such factors as the health or ability of the aged individual to perform driving tasks (Figure 4.10). Opinion was divided concerning youth curfew laws prohibiting persons under age 18 from driving between 11 p.m. and 5 a.m. unless they could show a legitimate need to do so (Figure 4.11). Opinion was similarly divided on a law prohibiting persons over age 70 from driving between 11 p.m. and 5 a.m. unless they took a medical exam to show they were fit to drive at night (Figure 4.12). When asked whether student fees or local school taxes should pay costs of driver education, a slight majority favored school taxes (55%; Figure 4.13).

4.2.4 Heavy Trucks

A clear majority of respondents believe the expressway speed limit for heavy trucks[2] should remain at 55 mph (68% versus only 23% believing the speed limit should be increased, and 9% indicating the speed limit should be decreased; Figure 4.14). Most respondents reported they took action while driving to avoid heavy trucks (57%; Figure 4.15). When a specific action to avoid trucks was mentioned, respondents were about equally distributed across the types of action taken (12% reported avoiding roads with trucks, 10% reported slowing down to avoid trucks, and 10% reported speeding up to avoid trucks). When asked to compare the driving safety of truck drivers to car drivers, the majority of respondents reported that they believed truck drivers drive equally as safely as car drivers (53%), and over a quarter believed they drive more safely. On the other hand, over half believed that the problem of objects coming or falling off heavy trucks was somewhat or very serious (Figure 4.17). Most respondents reported they believed that police enforce traffic laws "about the same" for truck drivers as for car drivers (51%; Figure 4.18). However, more believed traffic laws are enforced less strictly for truck drivers (34%) than believed traffic laws are enforced more strictly for truck drivers (15%).

4.2.5 Alcohol Consumption and Alcohol-impaired Driving

Almost all respondents believed alcohol-impaired driving was a somewhat or very serious problem in their communities (Figure 4.19). Responses to the items which asked if the server of drinks (either commercial or social hosts) should be held responsible for damages caused by an intoxicated patron or guest were skewed towards not holding the server responsible (Figures 4.20 and 4.21). For commercial servers, 47% of the respondents reported they thought

---

2. The term "truck" is used here to refer to semi-trailer trucks, defined for respondents as large trucks which include a cab and cargo-carrying trailer.

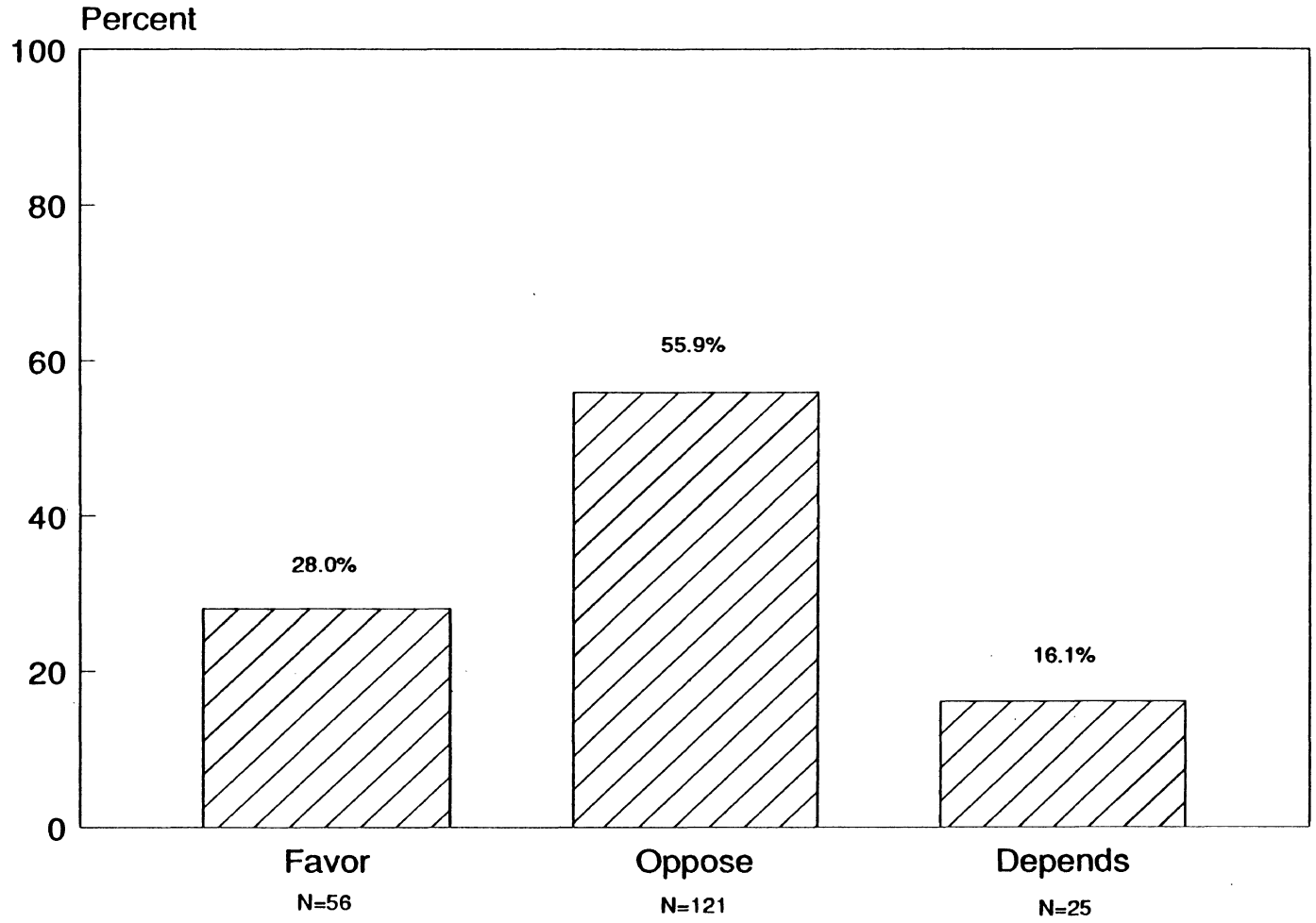

Figure 4.10: Would you favor or oppose a law which would not allow people above a certain age to drive?

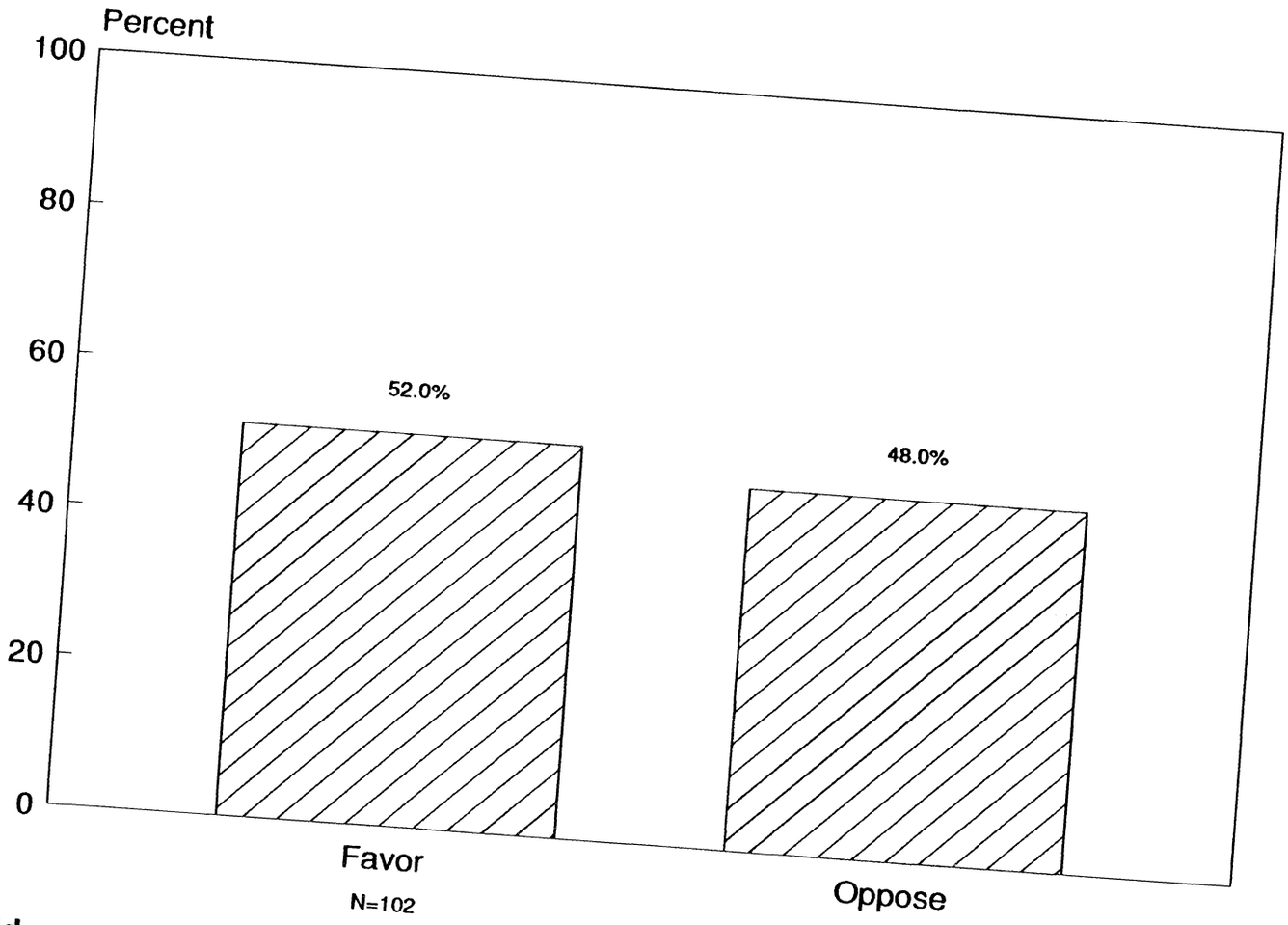

Figure 4.11: Would you favor or oppose a law which would prevent persons under the age of 18 from driving between 11 o'clock at night and 5 o'clock in the morning, unless they could show a need to drive to or from school or work?

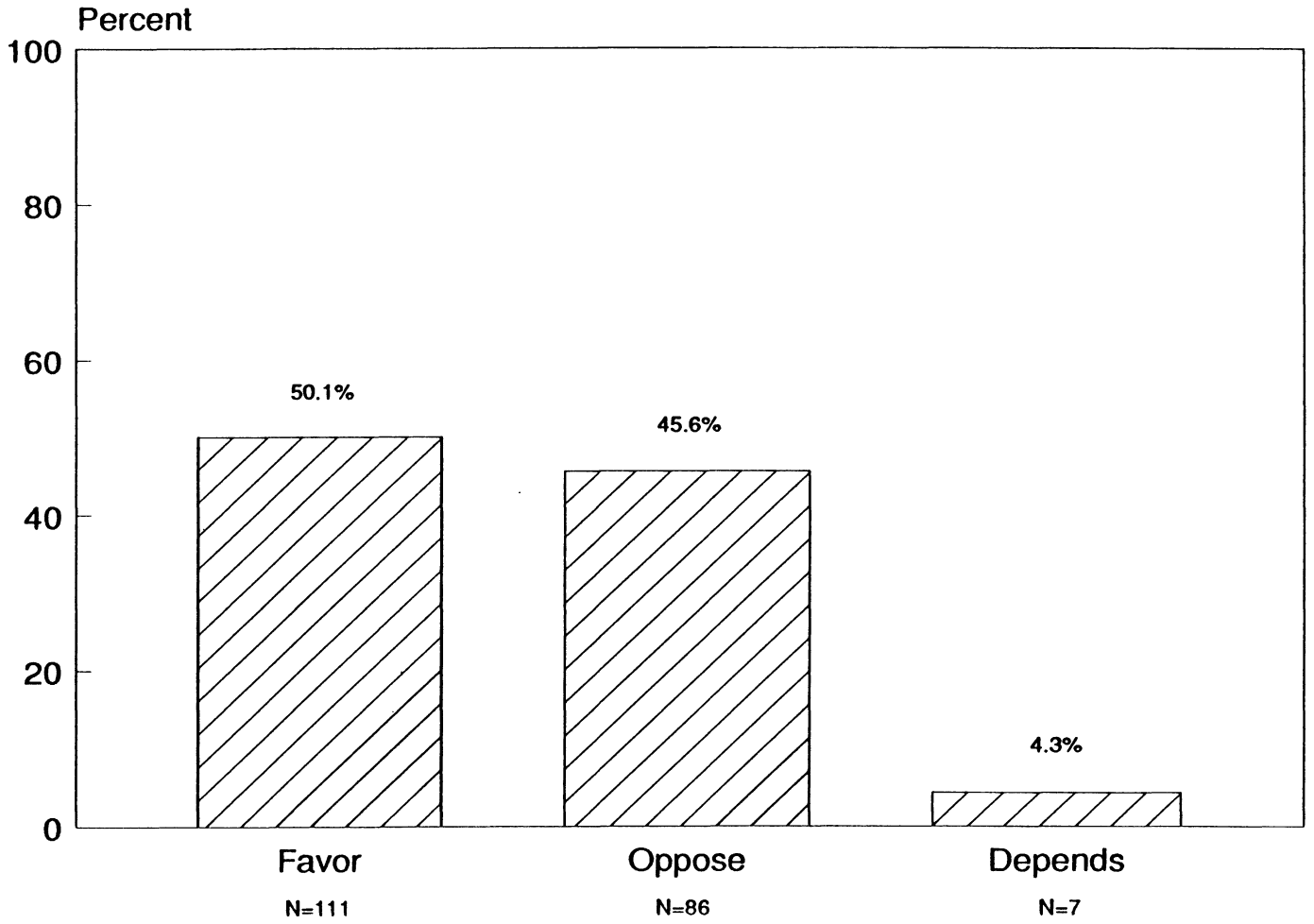

Figure 4.12: How about persons over the age of 70--would you favor or oppose a law that would prevent older persons from driving between 11 o'clock at night and 5 o'clock in the morning unless they take a medical exam to show they are fit to drive at night?

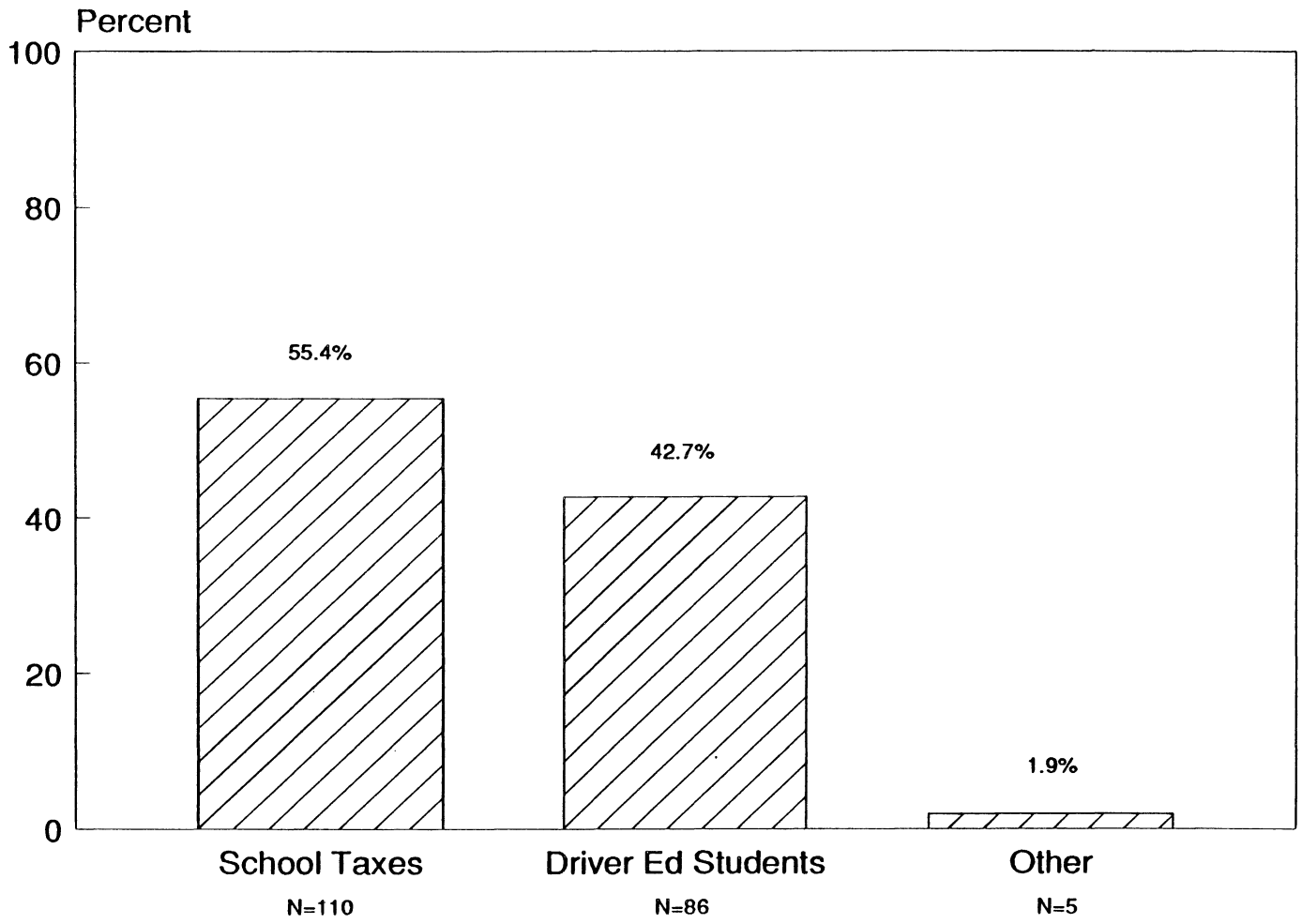

Figure 4.13: Do you think that driver education classes should be paid for by local school taxes or a fee paid by the driver education students?

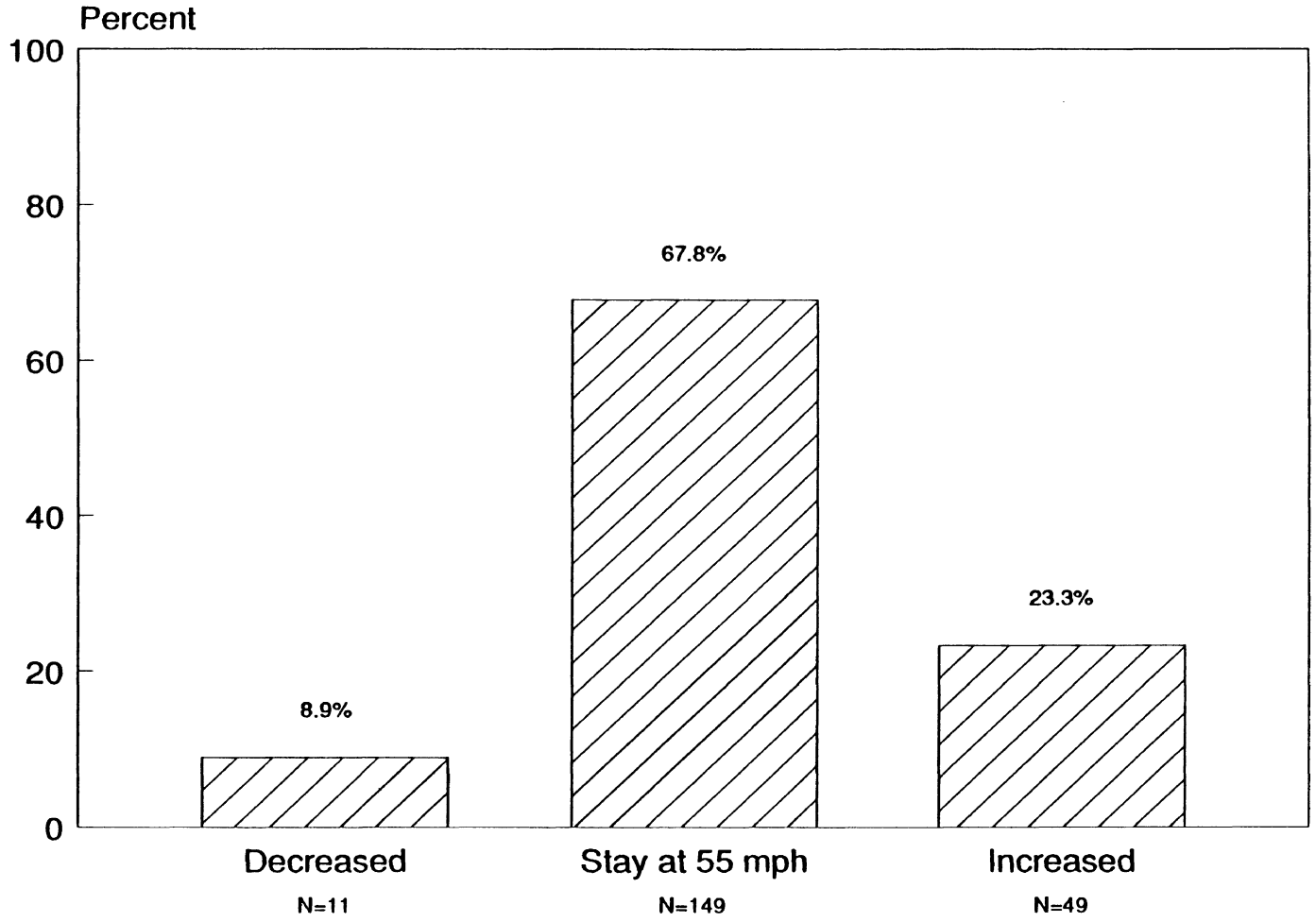

Figure 4.14: Do you think that the speed limit for semi-trailer trucks should be increased, decreased, or left at 55 mph?

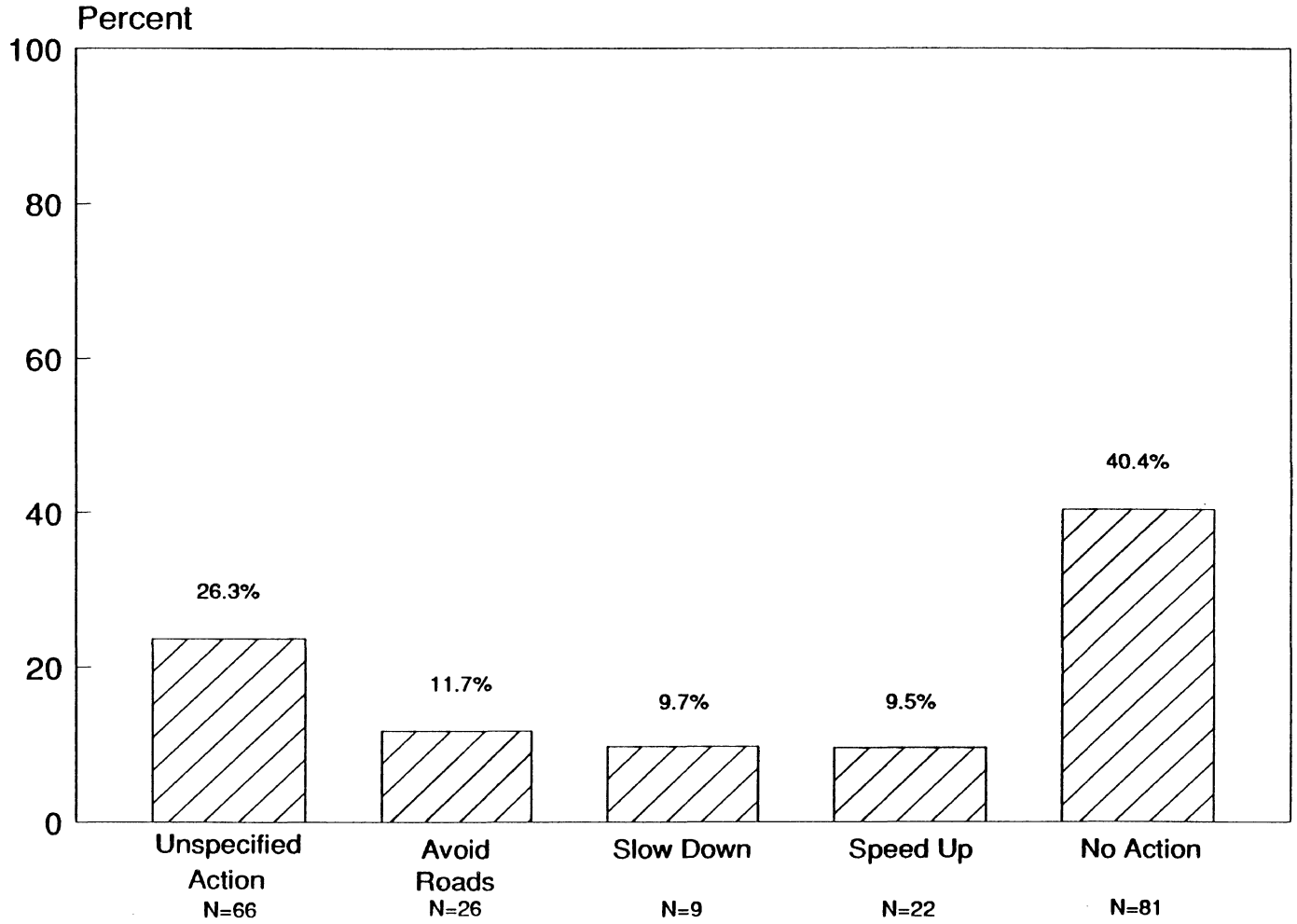

Figure 4.15: When you are driving, do you ever take any action such as avoiding roads with a lot of semi-trailer trucks, or slowing down or speeding up quickly to stay away from semi-trailer trucks?

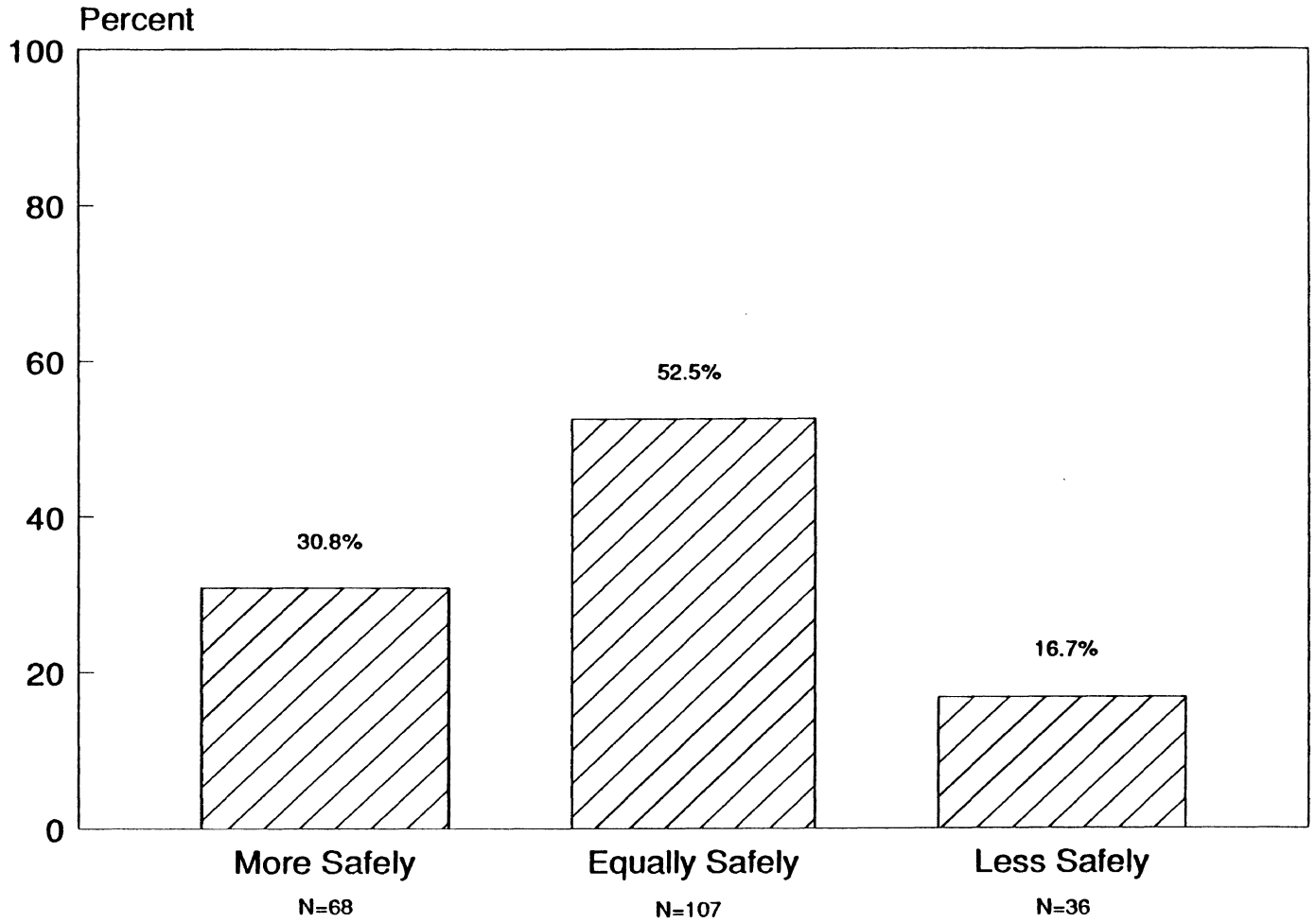

Figure 4.16: Compared to most car drivers, would you say that drivers of semi-trailer trucks drive more safely, less safely, or about equally safely?

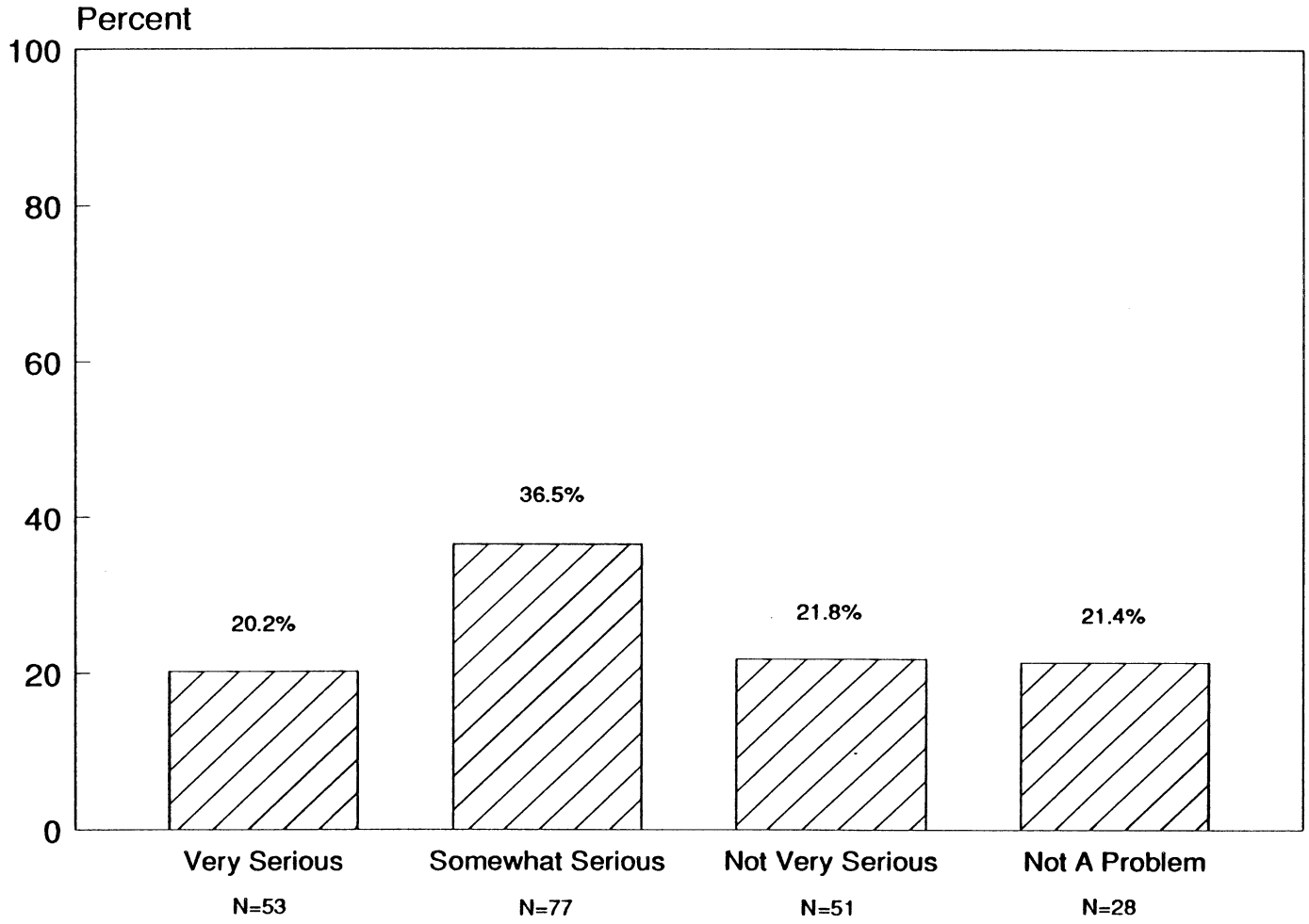

Figure 4.17: How serious is the problem of objects coming off or falling off semi-trailer trucks? Would you say it is very serious, somewhat serious, not very serious, or not a problem at all?

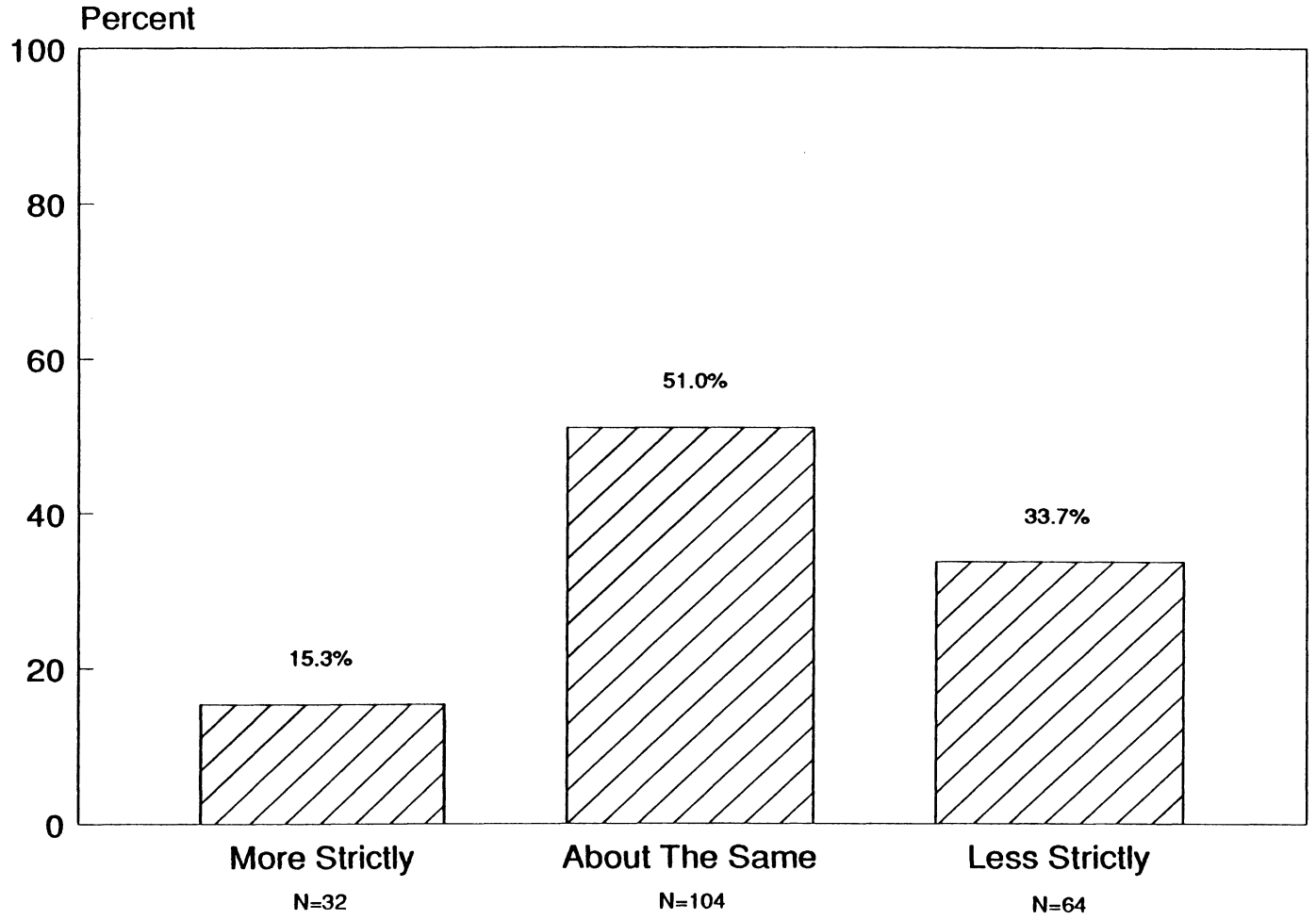

Figure 4.18: Do you think police enforce traffic laws more strictly, less strictly, or about the same for drivers of semi-trailer trucks as they do for car drivers?

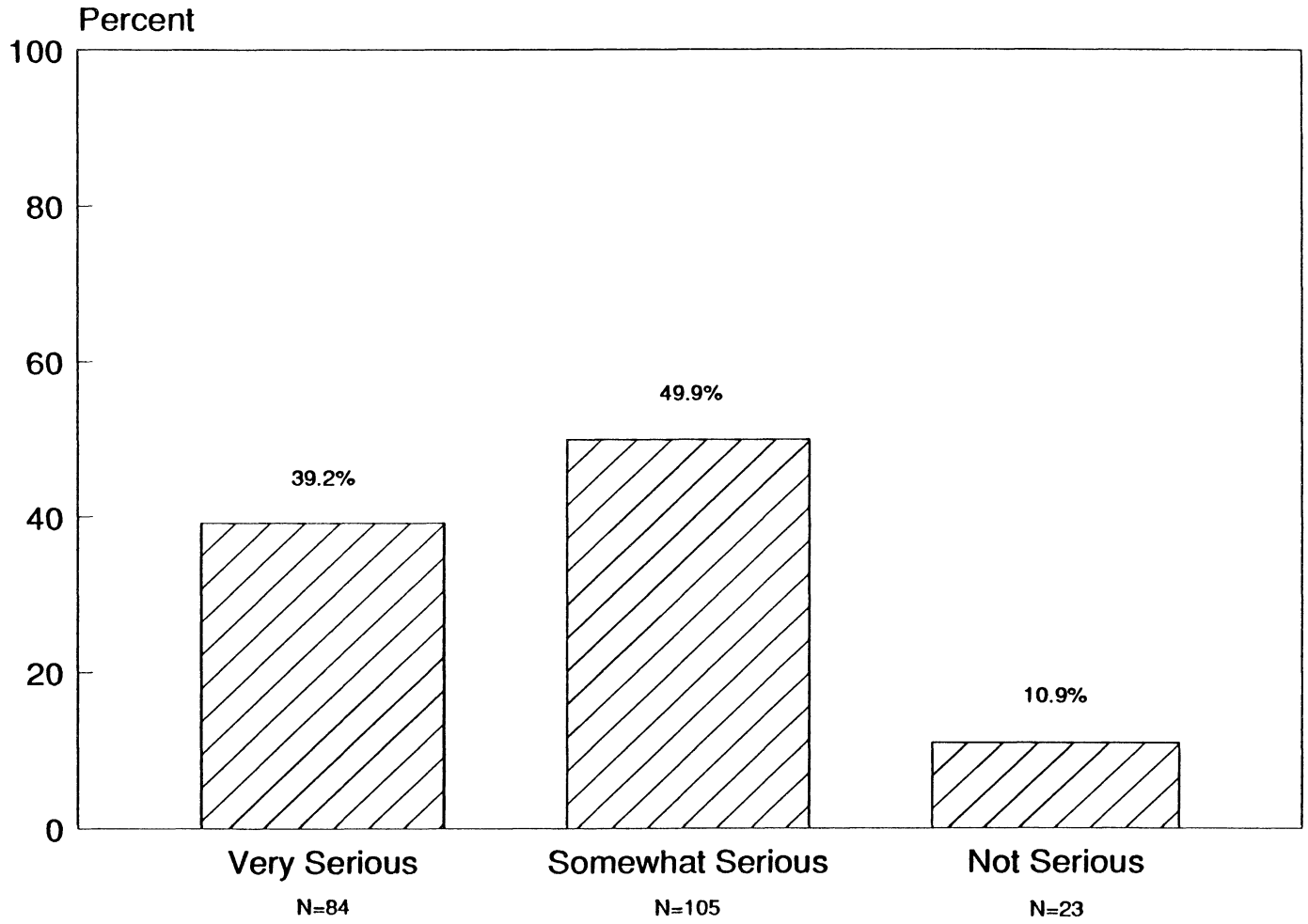

Figure 4.19: How serious do you think the drunk driving problem is in your community--would you say it is very serious, somewhat serious, or not at all serious?

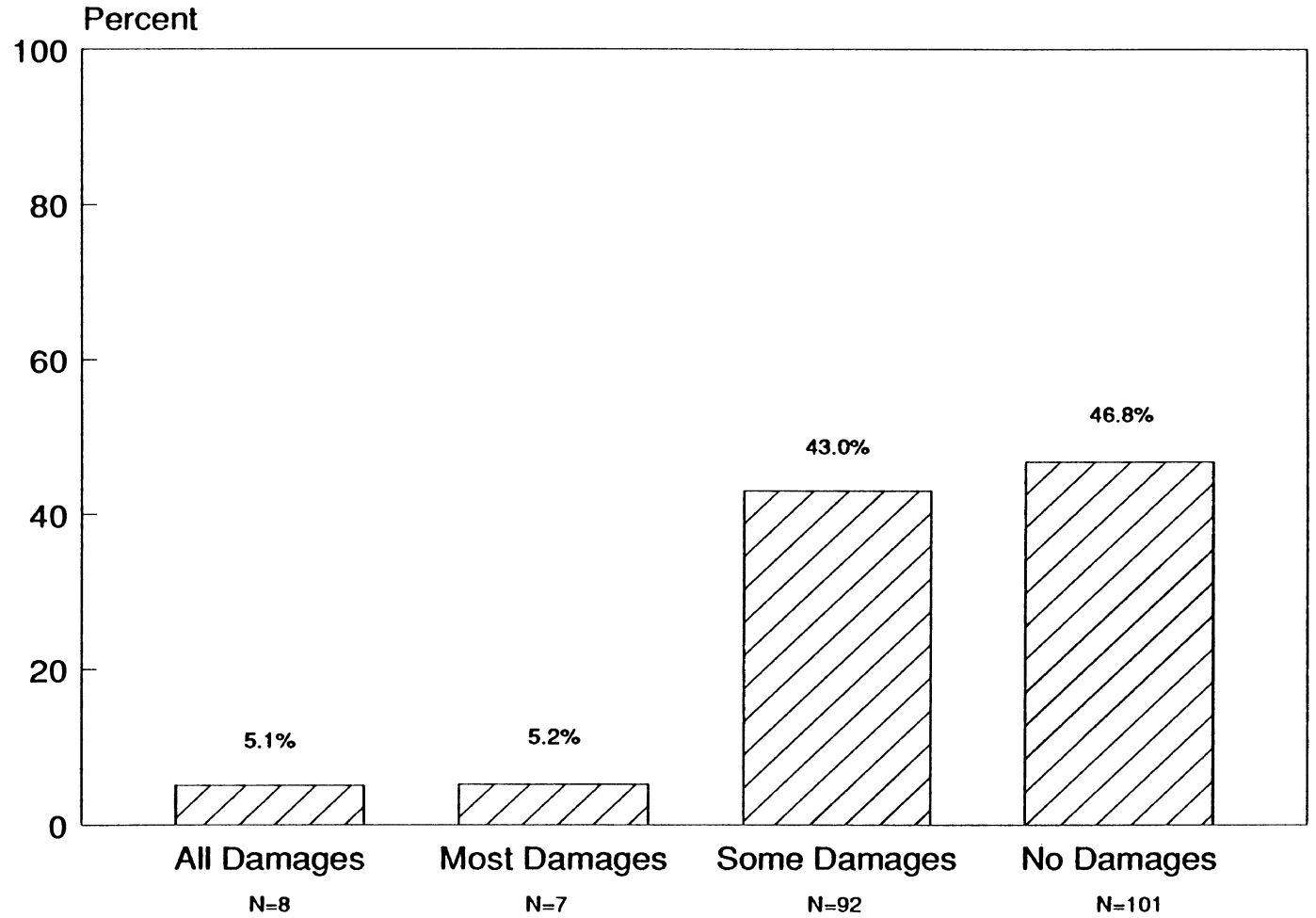

Figure 4.20: If a customer gets drunk, leaves a restaurant or bar, and injures someone in a car crash, do you think the bartender or the person who served the drinks to the customer should be held responsible for all of the damages, most of the damages, some of the damages, or none of the damages caused by the customer?

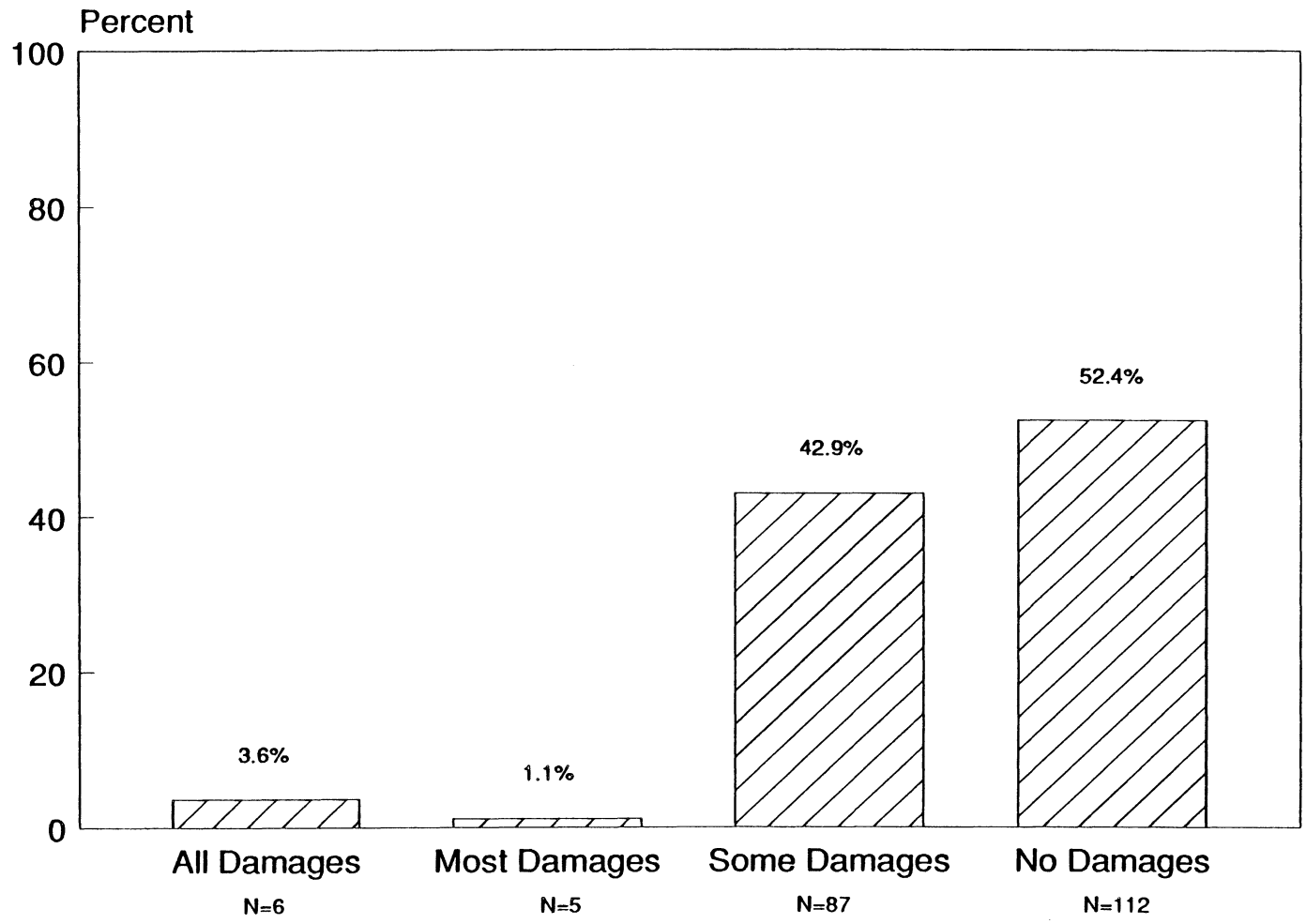

Figure 4.21: If a guest gets drunk, leaves a party, and injures someone in a car crash, do you think the host or hostess at the party should be held responsible for all of the damages, most of the damages, some of the damages, or none of the damages caused by the guest?

the server should be not be held responsible for any damages caused by the intoxicated patron; however, 43% reported that the server should be held responsible for some of the damages, and 10% believed that the server should be held responsible for most or all of the damages. For social hosts, 52% of the respondents reported that they believe the host should not be held responsible for any damages, a figure slightly higher than that for commercial hosts. On the other hand, 43% believe the host should be held responsible for some of the damages, and 5% believe the host should be held responsible for most or all of the damages.

When asked how many drinks respondents thought they could drink in one hour and still drive safely, the modal response was two drinks (Figure 4.22). Sixteen percent reported they thought they could not have a single drink and drive safely. In contrast, 6% thought they could have four drinks, and 8% thought they could have 5 or more drinks in an hour and still drive safely. Respondents were asked the number of drinks a 160-pound adult male could drink before he was over the legal limit to drive in Michigan. Interestingly, almost two-thirds responded with three or fewer drinks, a quantity that rarely would put one over the legal limit (Figure 4.23). A more sobering finding is that 14% of the respondents thought a 160-pound male could drink five or more drinks and still stay under the legal limit.

A majority of respondents favored use of sobriety checklanes (60%; Figure 4.24). Respondents varied greatly in their beliefs about how much money people convicted of alcohol-impaired driving for the first time should be fined (Figure 4.25). After collapsing responses into categories, subjects were clustered at three points, with 15% at $100-199, 37% at $500-599, and 17% at $1000 or over. Subjects also varied greatly on how long a driver's license should be suspended for a first-time alcohol-impaired driving conviction (Figure 4.26). The most frequent responses were 3 months (21%), 6 months (31%), and 12 months (23%).

Almost half of the respondents thought the hours for selling alcoholic beverages should be reduced, while a little over half support the status quo (Figure 4.27). Only 2% believed the hours should be increased. Very few respondents felt the number of beverage alcohol retail outlets in their community was too low (0.4% for stores, 2% for bars; Figure 4.28 and 4.29). Most felt the number of outlets was about right (64% for stores, 69% for bars), while about a third believed the number of outlets was too high (36% for stores, 30% for bars). The majority of respondents reported they thought the number of stores or bars selling alcoholic beverages should be limited by government agencies (64%; Figure 4.30). The vast majority thought that gasoline stations and stores selling gasoline should not be allowed to sell beer and wine (83%; Figure 4.31).

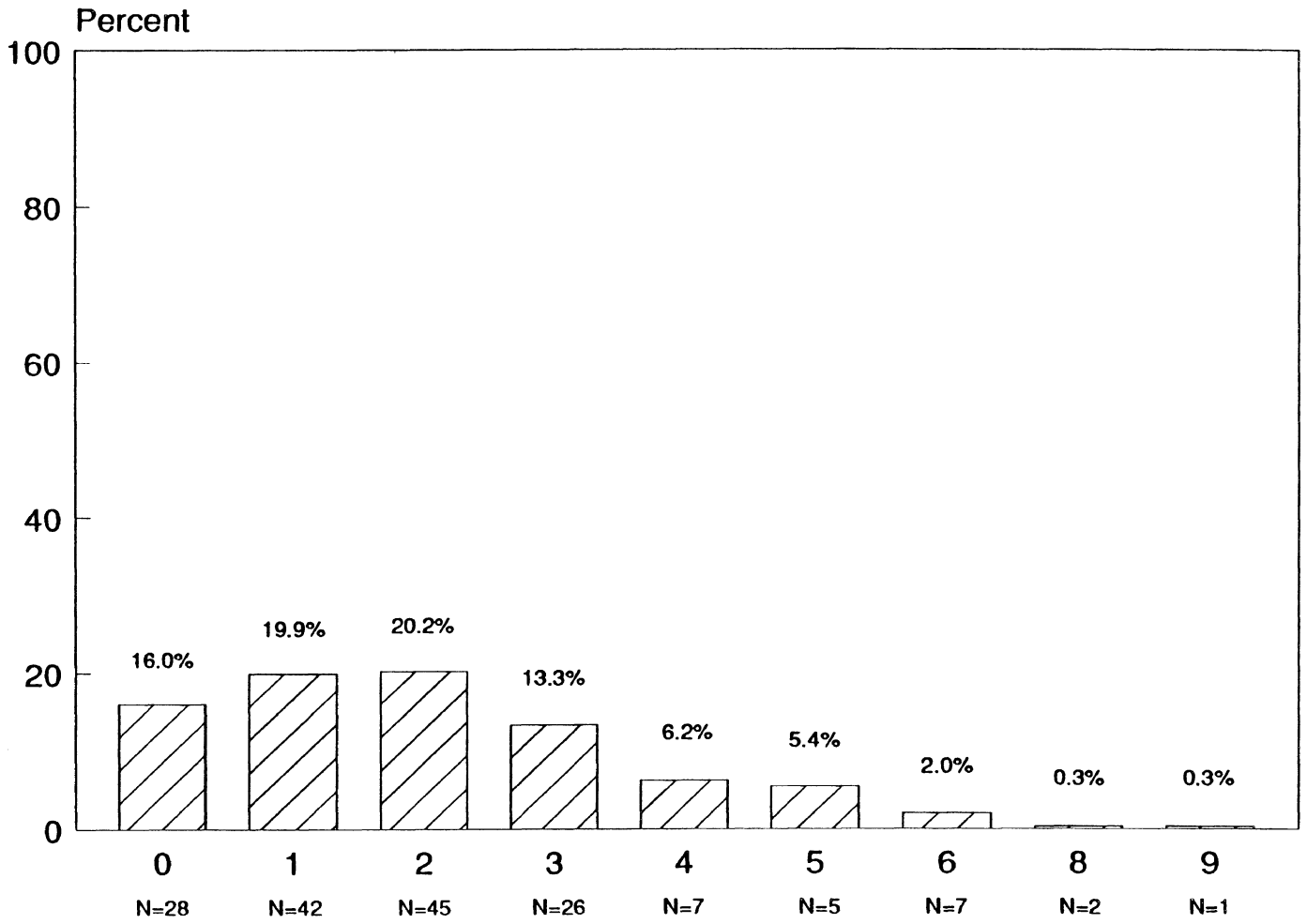

Figure 4.22: How many drinks could you drink in an hour and still drive safely?

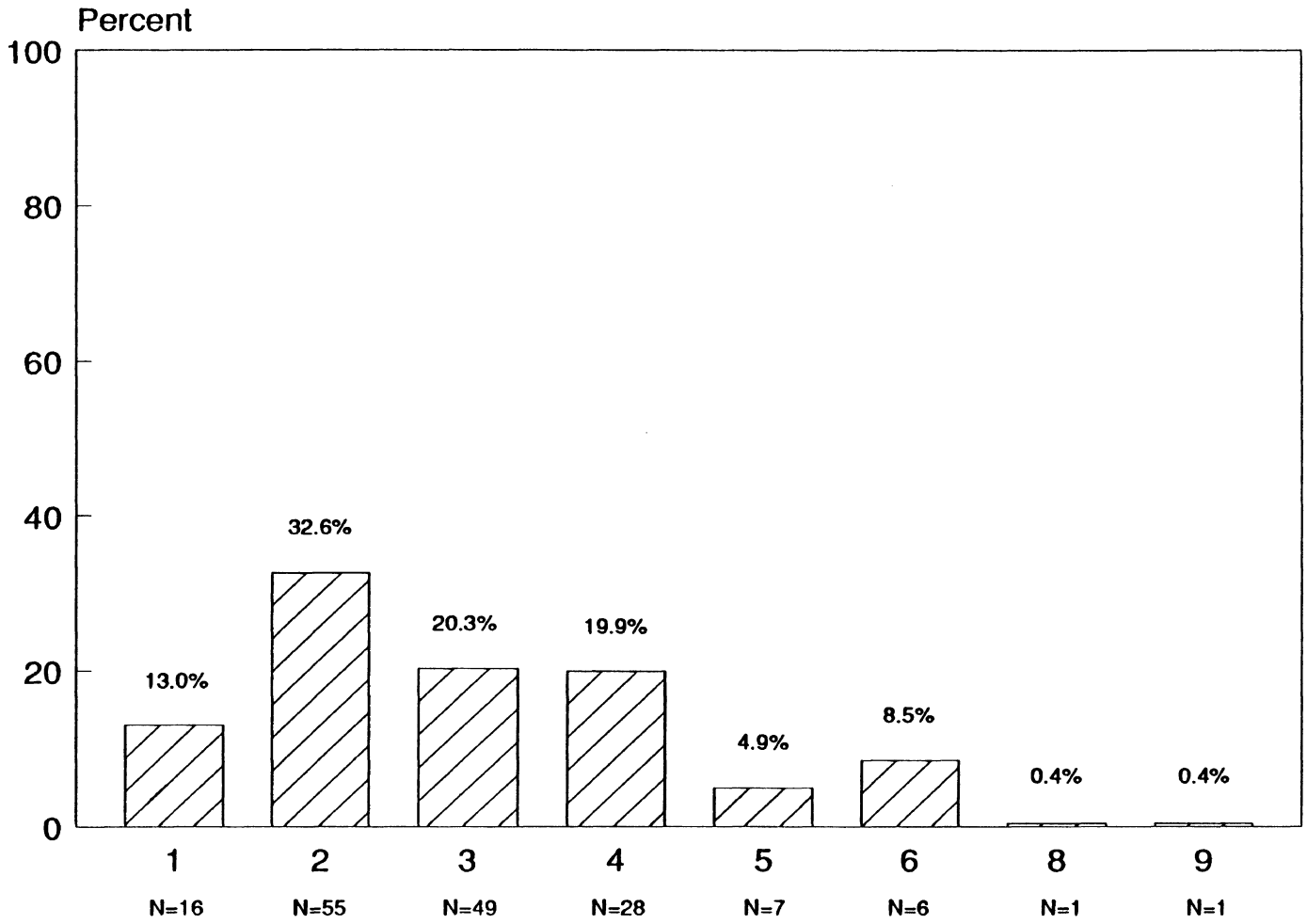

Figure 4.23: How many drinks would a 160-pound adult male have to drink in an hour before he was over the legal limit to drive in Michigan?

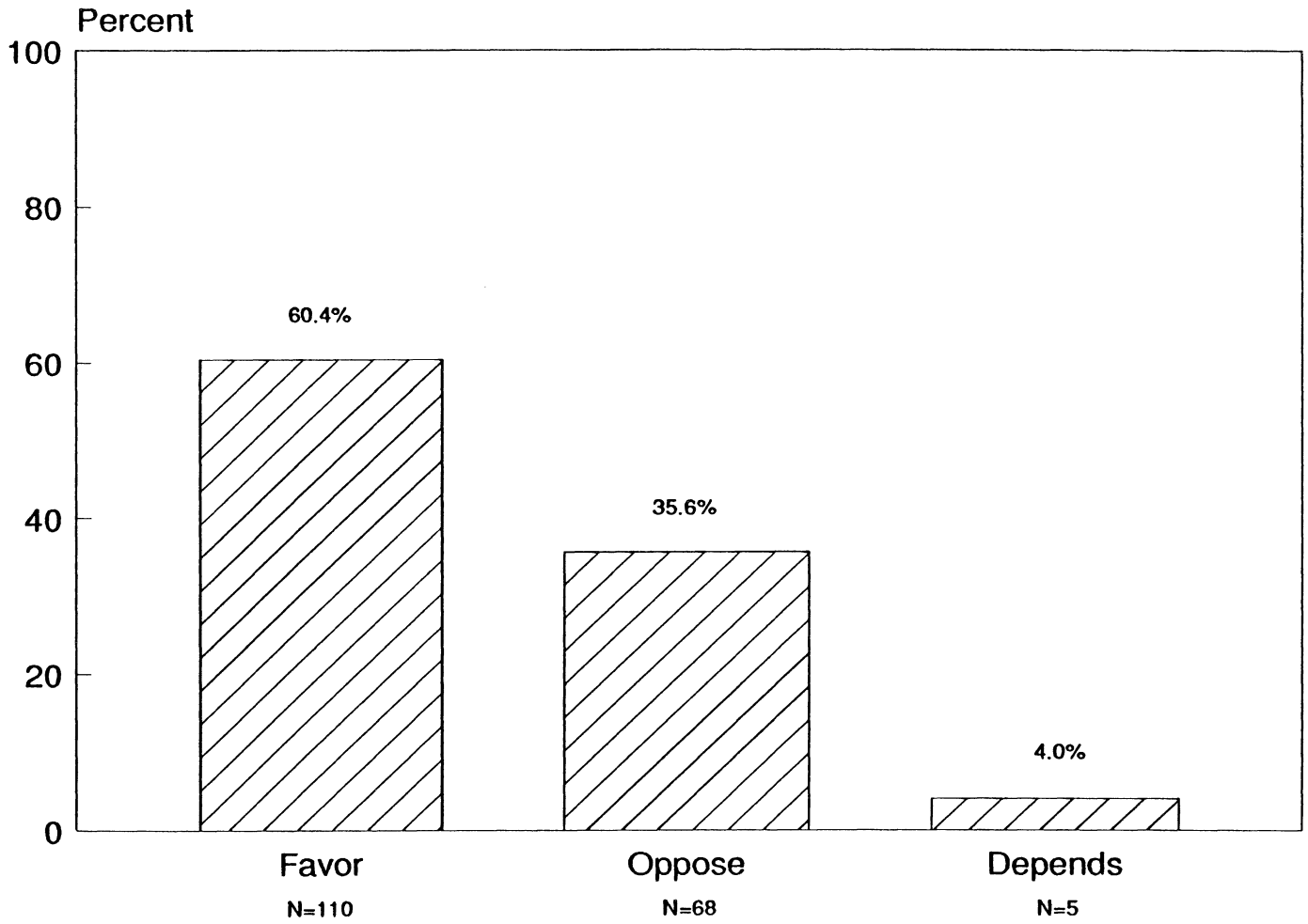

Figure 4.24: Do you favor or oppose the use of sobriety checklanes to prevent drunk driving?

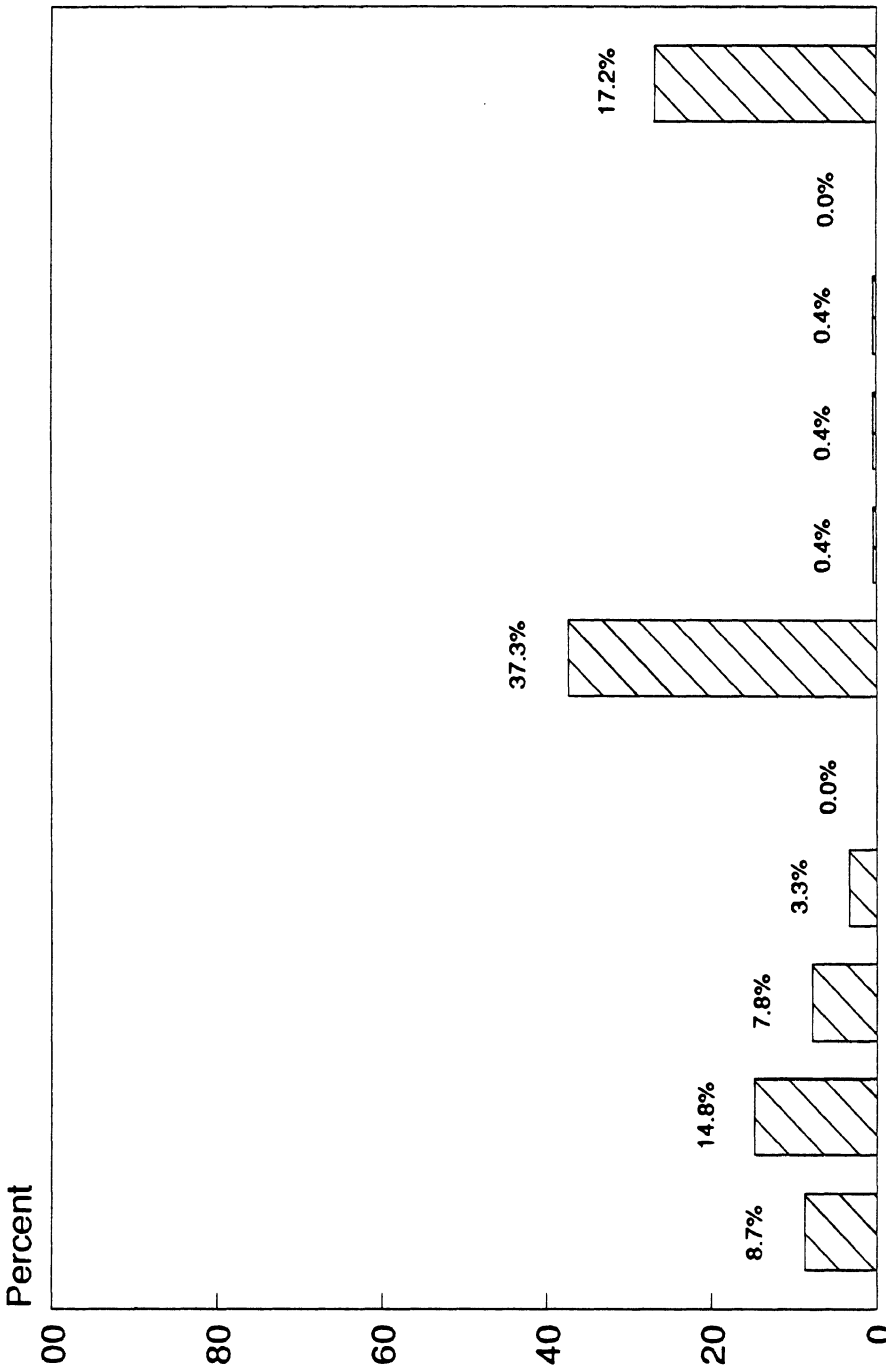

Figure 4.25: How much of a fine do you think a person should have to pay for the first drunk driving conviction?

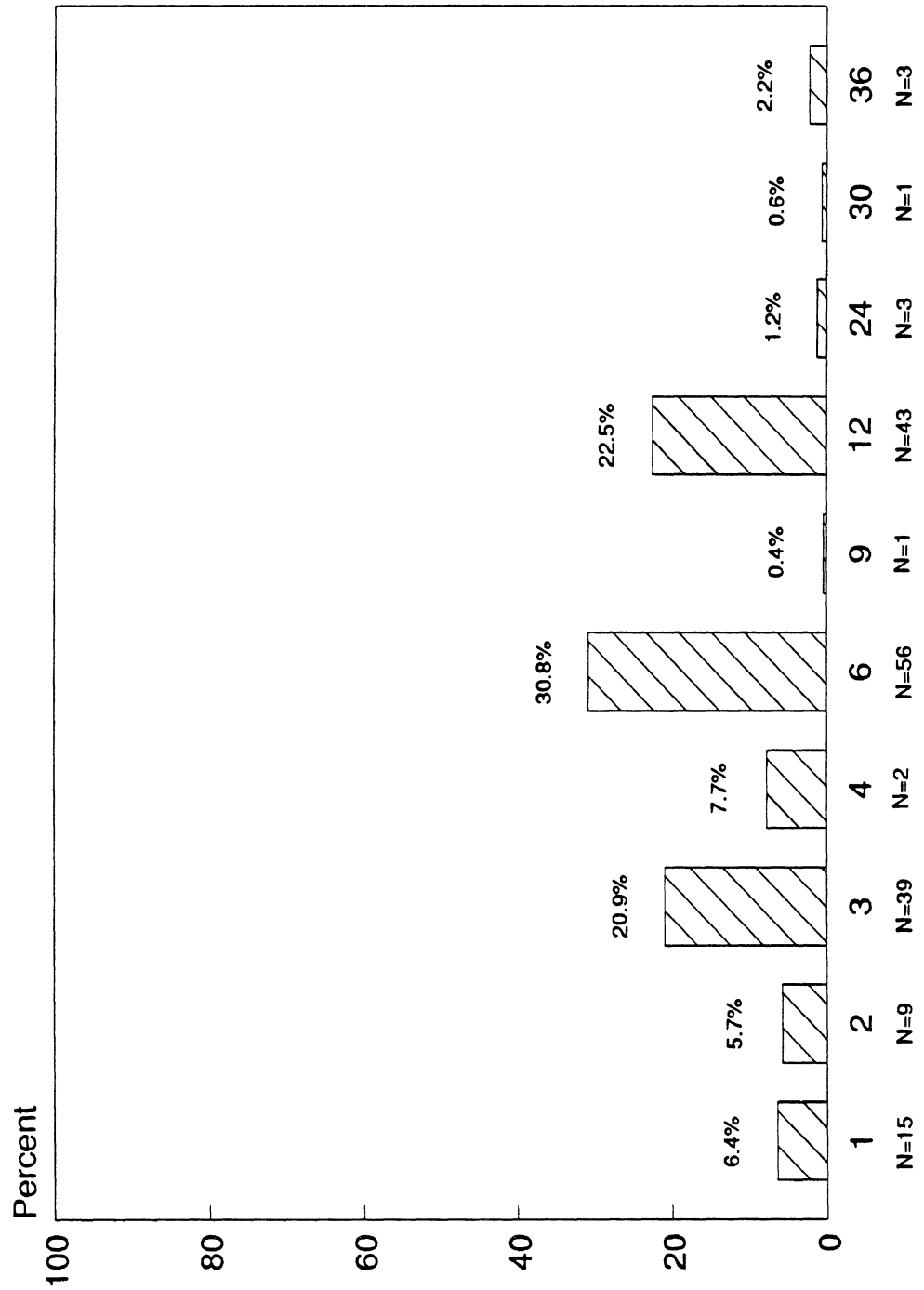

Figure 4.26: For how many months should their driver's license be suspended?

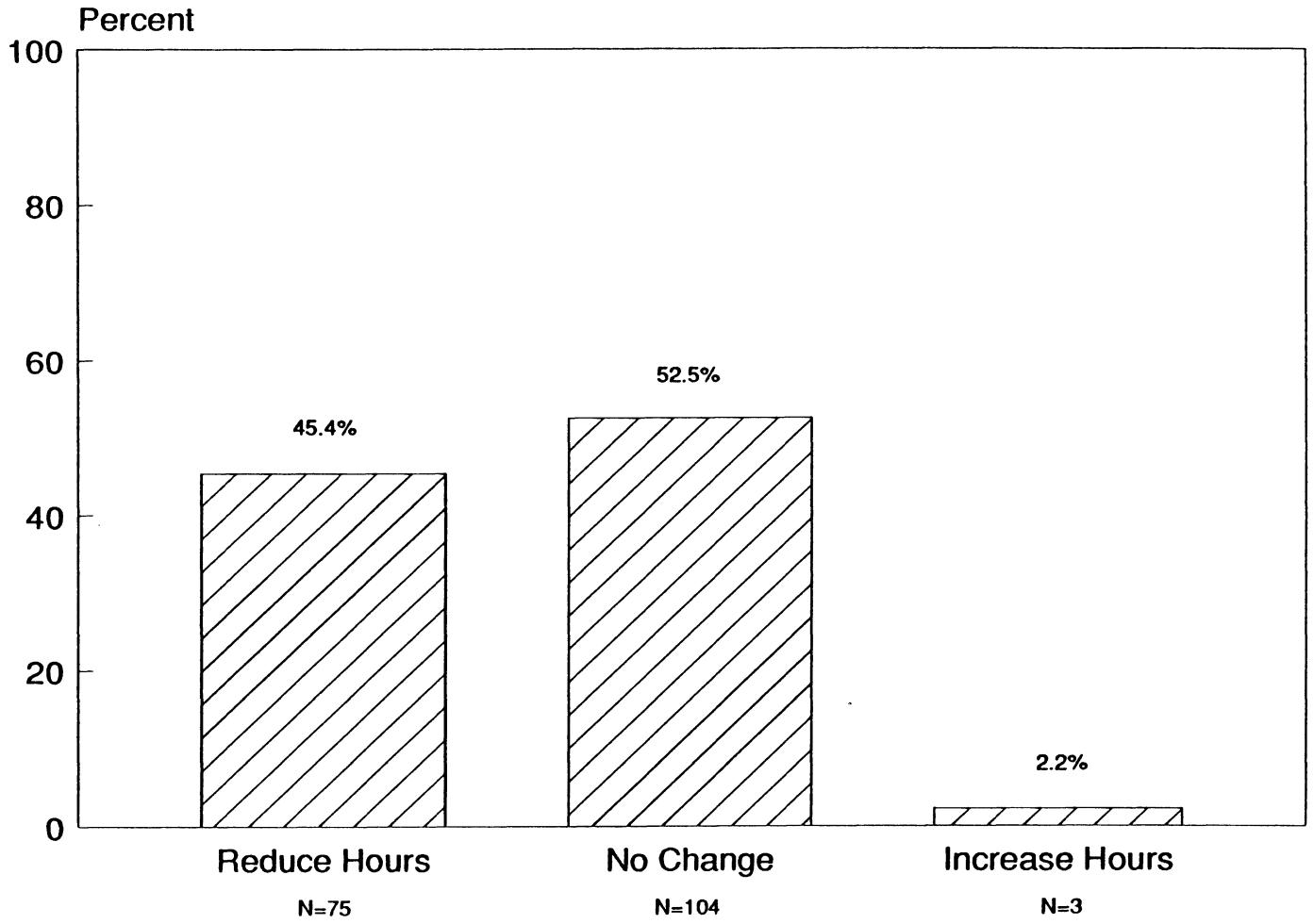

Figure 4.27: Currently alcoholic beverages can be sold on most days from 7 o'clock in the morning until 2 o'clock the next morning. Do you think bar hours should be reduced, increased, or left as they are now?

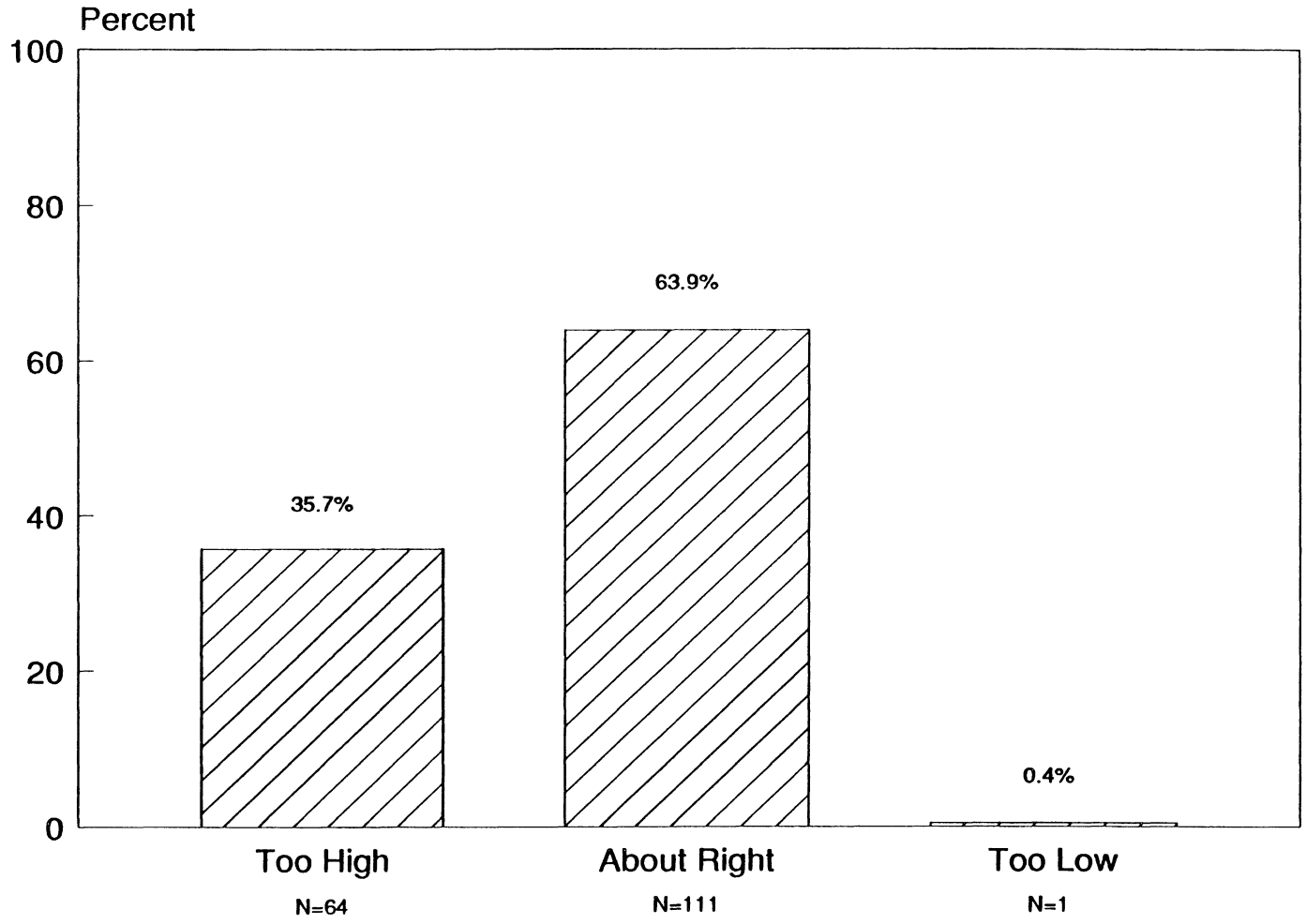

Figure 4.28: In your community, do you think the current number of stores that sell carry-out beer and wine is too high, too low, or about right?

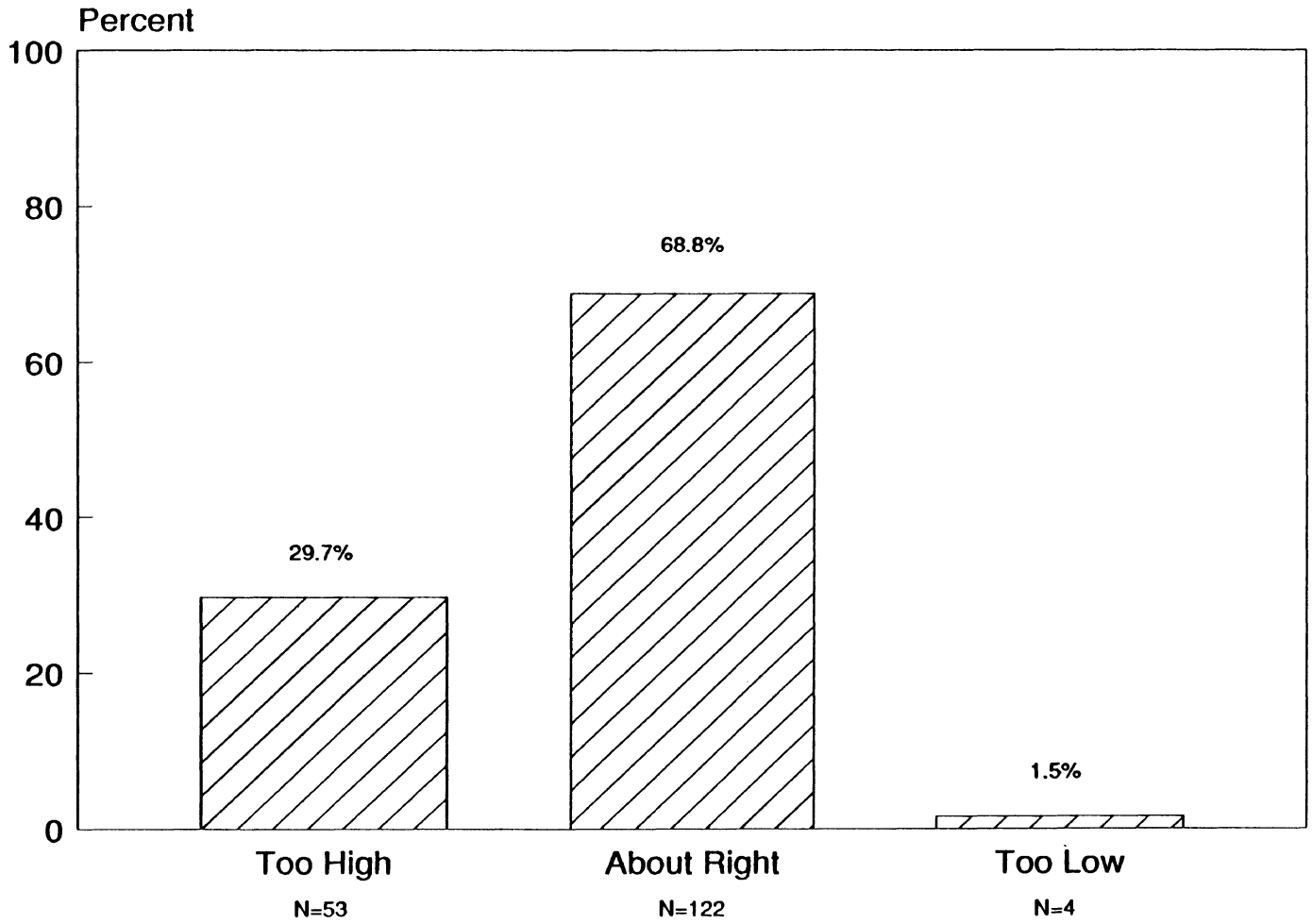

Figure 4.29: In your community, do you think the current number of bars that serve alcoholic beverages is too high, too low, or about right?

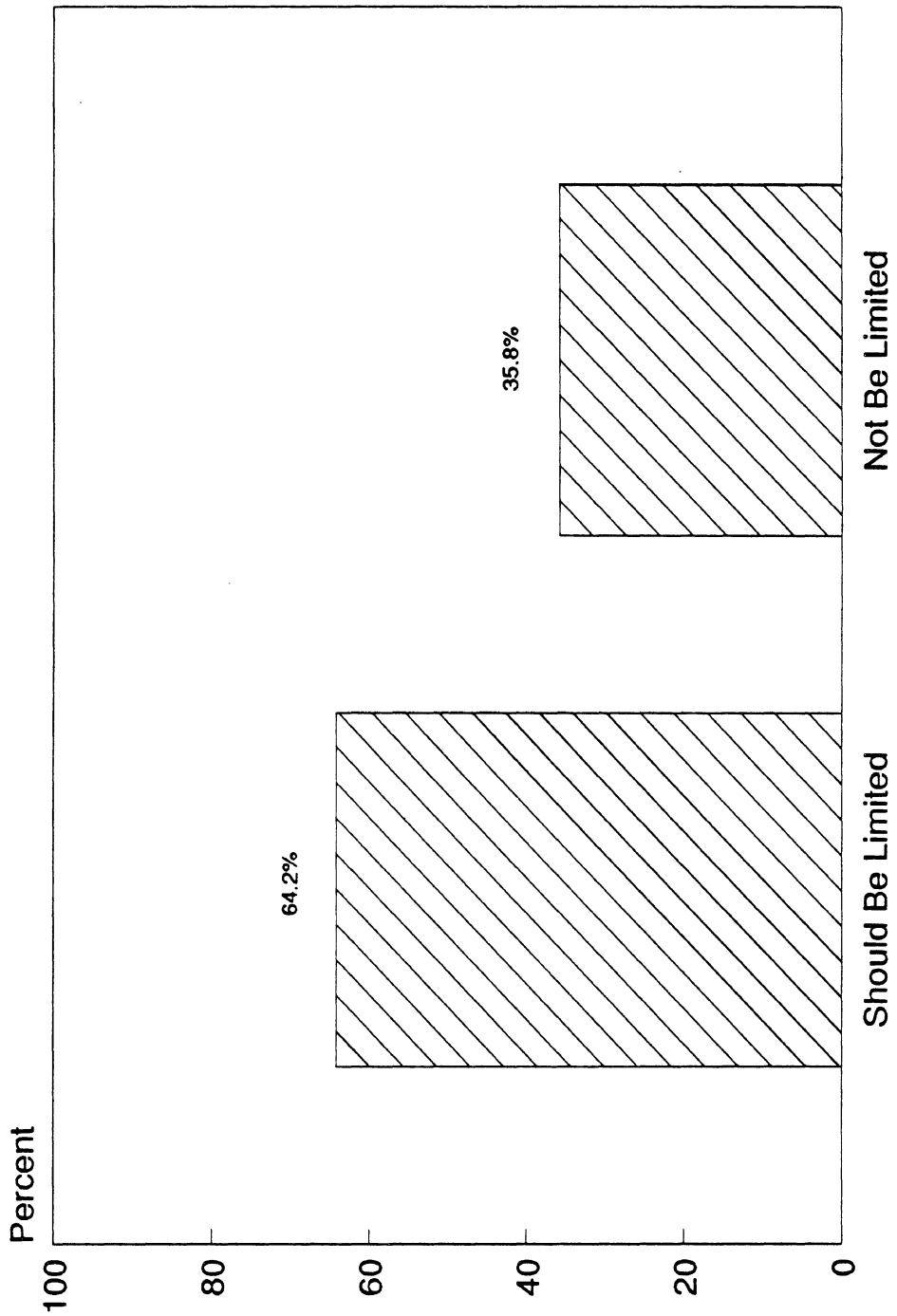

Figure 4.30: Do you think the number of stores or bars selling alcoholic beverages should or should not be limited by government agencies?

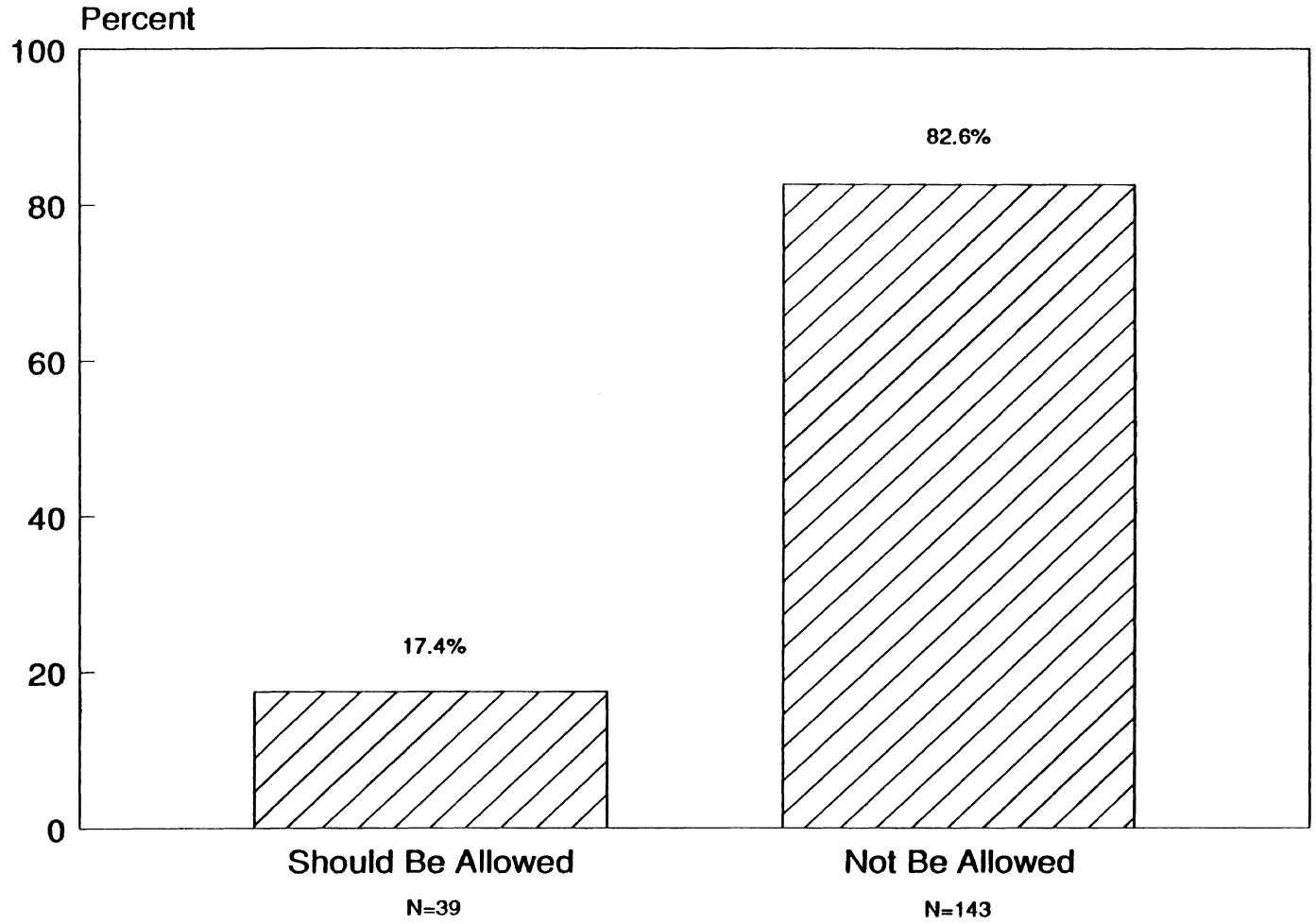

Figure 4.31: Should gas stations and other stores that sell gasoline be allowed to sell beer and wine?

Subjects were asked whether they favored or opposed a number of strategies for raising revenue to pay for programs designed to reduce alcohol-impaired driving (Figures 4.32 through 4.37). Most favored increasing the fee for a driver's license (64%), and increasing car licensing fees (55%). Overwhelming support was found for increasing taxes on alcoholic beverages (87%). The majority opposed increasing the state sales tax (60%), increasing the state income tax (67%), or increasing the gasoline tax (72%).

We asked respondents to estimate their alcohol consumption.[3] Results were consistent with national alcohol surveys. Most individuals drink little or no alcohol. In our sample, almost three-quarters drink alcoholic beverages no more than once or twice a month (Figure 4.38). A small number drink more than once a week but not every day (12%) or every day (2%).

More important in terms of highway safety is the frequency of intoxication. Our measure of intoxication is consuming four or more drinks within two hours.[4] Based on this measure, almost a quarter of the repondents admitted becoming intoxicated at least once in the previous two weeks (Figure 4.39). Of those who reported becoming intoxicated in the last two weeks, the majority of drinking occurred at their own home (53%), or at someone else's home (20%; Figure 4.40). Twenty-seven percent of those who recently became intoxicated reported driving after drinking on that occasion (Figure 4.41). Half of the individuals who drove while intoxicated believed they would **not** have been in trouble for drinking too much if they had been pulled over by the police (Figure 4.42).

4.2.6 Occupant Protection

Almost all respondents favored the law requiring motorcycle helmet use (Figure 4.43). Among the three respondents who reported having driven a motorcycle in the week prior to the interview, all reported wearing a helmet. We asked how likely it is that a driver who is pulled over for speeding who is not belted would be ticketed for lack of seat belt use. Almost a third thought that one was **not** likely to be cited for failure to use belts, but two-thirds thought there was at least a "good chance" of a ticket (Figure 4.44).

Self-reported seat belt use in this telephone survey greatly overestimated actual seat belt use observed at a probability sample of intersections throughout the state (Wagenaar and others, 1987). Mean self-reported seat belt use was 90% (Figure 4.45), but observed seat belt use in July 1987 was only 45%. Seventy-eight percent of the survey respondents reported using their

---

3. Note that about a third of all alcoholic beverages sold are not identified in self-reported consumption. That is, subjects underreport their drinking.

4. A drink was defined as 12 ounces of beer, 4 ounces of wine, or 1.5 ounces of liquor.

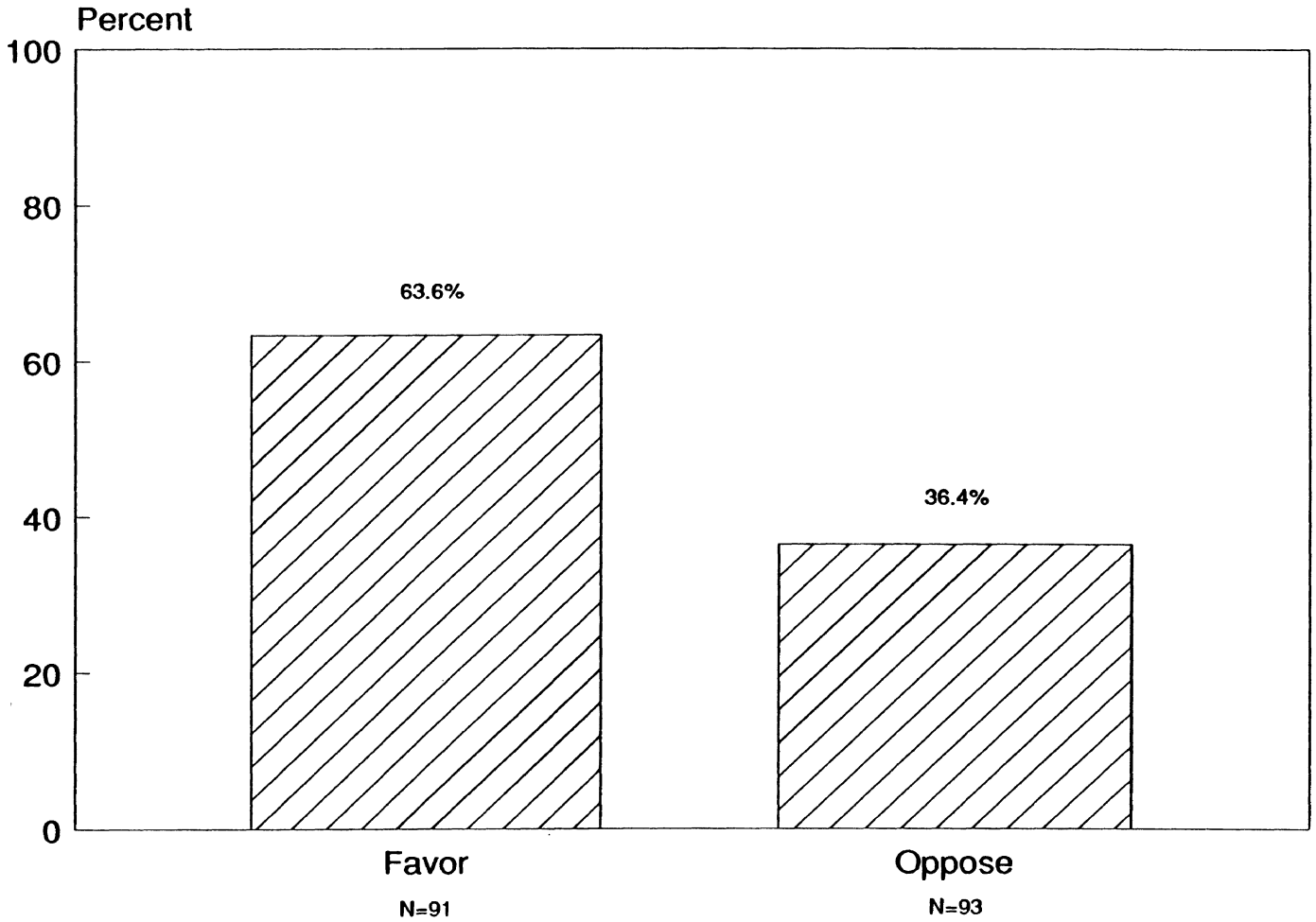

Figure 4.32: Would you favor or oppose an increase in the fee for a driver's license as a way to pay for programs to reduce drunk driving?

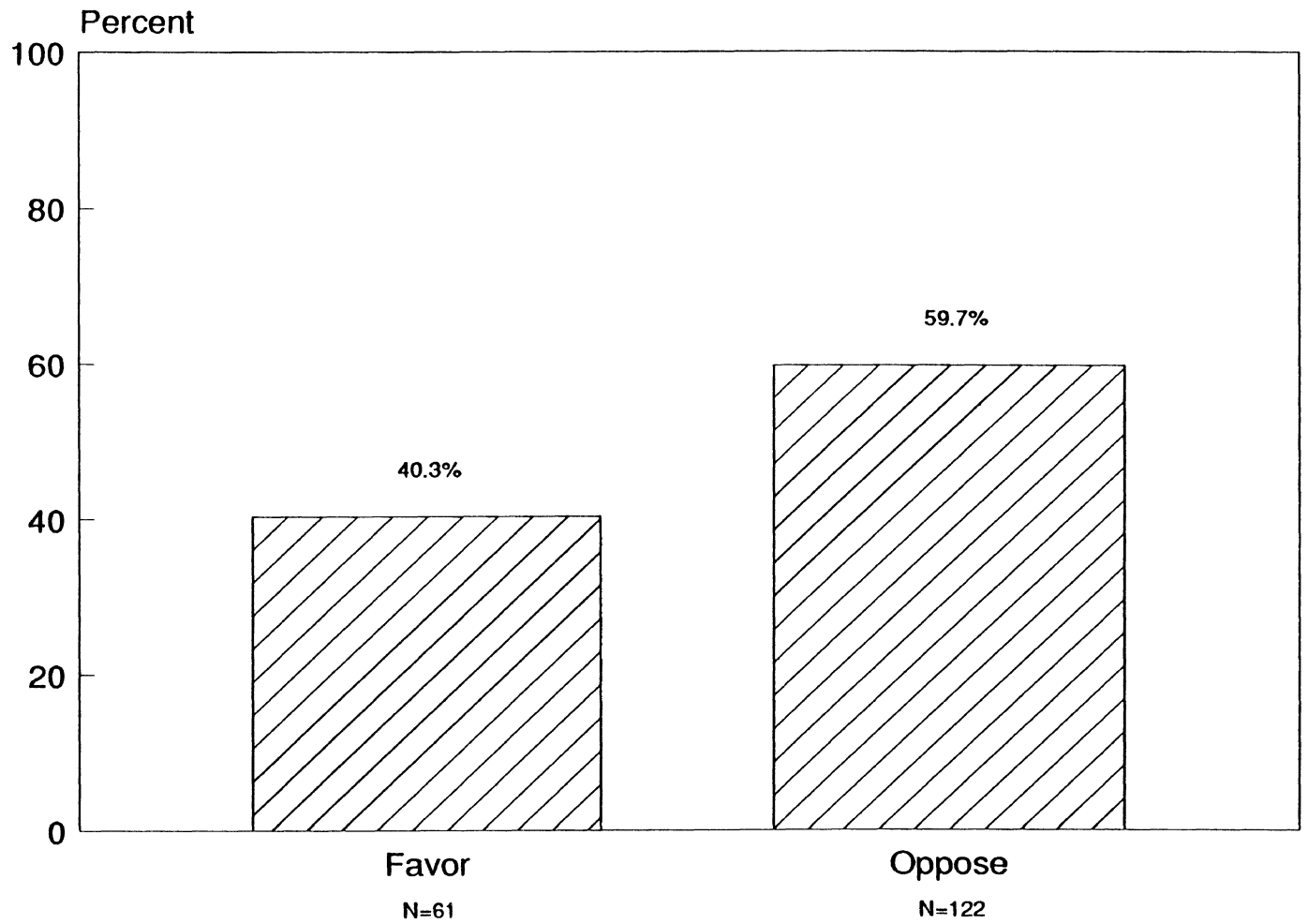

Figure 4.33: Would you favor or oppose an increase in the state sales tax to pay for programs to reduce drunk driving?

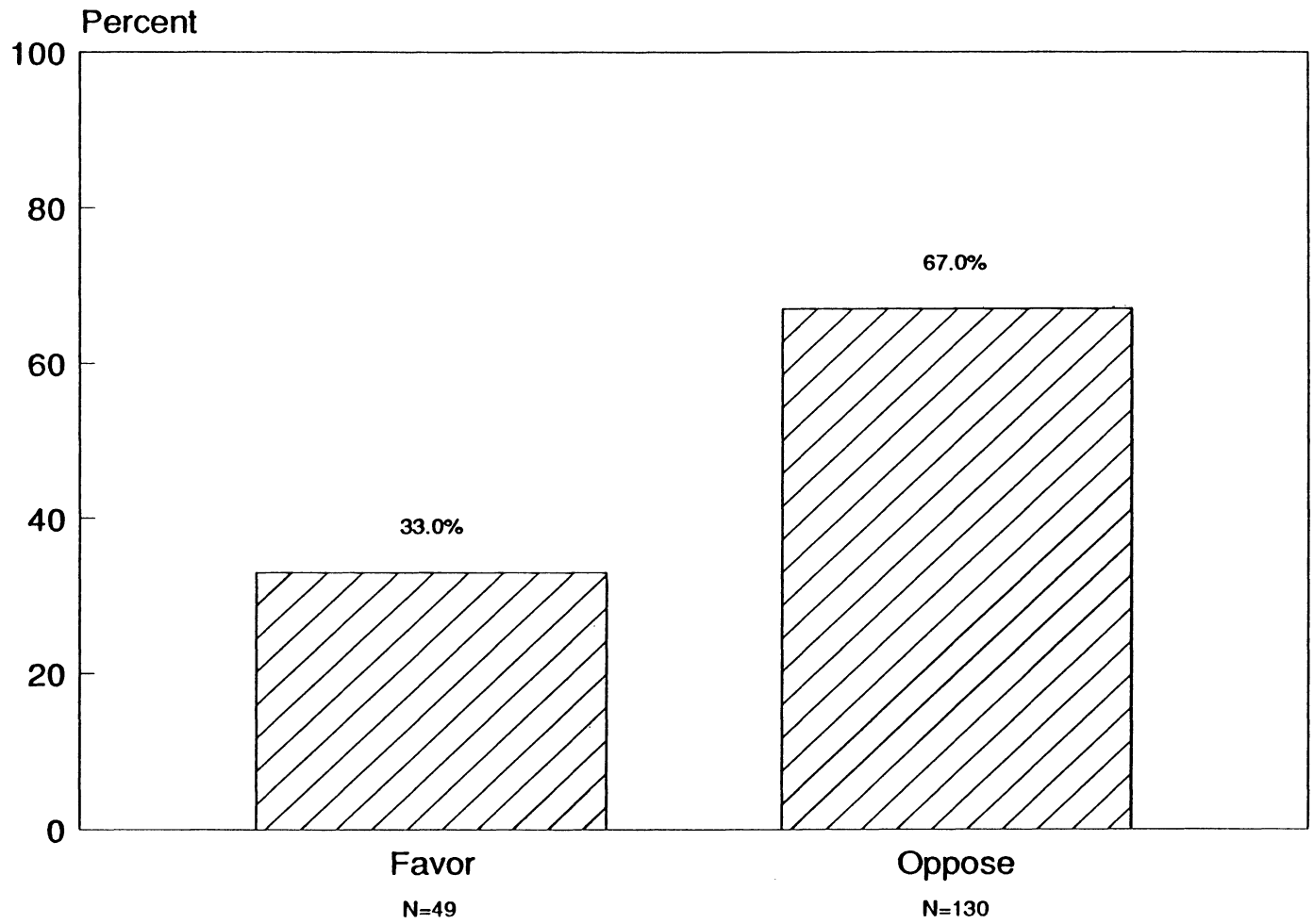

Figure 4.34: Would you favor or oppose an increase in the state income tax to pay for programs to reduce drunk driving?

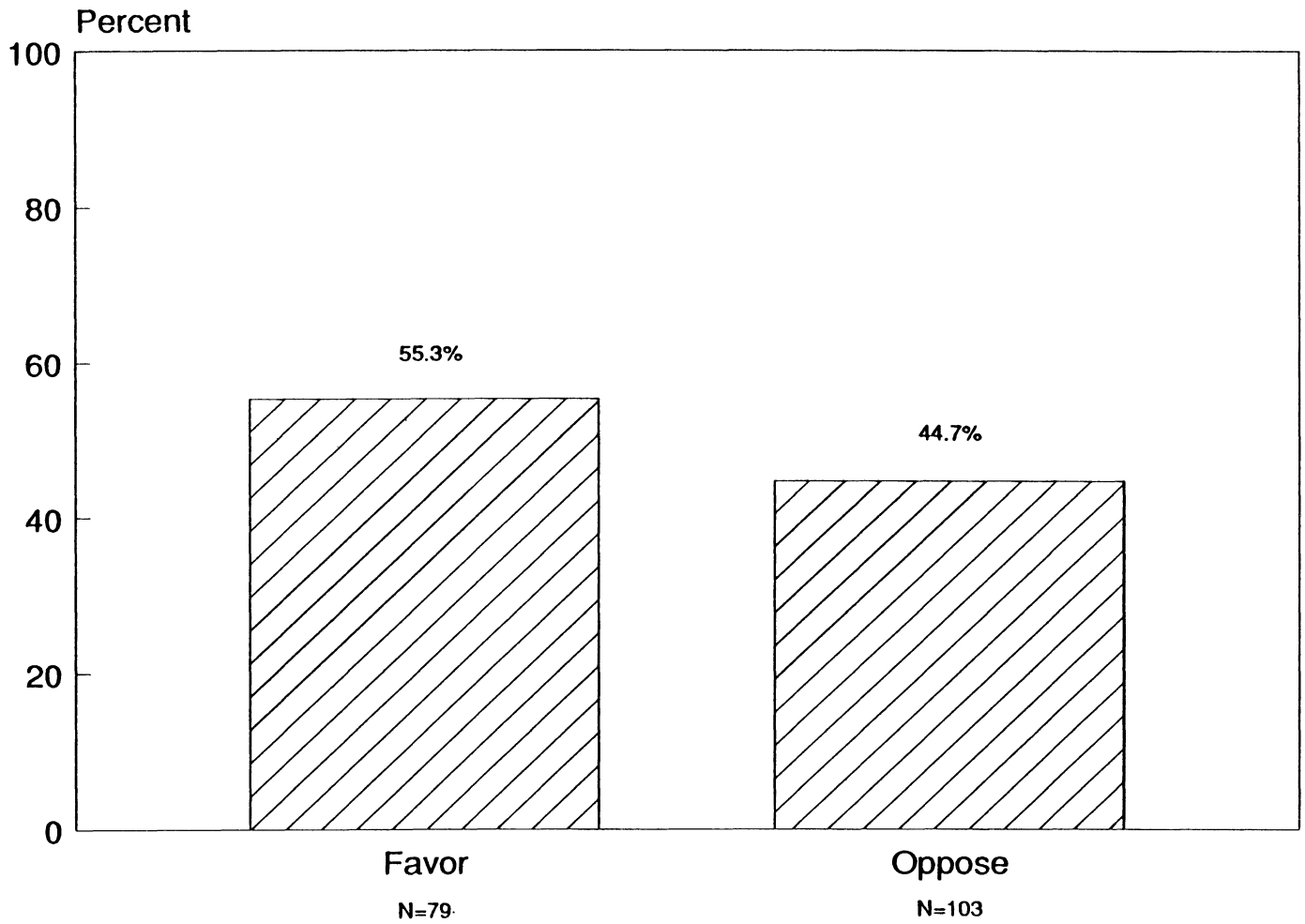

Figure 4.35: Would you favor or oppose an increase in the fee for car license plates to pay for programs to reduce drunk driving?

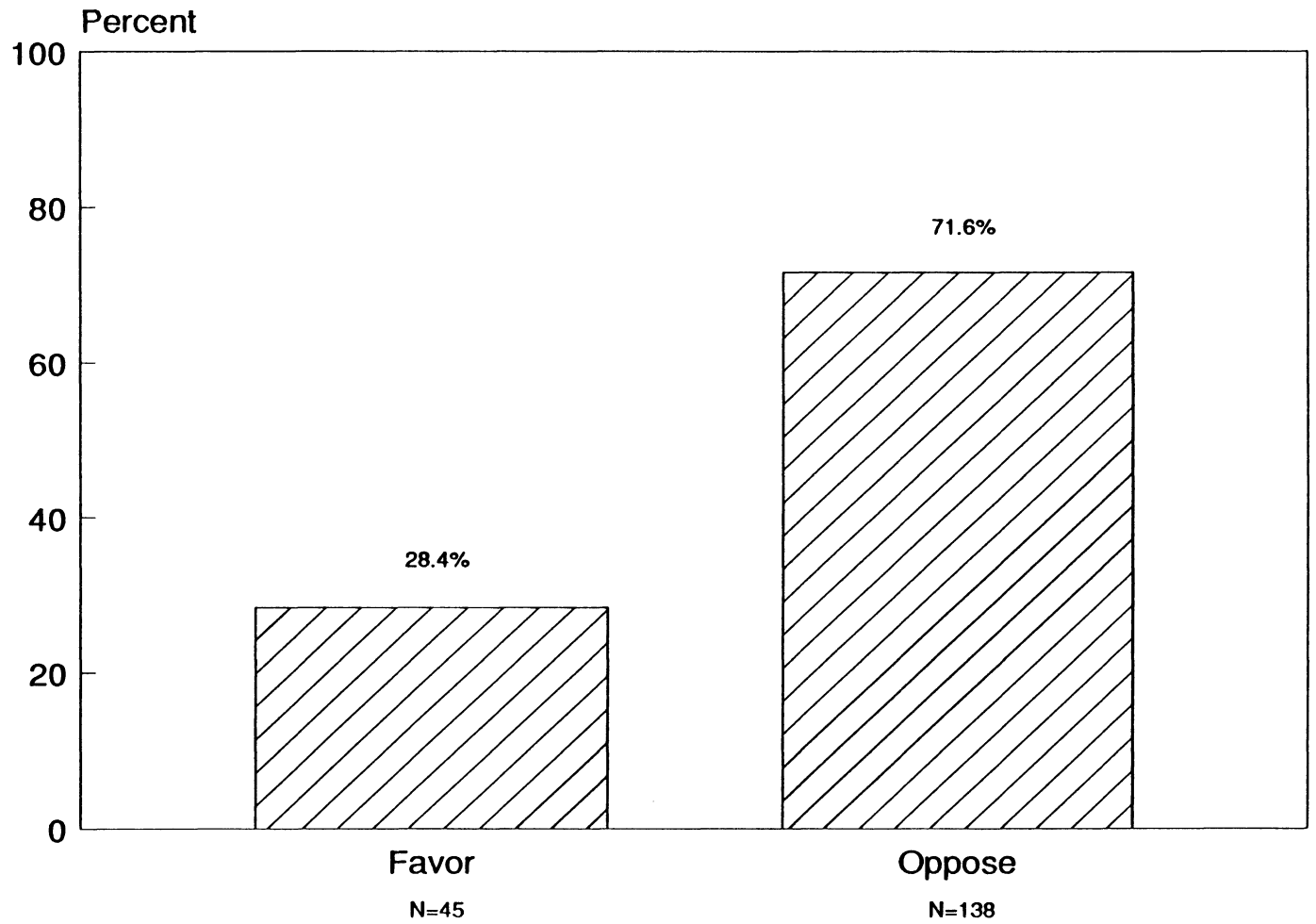

Figure 4.36: Would you favor or oppose an increase in the tax on each gallon of gas sold to pay for programs to reduce drunk driving?

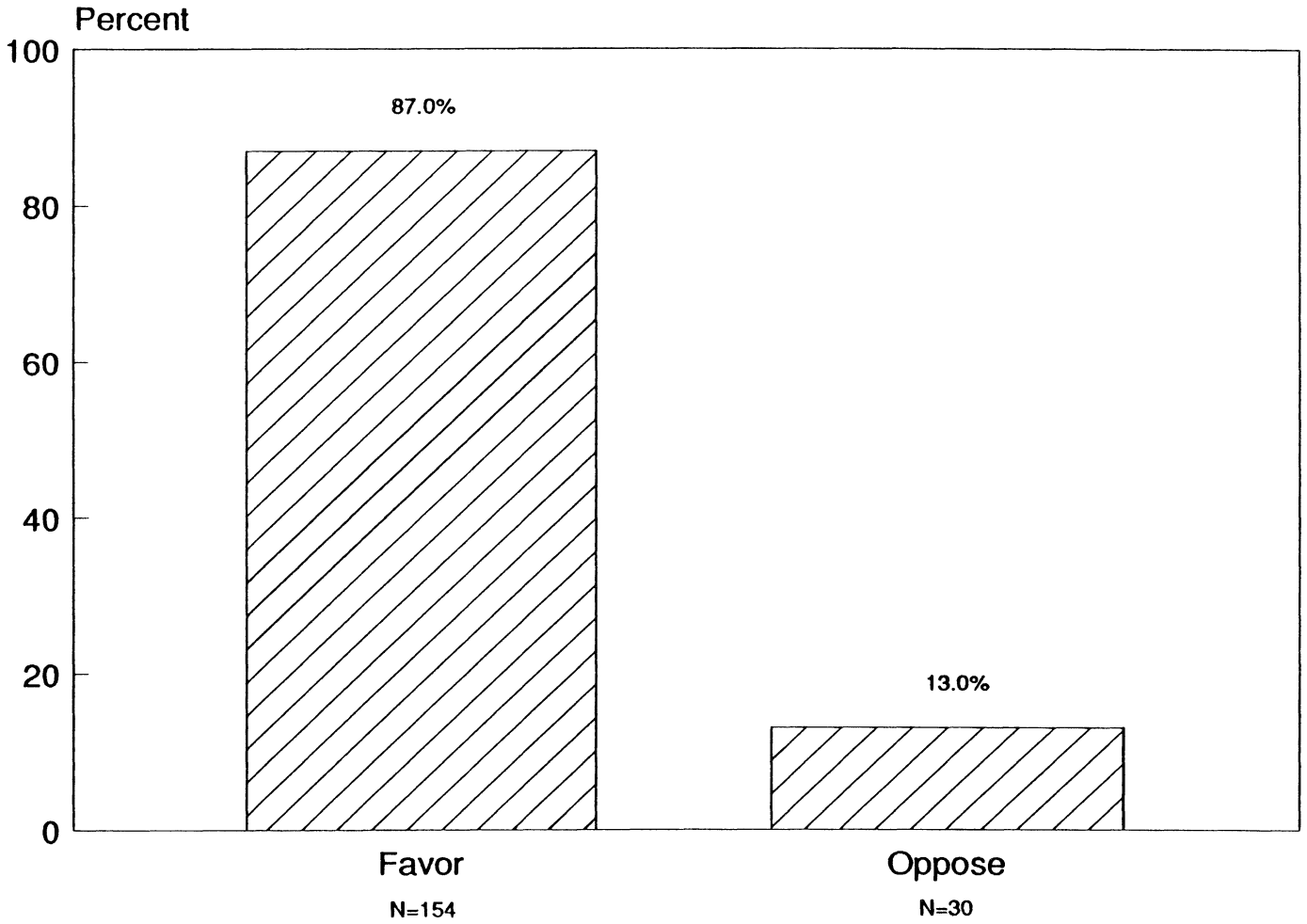

Figure 4.37: Would you favor or oppose an increase in the tax on each bottle of beer, wine, or liquor sold to pay for programs to reduce drunk driving?

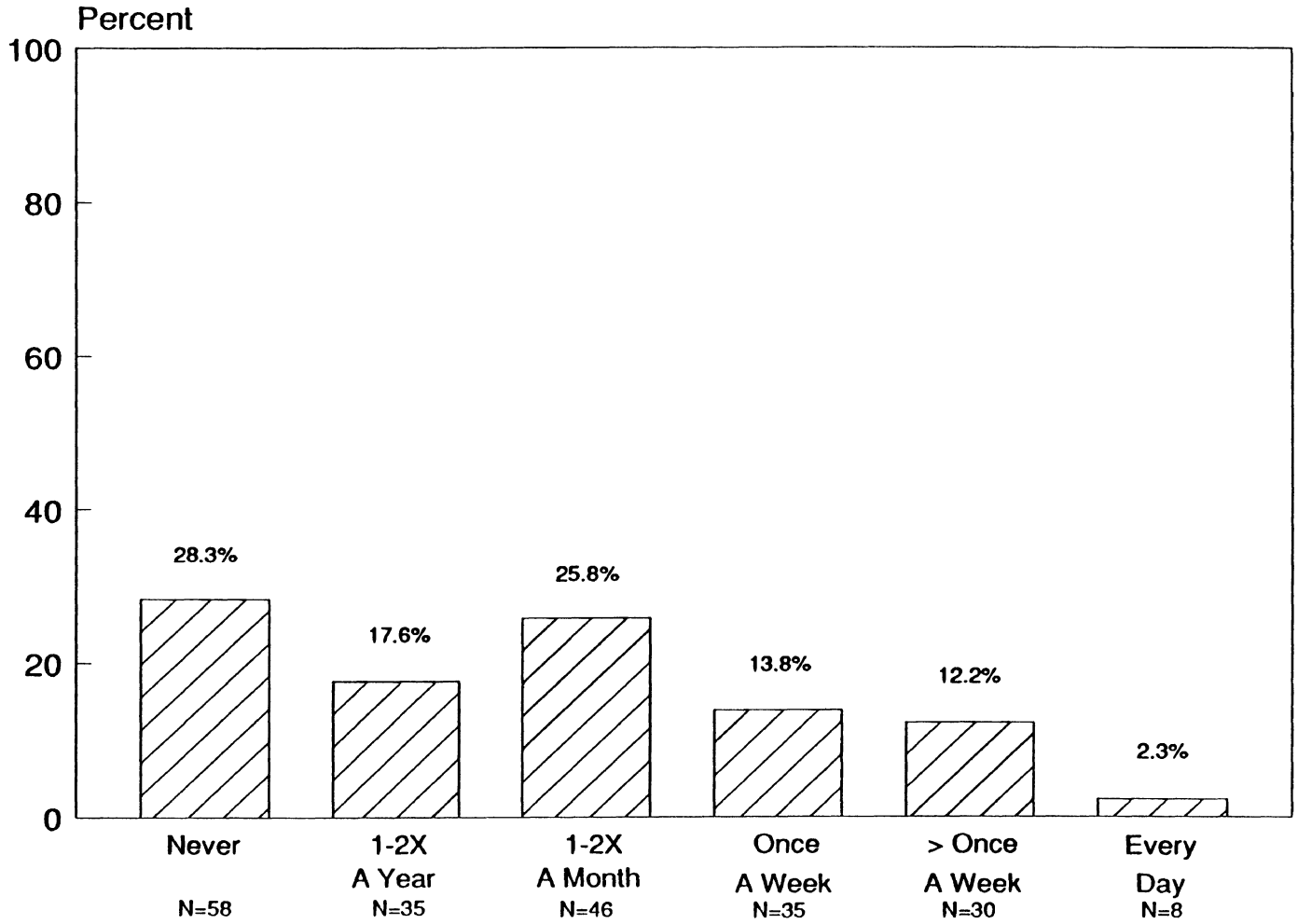

Figure 4.38: How often would you say that you drink alcoholic beverages? Would you say that you never drink, that you drink once or twice a year, once or twice a month, once a week, more than once a week, or every day?

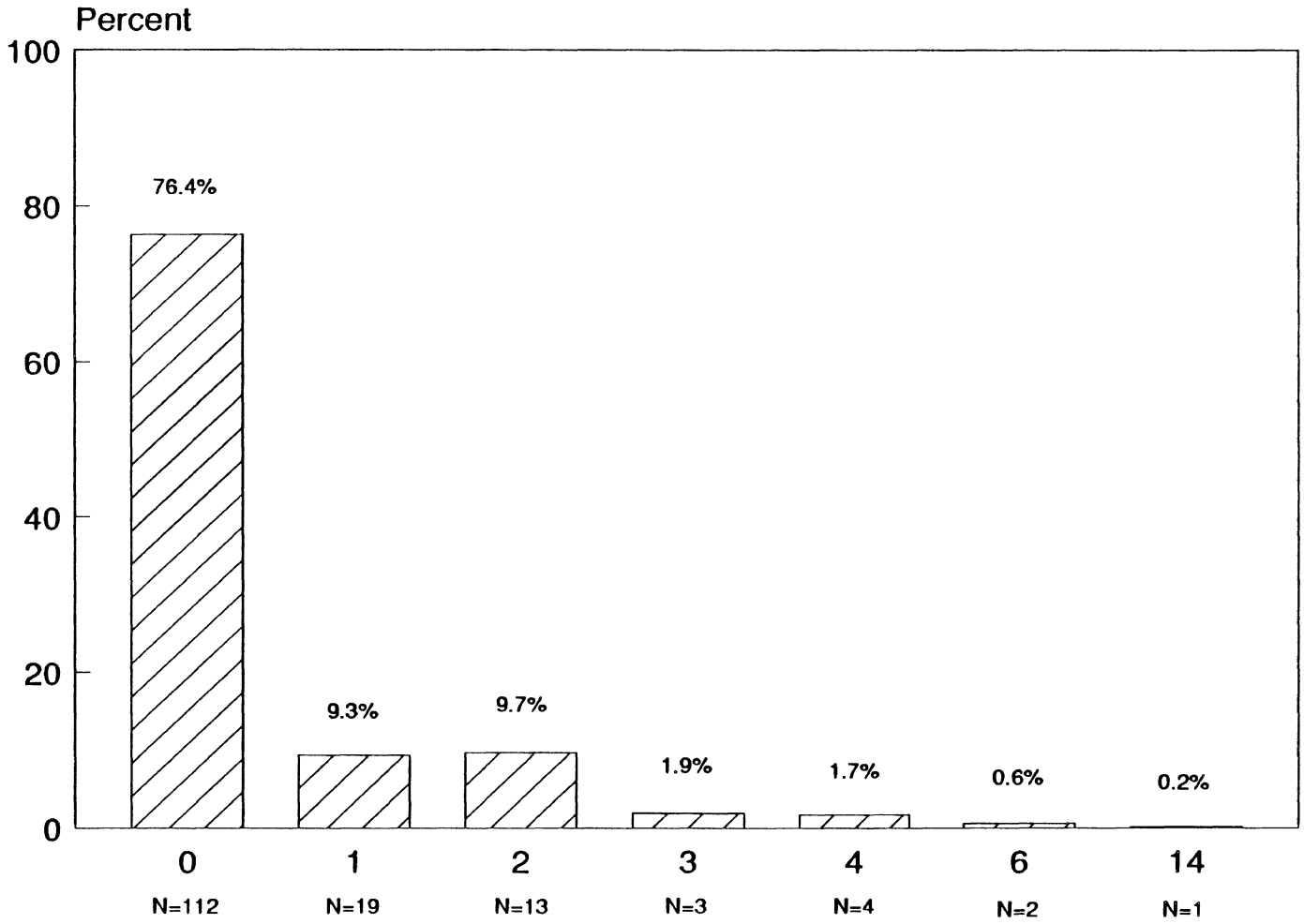

Figure 4.39: Thinking about any drinking you may have done in the last two weeks, how many times did you have 4 or more drinks within two hours?

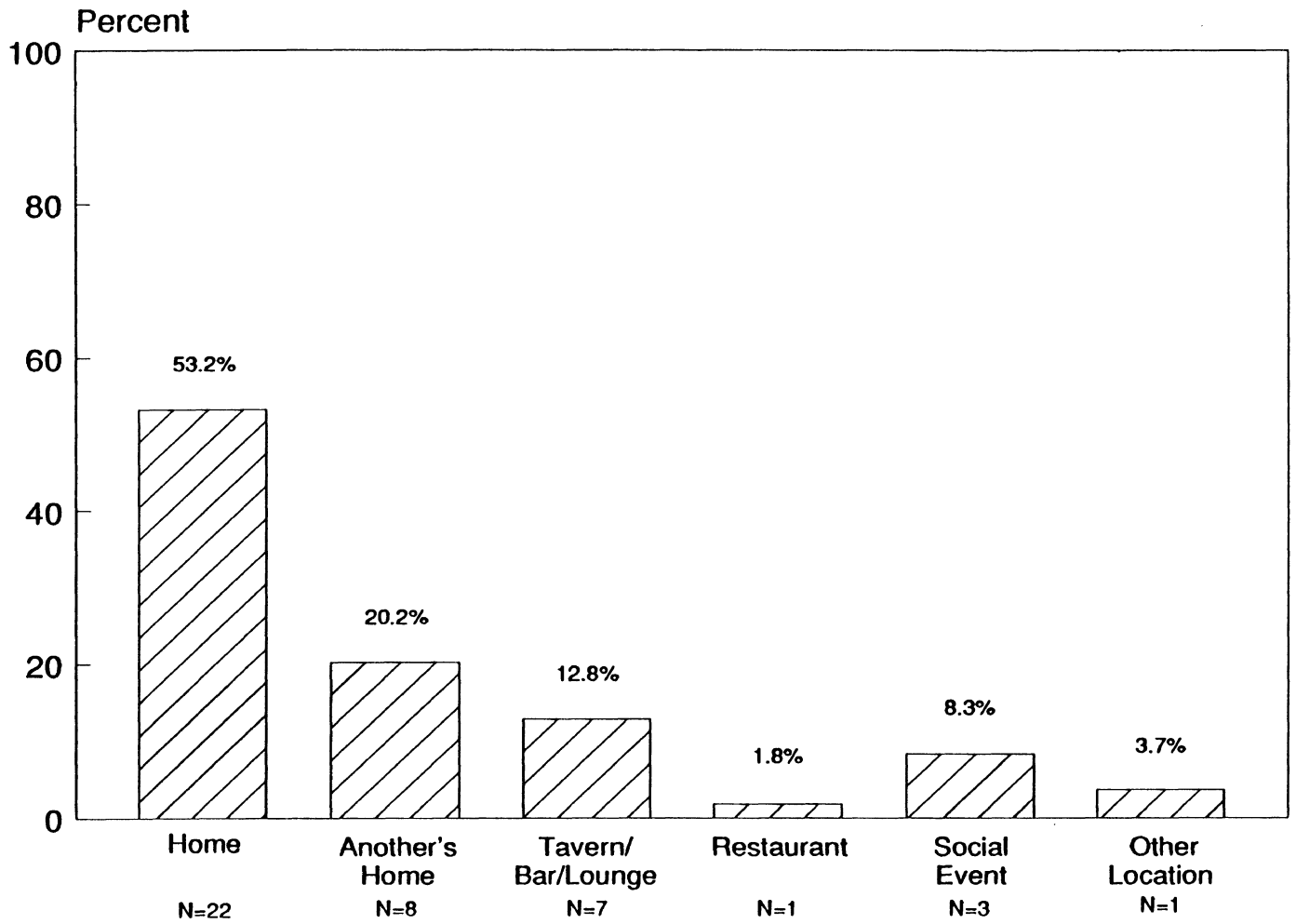

Figure 4.40: The last time you had 4 or more drinks, where were you drinking?

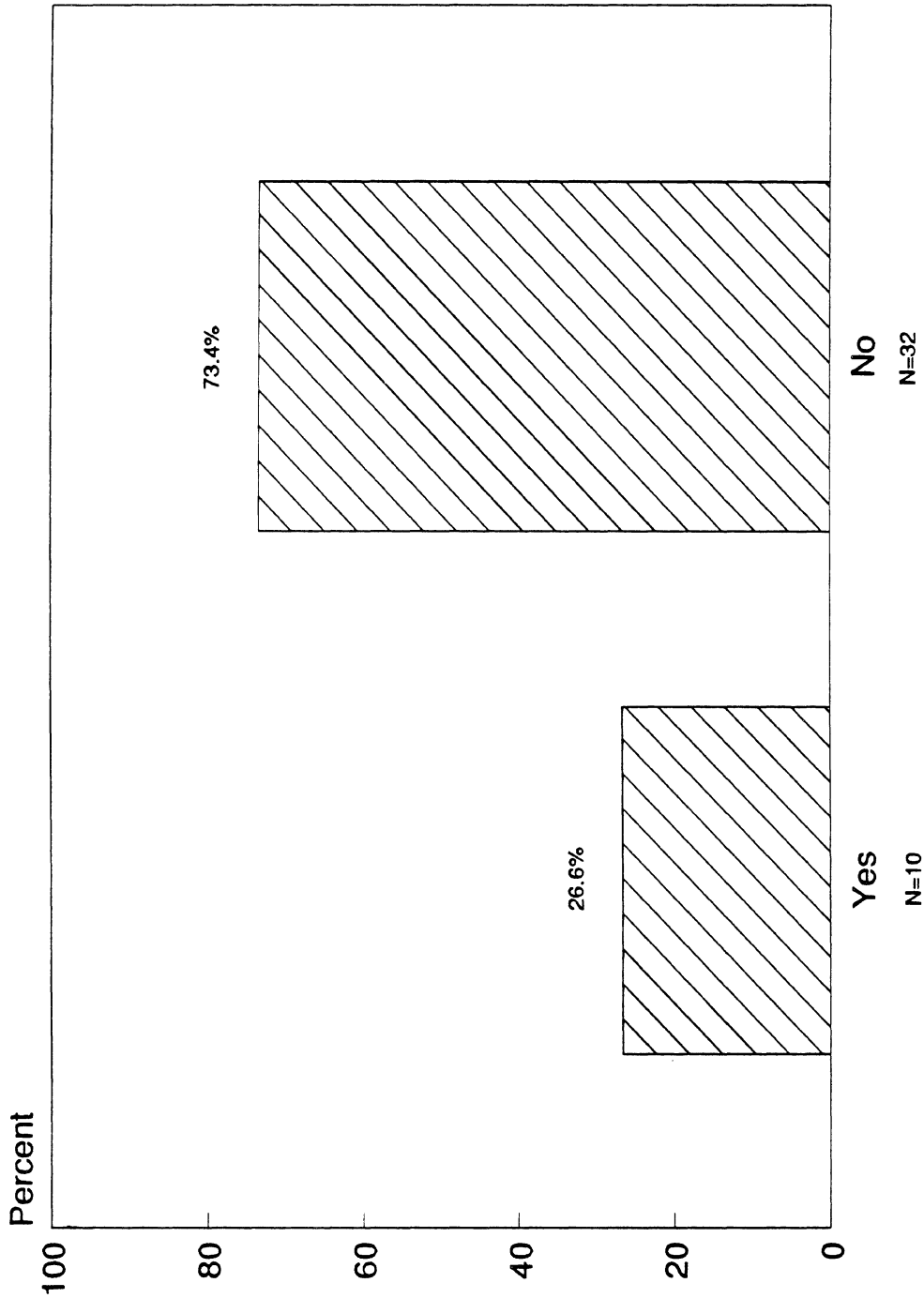

Figure 4.41: On that occasion, did you do any driving after drinking?

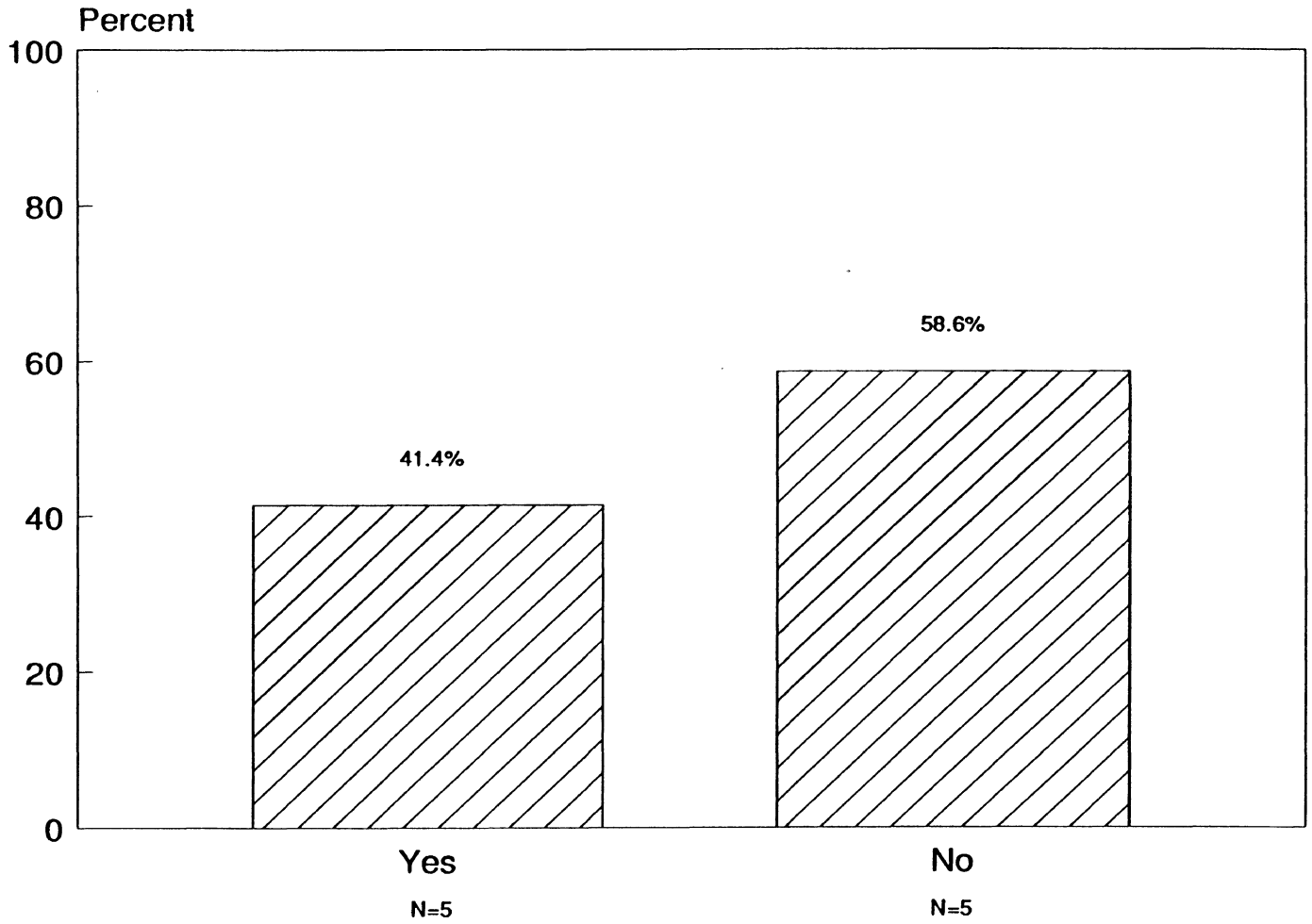

Figure 4.42: If you had been pulled over by the police on that occasion, do you think you would have been in trouble for drinking too much?

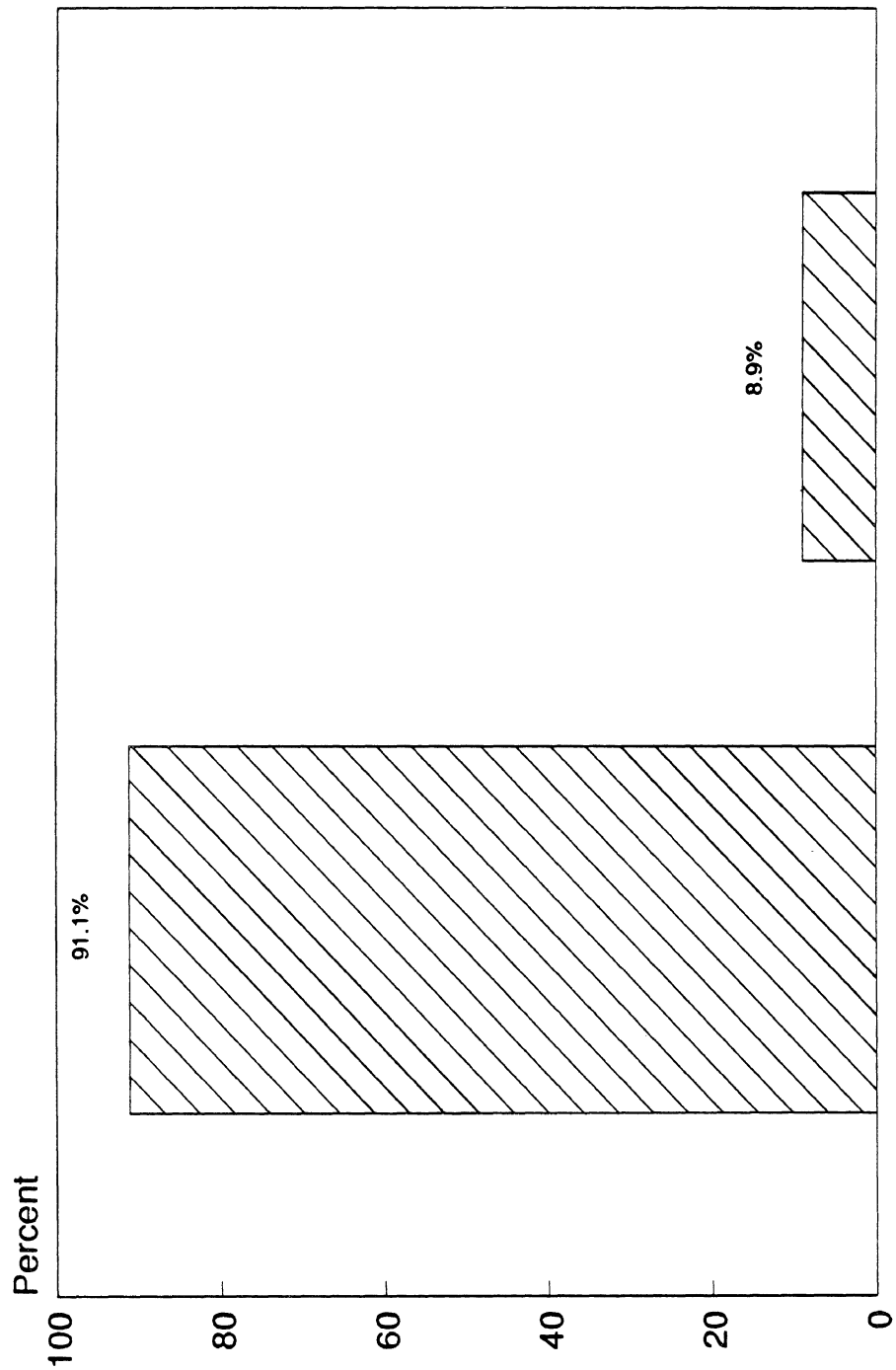

Figure 4.43: Do you favor or oppose the law requiring helmet use?

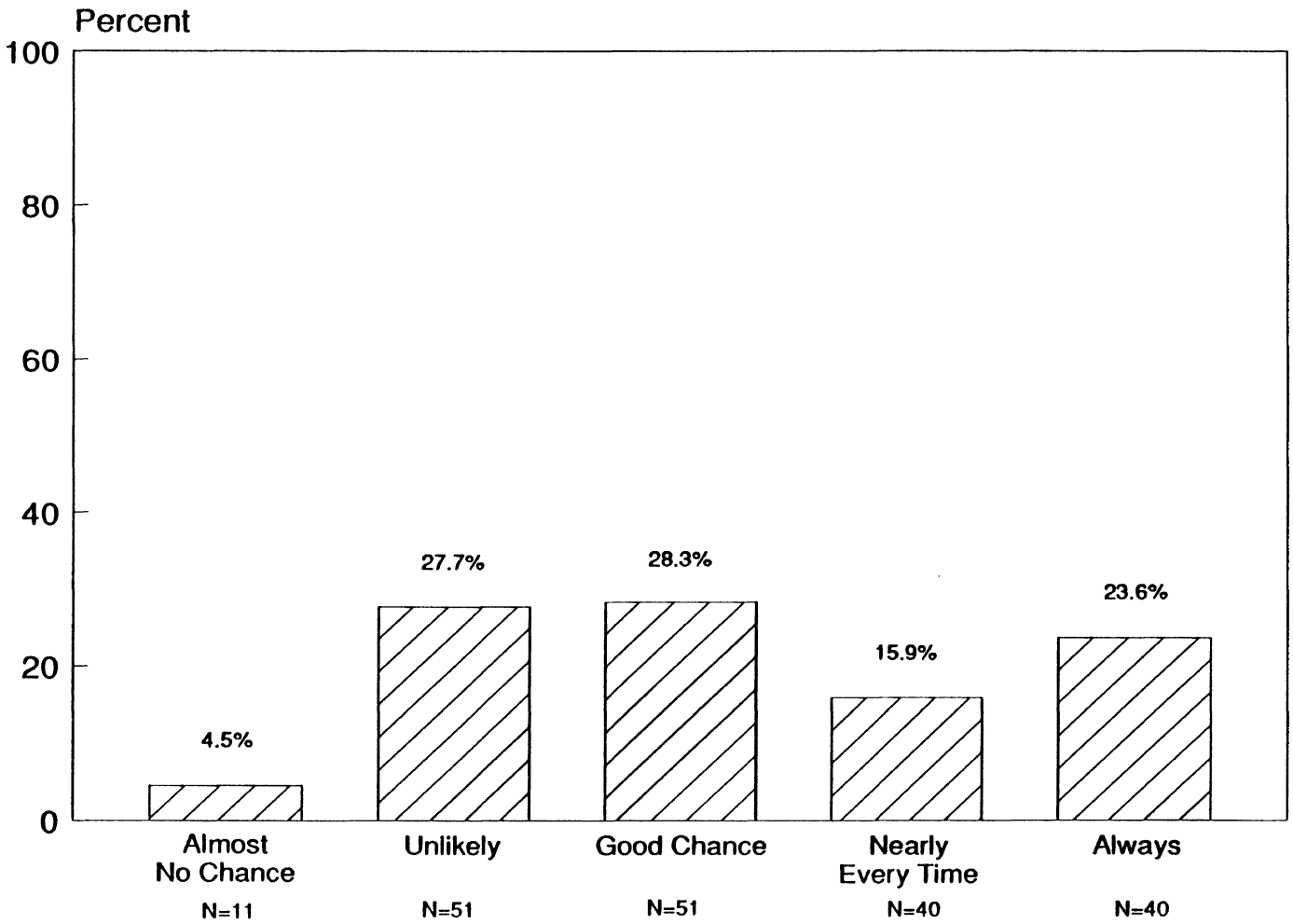

Figure 4.44: If a person is not using a seat belt and is stopped for speeding, how likely is it they will get a ticket for not having a seat belt on? Would you say there is almost no chance they would get a ticket; it is unlikely, but it happens sometimes; there is a good chance of a ticket; they will get a ticket nearly every time; or they will always get a ticket for not having a seat belt on?

belts ten out of the last ten times they drove a car or truck. No respondents reported never using their belt or only using it during one out of the last ten trips. Given our knowledge of a substantial proportion of motorists who do not use seat belts, these results indicate the propensity of motorists to respond in a socially desirable manner, that is, reporting belt use even if they rarely or never use them.

Respondents were evenly split with respect to whether they thought people in other cars noticed whether they were wearing their seat belt (Figure 4.46). When asked how often they would wear a seat belt if their car was equipped with airbags, 56% of the respondents reported they thought they would always wear a seat belt even with airbags (Figure 4.47). When given a choice, most respondents reported they prefer a combination of airbags and seat belts as the occupant protection devices available in the car they drive, although a third preferred manual seat belts alone (Figure 4.48).

4.2.7 Driving Patterns

Almost all respondents reported having valid driver's licenses (Figure 4.49), and having driven a car, van, or pick-up truck during the week preceding the interview (Figure 4.50). Only three motorcyclists (Figure 4.51) and four truck drivers (Figure 4.52) were in the sample. Respondents report driving an average of 17,252 miles in the past year.

4.3 Conclusion

Results of this initial implementation of the Michigan Omnibus State Safety Survey with a sample of about 200 Michigan residents reveals a number of interesting patterns. Public support for some safety policies such as annual vehicle inspections and an increase in taxes on alcoholic beverages was overwhelming, while support for other policies such as banning radar detectors and youth curfew laws was more divided. These initial results point to the utility of periodic careful surveys of public opinion. Because of the relatively small sample size, estimates reported here have substantially larger sampling variances than estimates from the full implementation planned for the fall of 1987. In addition, the full implementation will allow detailed analyses of these opinions, attitudes, and reported behaviors stratified by demographic and other characteristics.

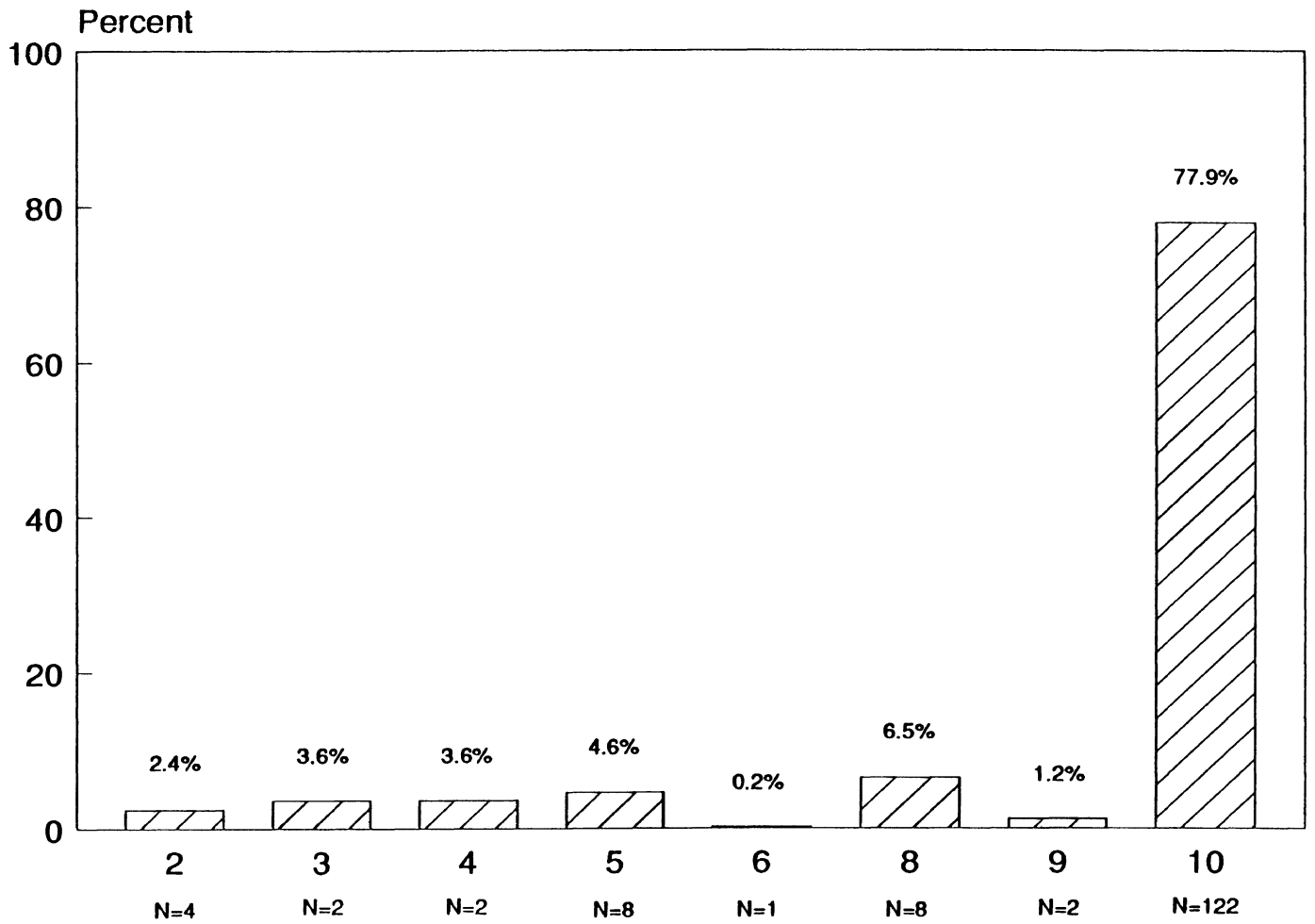

Figure 4.45: Of the last 10 times you drove in a car or truck, how many times did you use a seat belt when one was available?

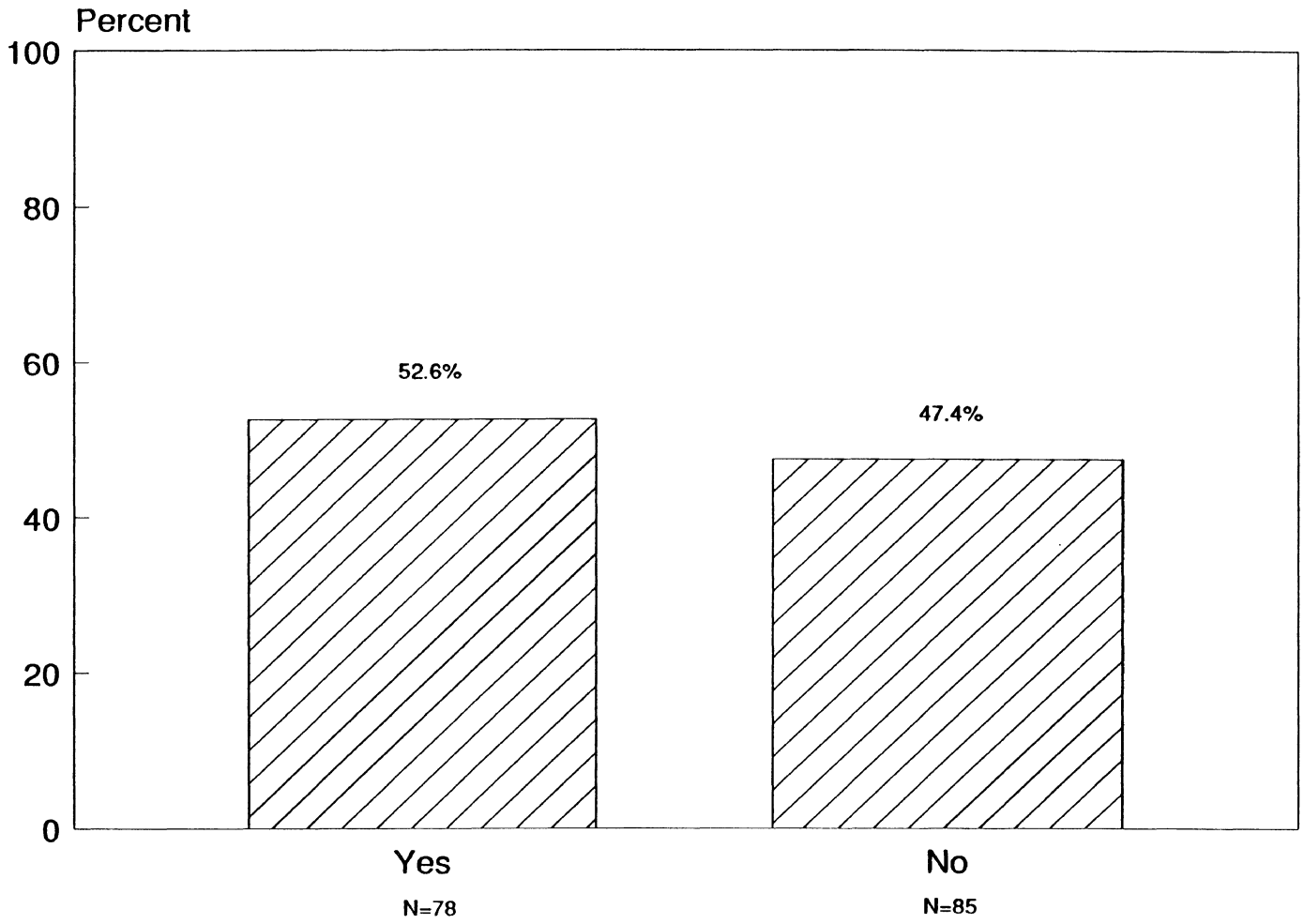

Figure 4.46: Do you think that people in other cars notice whether you are using your seat belt when you are driving your car or truck?

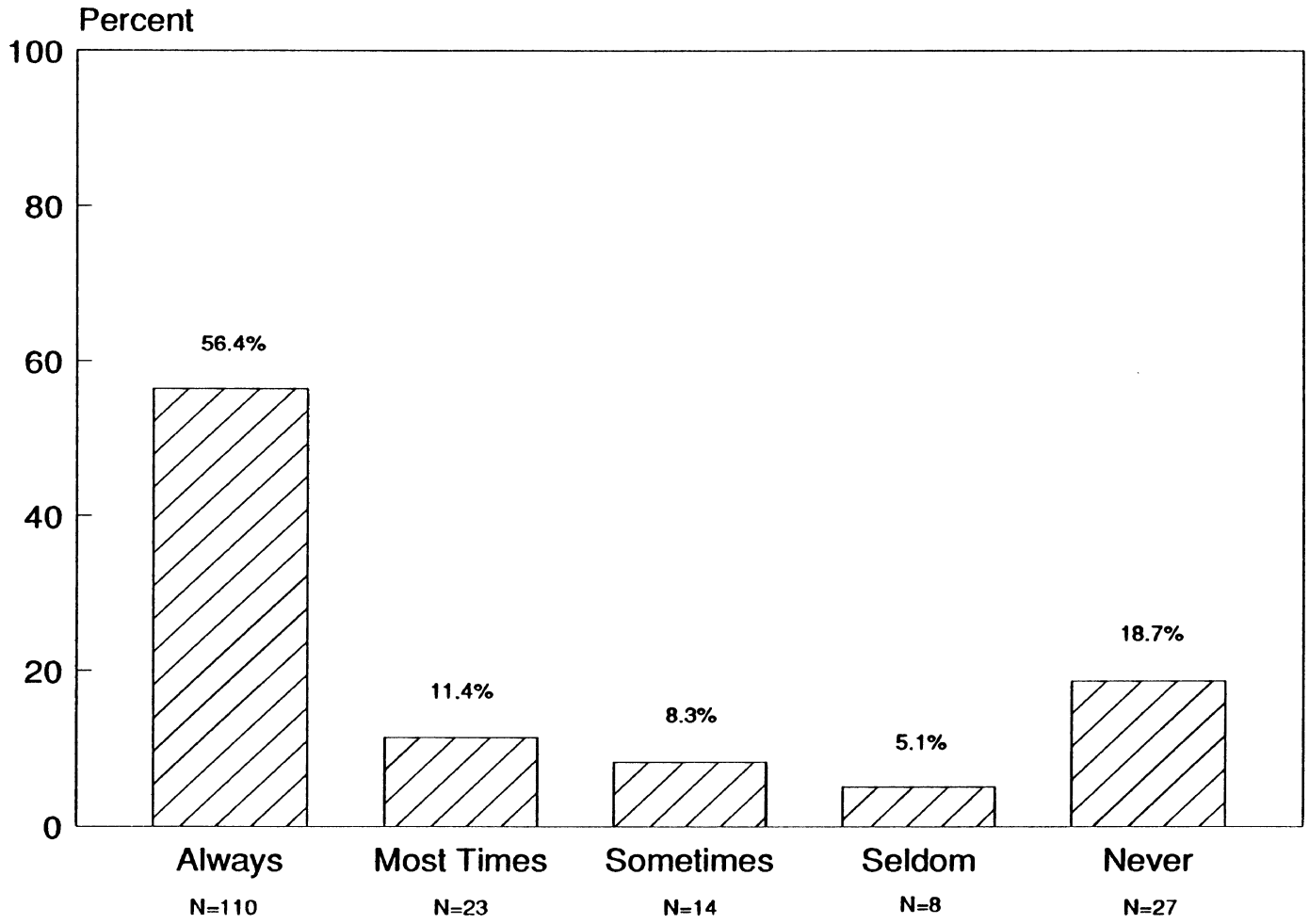

Figure 4.47: If your car had airbags, how often would you use your seat belt--always, most of the time, some of the time, seldom, or never?

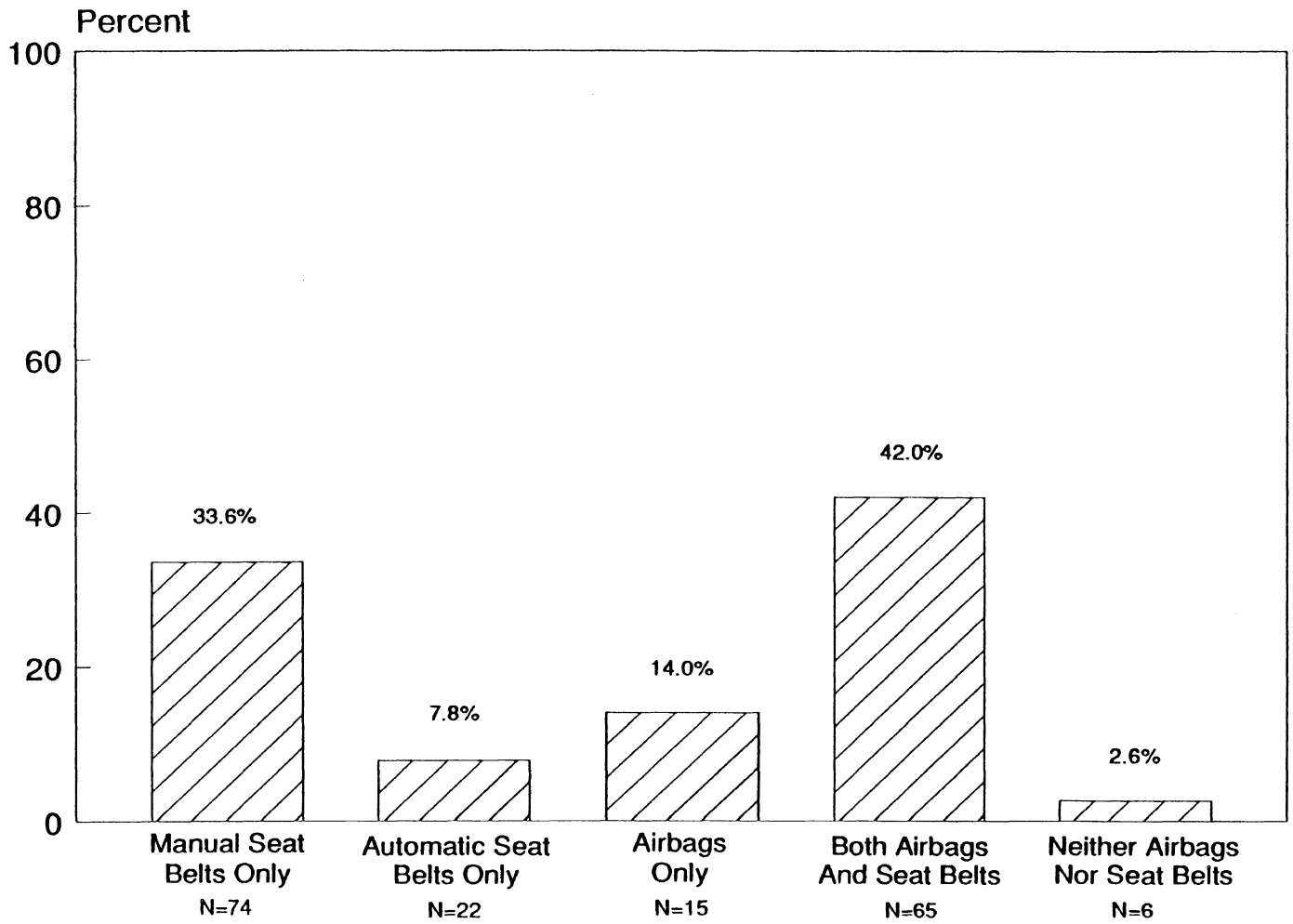

Figure 4.48: If you had your choice--and there was no difference in cost--would you prefer to drive a car equipped with only seat belts that you have to buckle yourself; only seat belts that automatically fit around you when you get in the car; only airbags; airbags and seat belts; neither seat belts nor airbags?

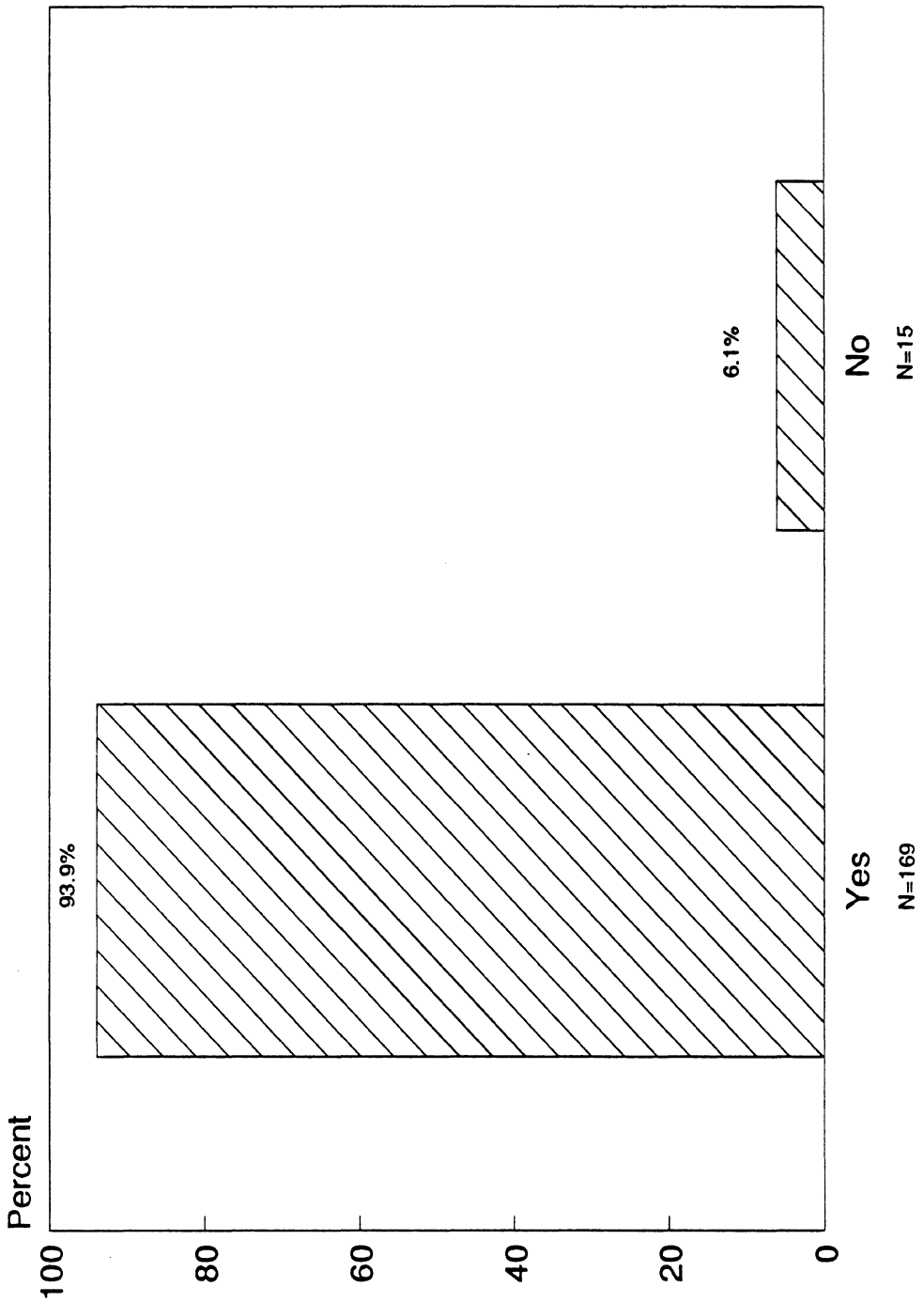

Figure 4.49: Do you have a valid driver's license?

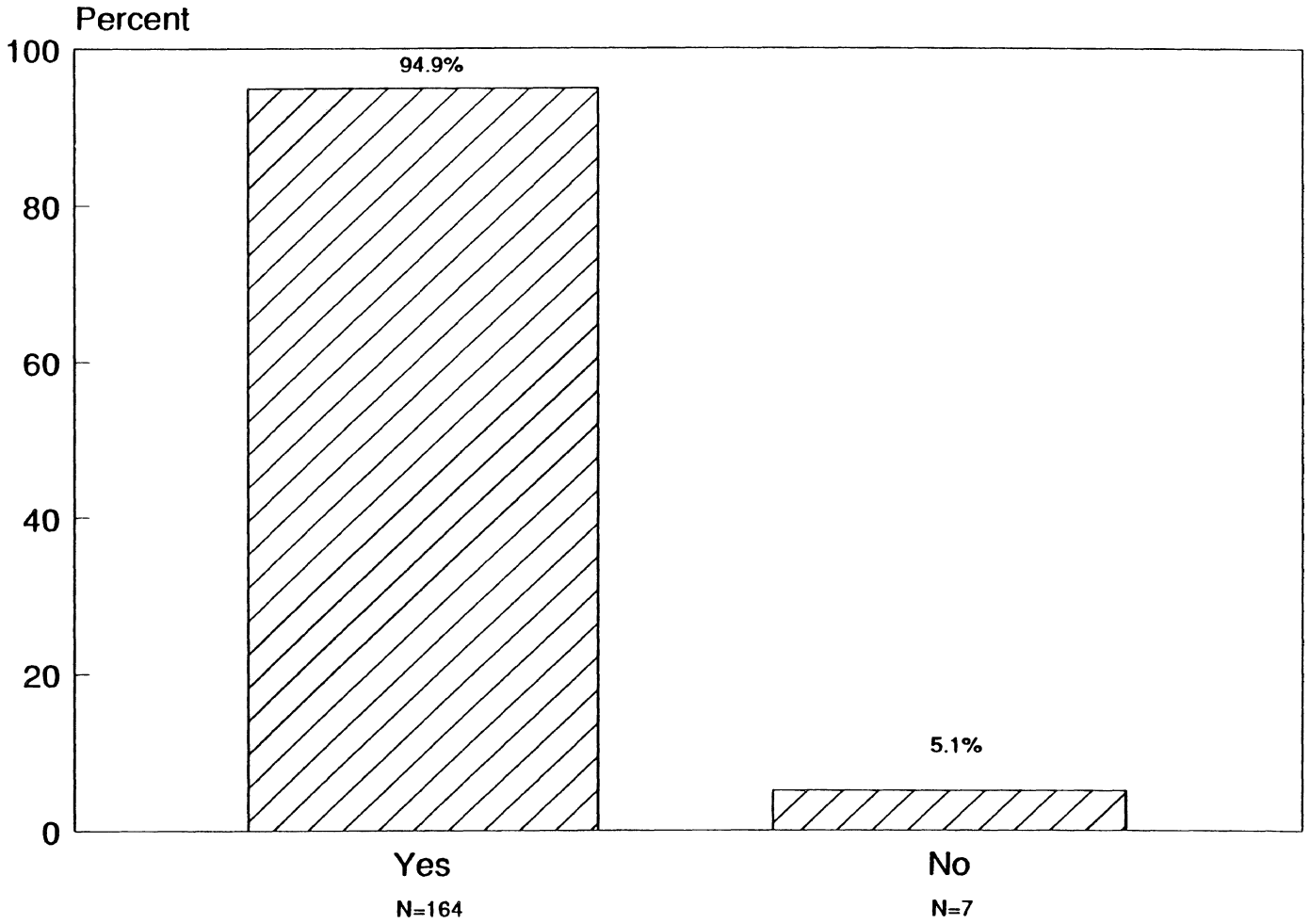

Figure 4.50: During the last week, did you drive a car, van, or a pick-up truck?

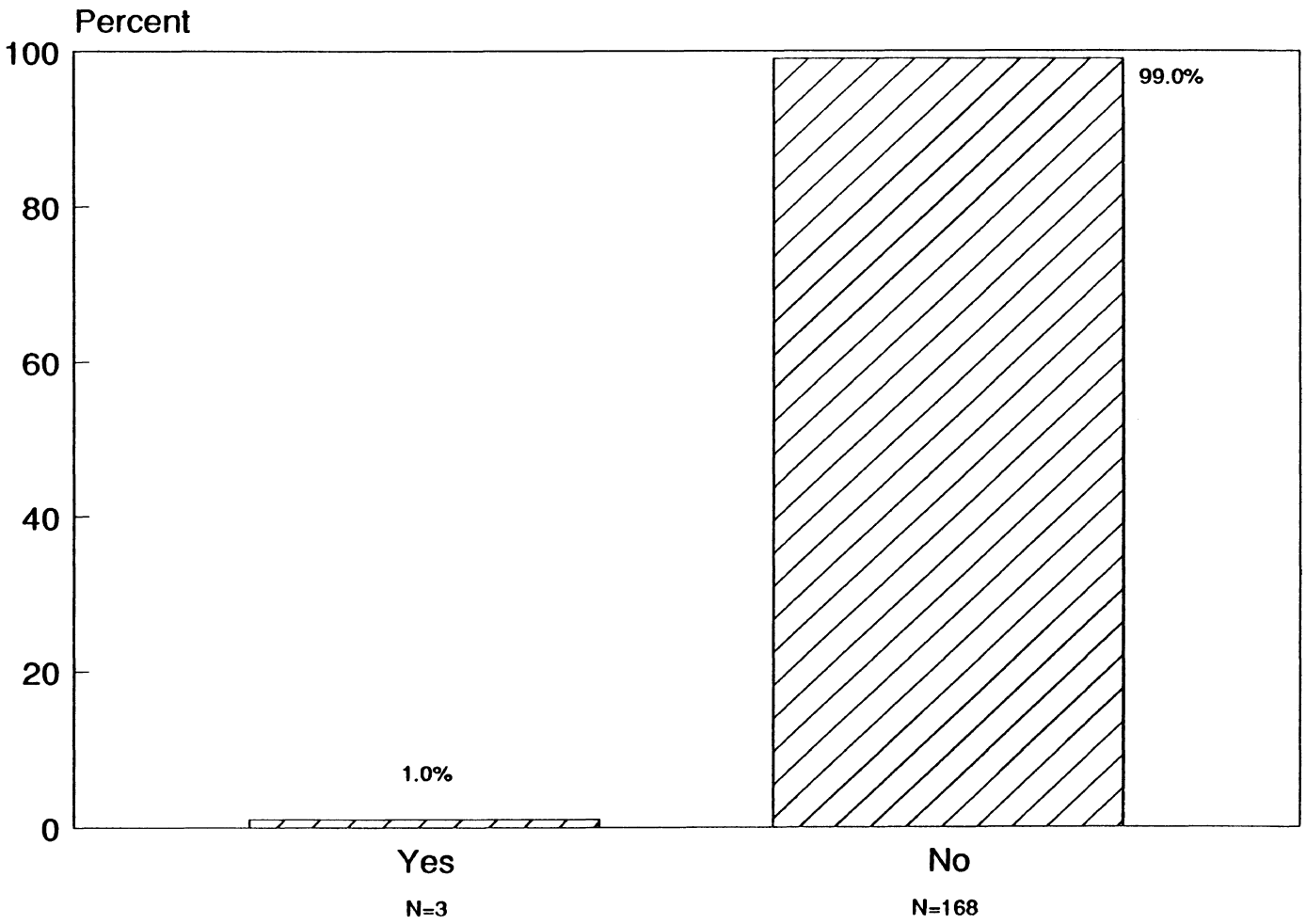

Figure 4.51: During the last week, did you drive a motorcycle?

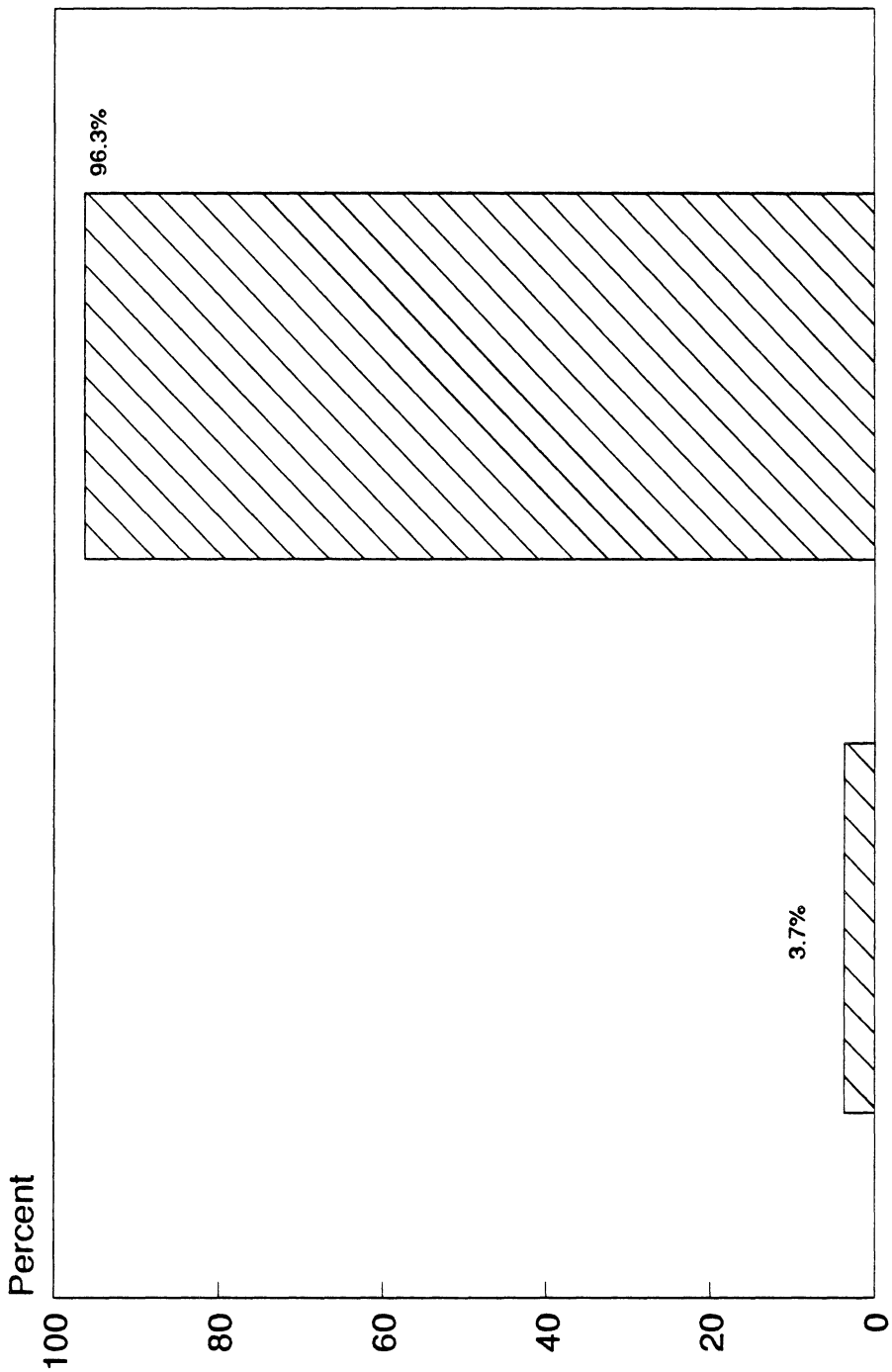

Figure 4.52: During the last week, did you drive a semi-trailer truck?

5 References

Traugott, M.W., Groves, R.M., and Lepkowski, J.M. "Using Dual Frame Designs to Reduce Nonresponse in Telephone Surveys." St. Petersburg, FL: Paper presented at the *Annual Meeting of the American Association for Public Opinion Research*, May, 1986.

Wagenaar, A.C., Molnar, L.J., Businski, K.L. *Direct Observation of Seat Belt Use in Michigan: July 1987.* Ann Arbor, MI: The University of Michigan Transportation Research Institute, September, 1987.

U.S. Department of Commerce, Bureau of the Census. *State and Metropolitan Area Data Book 1986, Statistical Abstract Supplement*, Washington D.C.: U.S. Government Printing Office, April, 1986.

Appendix A

Description of Computer Assisted Telephone Interviewing System

Since 1978 the Survey Research Center (SRC) at The University of Michigan has been active in the development of Computer Assisted Telephone Interviewing (CATI) system designs and is now using in production the third major design of such a software package, supported by a PDP 11/70 minicomputer located in the basement of the Institute for Social Research. The specifications for the software were developed by the Sampling, Field, and Coding sections of SRC and implemented by Amrigon Enterprises. At this point, scores of different surveys have successfully used the system.

Of chief concern to CATI users at SRC is the full integration of the CATI system into the administration of the telephone interviewing facility. This means that CATI is not merely the presentation of questions and the input of respondent answers, but a system of integrated programs which permit researchers to implement a variety of quality control features in their surveys, for managers and supervisors to monitor the progress of the survey, and for the survey analyst to obtain self-described data sets quickly upon completion of the interviewing.

There are five major components to the SRC CATI system:

1. An interactive program for building a CATI questionnaire (Screen Construction).

2. A set of quality control procedures for checking CATI questionnaire applications (Screen Utilities).

3. A program to release sample numbers and assign cases to interviewers (Call Scheduler).

4. A program which displays questions and processes interviewer input of responses (Data Entry Program).

5. Supervisory aids to monitor the survey progress (Supervisor Utilities).

The product of a completed CATI study is a self-described OSIRIS data set, listings of responses to open questions, listings of interviewer comments, and a listing of the questionnaire itself.

A.1 Screen Construction

The screen construction program allows the CATI user to create the building blocks of a CATI application. These are screens or displays that define for the interviewer

the questions to be asked of respondents. Displays are built in an interactive way, using "menus" that list all the relevant options for a display.

The displays have several parts that implement the various features of the SRC CATI system:

1. **Screen attributes**--screen name, whether the screen is at the beginning of a section, the number of the screen which will normally follow, and the number of inputs (1 to 8) to be allowed for the particular screen.

2. **Screen text display**--this can contain eighteen lines of 80 characters each to display the question text, any interviewer instructions, and the permissible answer categories for the question.

3. **Variable attributes**--the SRC CATI system permits displays that simultaneously list several (to a maximum of eight) different questions, each having a separate input. Inputs are given variable numbers and names, can be checked to confirm that they are within a valid range or are valid characters (e.g., "1-6,8,9" for a numeric input, or "M,F" for a character input), are given a specified format which will be checked at time of entry (e.g., a two-character numeric field), and may be assigned missing data codes. For each variable entered on a screen, OSIRIS data set characteristics (variable name, number of digits and missing data codes) must be supplied.

4. **Screen text "fills"**--the SRC CATI system permits the dynamic alteration of a question wording to tailor the question to the particular respondent.

5. **User specified logic**--the researcher can specify up to 15 lines of logical statements to accomplish any or all of the following: route the interviewer to a different question conditional on values of previous or current input(s); create new variables that are arithmetic functions of other variables; and check the consistency of an entered value with regard to the values of other variables previously entered, displaying error messages on the screen for interviewers. These statements can be simple or complex, including compound (using AND and OR links) conditional statements.

The person entering a particular application can build screens completely (i.e., text, variable attributes, user specified logic), or the task can be separated into pieces, so that one person might enter the text and another the logic.

At the completion of entering a set of screens an application can be run to test whether it correctly implemented the desires of the researcher; there is no need for a compilation or translation step.

A.2 Screen Utilities

Functions labelled "Screen Utilities" assist the researcher in building the application, and in revising and testing the application, to ensure that the design is implemented as initially intended. Currently, by using a simple menu approach, the user can obtain a listing of all the screens in an application, including the detail of the question wording, valid code ranges, skip logic, etc. Alternatively, a simpler listing of the screens can be obtained. In addition, the menu allows the user to produce cross-reference listings of all screens (by question number, screen number or variable number). Finally, there is a check to flag screens that are not referenced by other screens in the application. All of these functions are aids in "debugging" a CATI application. There are also utilities for deleting screens from an application and for quickly copying portions of other applications to a new one when identical or similar screens are to be built. In complex applications these functions aid the researcher.

A.3 Call Scheduler

Telephone numbers that belong to the sample for a particular CATI application are stored in a disk file throughout the survey. One set of programs in the CATI system permit the users to enter sample cases, manipulate them, refresh them, and assign cases to individual interviewers for dialing. Both samples from lists of persons or firms and randomly generated telephone numbers can be used in the system. For random digit dialed (RDD) surveys automatic random regeneration of numbers is made when rejection rule sampling schemes are used. For list samples, any characteristic of the sample case (e.g., name of firm, address, name of informant) can be displayed to assist the interviewer in locating the respondent. The sample cases are entered into the file in a randomized order, so that the progress through the file and assignment to interviewers is initially randomized.

The call scheduling and case assignment procedures in the SRC CATI system allow the researcher to control the pattern of calls on sample numbers by defining priority groups for calling at any point in time. For example, the call scheduling rules can be constructed to give higher priority on a weekday evening for calls on numbers that were previously called during a weekday morning but not answered at that time. The researcher

can specify the callback patterns that are to be enforced in a given study. The goal of the call scheduling procedures is to eliminate the time it takes interviewers to decide which of the active numbers to call next **and** to reduce the total number of dialings required to complete a survey. This component of CATI is the least stable because it is attempting to routinize a procedure that in paper and pencil surveys was not strictly controlled; hence, rules for callbacks must be made now on the judgments of managers without much data to support their decisions. As data are assembled on the efficiency of various schemes, the efficiency of the scheduling routines can be improved.

Once contact is made on a sample number, the interviewer is given the responsibility of scheduling any further calls that are necessary to complete the interview. Interviewers are instructed to schedule callbacks at times when they themselves are scheduled to work so that their knowledge of the individual sample unit can assist them in completing the case. If that is not possible, the CATI system flags cases for assignment to others at the time of the appointment.

A.4 Data Entry Program

The only program that the interviewer need be familiar with is the CATI production data entry program, which displays questions, accepts responses entered, and checks for errors or invalidity in those responses. This part of the system is designed to assist the interviewers in their jobs and to make complex instruments as simple as possible to implement. The chief job of the interviewer is to read the questions exactly as they appear on the screen and to choose an answer that is given by the respondent. For open questions the interviewer types in the text of the respondent's answer.

The forward movement within the questionnaire is controlled totally by the computer, based on logic entered by the designer into the application. At times in a questionnaire, however, the interviewer must go "backward" in a questionnaire, retracing steps already made. This is required for review of a previously entered response (e.g., the respondent might suddenly say, "I think I gave you the wrong answer to a question a short ways back--you know, the one about the number of drinks I had last week."). At other times the interviewers may realize that they have entered the wrong response and want to return to change the entry. To facilitate this non-traditional movement through the questionnaire, the SRC CATI system uses a set of function keys on the terminal that allow the interviewer to command the system to return to a previous question. There is no need for the interviewer to remember any commands, but merely to hit a clearly labelled key to induce the desired

movement. Different keys allow the interviewer to backup one input within the same screen (on multiple question screens), to backup one screen, to backup to a prior section of questions, to return forward after a backup, one screen, or to the first unanswered question in the series.

The interviewer can also at any point in the questionnaire invoke a "control" screen which allows him or her to terminate the interview or to skip to any section of the questionnaire that the researcher permits to be asked out of the normal sequence.

At all points in the process of interviewing if errors are made (e.g., a response out of the permitted range, inconsistent answers), the interviewer is immediately informed of the nature of the error so that corrections can be made. Error messages can be tailored to the nature of the error in many cases.

A.5 Supervisor Utilities

A CATI system that does not address the needs of the survey administrators typically does not achieve efficiency gains over a non-CATI approach. Over the several years of CATI experience the desire to integrate administrative procedures into the CATI system has been the chief concern of the users. This part of the system attempts to address the needs of supervisors and managers to control and monitor the progress of the study and to evaluate individual personnel performing tasks on the project.

The "Supervisor Utilities" permit supervisors, again with a simple menu approach, to obtain up-to-the-minute reports on number of completed interviews, overall response rate, individual interviewer response rates, refusal conversion rates, and average interview length, as well as information for quickly identifying bad or depleted sample clusters and potential non-residential telephone numbers. Quality control is enhanced by utilities which enable supervisors: (1) to get listings for a subset of interviews (e.g., for a given day of production or for an individual interviewer) of the open-end responses, and interviewer call notes (entered at the end of an access to a case) and comments (entered during the interview through use of a function key and associated with a particular question--usually to record probes), and (2) to review the complete call history of any sample element. One utility assists in monitoring and modifying interviewer shift schedules by providing the number of no-contact cases available to schedule at any time of day. Other utilities permit researchers periodically during production to review subsets of the data set, in order to examine response frequencies and assess consistency.

A.6 Summary

As with much computer software an evaluation of a CATI system requires a definition of the functions the system should perform. Survey organizations differ in their definition of CATI. SRC has defined CATI not merely as a data entry vehicle for surveys, but rather as machine assistance for all parts of the survey process--an integrated package of software which offers quality control potentials at several stages of the survey process. Included among these are: checks on the validity and consistency of respondent answers **at the time of data collection**; automated control over sample release and the schedule of call backs; the monitoring of progress during production interviewing, including individual interviewer production rates; and the release, within a short time after the end of interviewing, of a clean and self-described data set ready for analyses.

Appendix B

Instructions to Interviewers

The following pages contain general guidelines to be followed when administering the Superconducting Super Collider (SSC) survey in June/July 1987. The SSC study is directed by Michael Traugott of the Center for Political Studies. The focus of this study includes attitudes of Michigan residents toward general issues concerning science and technology, gauging current knowledge about the SSC project, discovering where people have obtained information concerning the SSC project, and uncovering initial attitudes of support or opposition toward the SSC project. In addition, there are items dealing with transportation issues and safety. These items are being tested for the University of Michigan Transportation Research Institute. Each part of this study is being funded separately by the State of Michigan. The results will be used for aggregate statistical purposes and will be published in a report for the State of Michigan.

The SSC study consists of three surveys: one to be conducted using a state-wide sample, and the other two using samples from the areas of Monroe/Lenawee counties and Jackson/Ingham counties respectively. Residents from the regional samples will be the only respondents to answer questions from section D of this study. Each sample consists of 600 respondents, making the total sample size for the study 1,800 R's. In an attempt to increase the completion rate in this study, more than 2,000 letters were sent to some of the households in which interviews will be taken.

Some of the questions in this survey will elicit additional comments from the respondents. <u>In order to minimize interviewing</u>

time, and therefore cost, you will not be asked to record all of the respondents' comments in detail. Use the PF10 key only for those items with a "pro-con" response category, or an explicit statement to record R's comments.

For all questions, you should still employ the follow-up probes in the usual form, and you should not cut short respondents' elaborations of their responses. However, please do not record these comments in the computer except as indicated on the terminal screen.

Interviewing for the SSC study occurs between June 10 and July 15.

More detailed comments on selected survey items follow:

A1-A3 These questions have to do with respondent attitudes towards general issues of science and technology. Answers of "Don't Know" are to be coded as 8 and probed further for questions A3a through A3f.

B1-B8 These items deal with respondents' perceptions concerning the state's activity in attracting new businesses to the state, particularly those that involve high technology. In question B7, respondents may say "it depends" for various reasons (e.g., "if contingency plans for reducing individual taxes as well I would say it is a good idea"). If these types of responses occur, the interviewer should code the response as "it depends" and ask the respondent if they generally think it is a good idea or a bad idea.

C1-C5 These questions ascertain respondents' knowledge about the SSC, where that knowledge was obtained, and whether or not they feel that such a project should be built in the state. Also included in this section are questions that deal with respondents' attitudes concerning the possibility of the state offering incentives in an attempt to attract the project. In question C3, if confusion arises on the part of the respondent about the similarity of the competition between states in courting the SSC project and attempts to attract the GM Saturn facility, the interviewer should emphasize that the similarity lies in the competition between the states and not between the two projects. In question C5, if

respondents express confusion about the phrase "53 miles in length", the interviewer may wish to explain that the phrase refers to the circumference, or a "ring that is 53 miles around".

D1-D9 These questions will be asked only in two regional surveys, and they deal specifically with respondents' attitudes and ideas about the possibility of having the SSC built near their area. In question D4, if the respondent asks whether the question refers to "during the construction process" or to "after the construction process", the interviewer should clarify that the question refers to "during the construction process only", and NOT to when the SSC project is completed. In question D7, respondents may indicate that they wouldn't get fair market value or any type of compensation since they rent. If such responses occur, the interviewer should code them as a "7". For questions D8 and D9, respondents may start to answer the question as if "answering for somebody else" (relative or neighbor). Interviewers should clarify such a situation for the respondent by telling them we want to know "how they would feel" as opposed to answering the question "for someone else".

E1-E9 These items deal with respondents' media use, and how interested they are in media items about science and technology. If, for questions E1 and/or E3, respondents reply with, "Oh, I have it on all day," or responses of a similar nature, the interviewer should ask, "How long is that?" If respondents provide a range, the interviewer should ask the respondent which of the numbers in the range is closest to the actual amount of time they watch, listen, or read. In question E1, VCR usage should be included in the total amount of time watching tv, unless the respondent states that he/she uses a VCR in connection with rental movies. If respondents ask what is meant by "science and technology" in questions E3-E9, the interviewer should state, "Whatever it means to you."

F These questions are basic demographic questions and are standard in format. The response section for each question should be sufficient for interviewers to handle problems, if any, that may arise during this section of the survey.

AA1 This item deals with whether respondents would favor or oppose an annual inspection law. If respondents are confused and ask questions such as "who would conduct such an inspection" or if "such a law is being considered", the interviewer may wish to clarify by stating that any

inspection could be conducted by state licensed mechanics or by state or local police using checks at the roadside. Clarifying the latter item can be achieved by telling the respondent that there is no specific proposal being considered at this point in time.

AA2 These questions ask for respondents' opinions about the condition of Michigan expressways and the major roads in the area of the respondents' residence. If respondents desire a definition of expressways for question AA2a, the interviewer may specify that an expressway is "a limited-access, multi-lane highway that has no intersections and requires the use of ramps for entering and exiting". In question AA2b, if respondents want to know what is meant by "in your area", the interviewer may tell them that area refers to "whatever you consider your local community to be".

AA3 This item is a straightforward question and should not result in any difficulties.

AA4-4a Questions in section AA4 generally deal with speed limits in the state of Michigan. Respondents are asked both how fast they travel on certain roads and their attitudes toward various speed issues. In question AA4, if a range of speeds is provided by a respondent, the highest speed in that range should be coded by the interviewer. If respondents state they "do the speed limit", the interviewer should ask them "how many miles per hour is that?". In question AA4a, if respondents ask "they should keep it as it is now", the interviewer should ask them "how many miles per hour is that?".

AA4b This question presents a scenario in which the respondent is driving on an expressway in Michigan, and a police car with radar is on the side of the road timing each car as it passes. The respondent is asked to specify how fast he/she would have to be going in order to be pulled over by the police. If the respondent does not specify a mile per hour figure, i.e. responds with "eight miles over the speed limit", the interviewer is to add that figure to 55, and record, in this case, "63" as the response.

AA4c This question deals with respondents' attitudes towards speed issues. In question AA4c, if respondents express confusion over what a radar detector (or fuzzbuster) is, the interviewer may specify that it is "a device some people have in their vehicle to warn them when police are using radar in the area to find speeders".

AA5-AA7 These questions deal with respondents' opinions and attitudes concerning drivers' licenses and drivers' education classes. In question AA5, if respondents indicate "they should keep it the way it is now", the interviewer should ask "what age is that?"

AA8 This question deals with respondents' opinions about how drivers' education classes should be financed. Interviewers should note that this is not a question of fact; i.e., if any respondent is unsure about how such classes are financed now, the interviewer should indicate that payment currently varies area to area. If respondents come up with responses other than those that appear for the question, please record those responses.

BB1-BB6 These items deal with respondents' assessments and attitudes concerning semi-trailer trucks on Michigan roadways. In question BB2, if respondents specify more than one kind of evasive action they take", the interviewer should code the response as a 1 (a "general" yes). Question BB5 attempts to get at differential treatment of car drivers and semi-trailer truck drivers. If respondents say "it depends" or something similar in nature, the interviewer should specify "in general..." and repeat the question.

CC1-CC5 These questions deal with respondents' attitudes and opinions related to drinking and/or drinking and driving. These questions are relatively straightforward and should pose no problems for the interviewers. However, it should be noted that in question CC4, a response of "zero" is different than a response of "I don't drink".

DD1-DD8 The items in this section deal with respondents' attitudes and opinions about when and where alcohol is sold, as well as about possible preventive measures for drunk driving and how those measures could/should be financed. In question DD1, if the respondent begins to provide alternative responses or comments than those provided on the terminal screen, do NOT record them! In other words, do not use the PF10 key for this question. Interviewers should note that for question DD2a, that if the respondent answers "it depends", should probe and ask the question again. If the respondent says "it depends" again, the response should be coded as 9997. For question DD3, interviewers should emphasize "most weekdays" and ask the question again if respondents bring up the hours alcohol can be sold on Sundays and holidays. In question DD8, if the respondent expresses confusion about "gas stations or other stores", the interviewer may wish to provide examples such as "7-11, mini-marts, and/or Stop and Go" to help clarify the question for respondents.

DD9a-f These questions deal with respondents' opinions about how money should be raised for the increased costs associated with efforts to reduce drunk driving. Interviewers should remember that each tax or fee should be considered separately by the respondent. The fact that respondents might favor one tax or fee should not determine whether

they favor or oppose other taxes or fees.

EE1a-d These questions assess how often and how heavily respondents drink as well as their opinions about possible consequences of personal drinking and driving situations.

FF1-3 These questions deal with respondents' opinions about the Michigan seat belt law and the Michigan helmet law. If respondents seem to be unsure about what is being sought in question FF1, the interviewer may want to emphasize that "we want you to think what is likely to happen, not what you think should happen".

GG1 This question asks whether respondents have a valid driver's license. The valid driver's license can be for any motorized vehicles (except boats and planes), e.g., motorcycles, chauffeur's license, etc. A suspended or a revoked license does NOT constitute a valid driver's license. Also, please note that it does not matter what state issues the driver's license.

GG1a This questions asks how many miles respondents have driven in the past year. Please note that motor vehicle refers to only cars, trucks, and motorcycles. Cars are to be defined as vans, pickup trucks or any other utility vehicles such as Broncos, Jeeps, Blazers, etc. Trucks refer to semi-trailer trucks, and motorcycles refer to any two wheeled cycle with an engine size larger than 50cc. Please note that the category "motorcycles" excludes mopeds. If respondents ask if "miles as a passenger" gets included in the total, the interviewer should specify that the question refers to "miles driven". Also, the interviewer should note that this question refers to miles driven on highways or roads.

GG3a-d This series of questions asks respondents to specify whether or not they drove rode various vehicles in the past week.

GG5-GG7 These questions deal with respondents' attitudes and opinions about seat belt usage. Question GG5 requires a numerical response. If respondents state they wear seat belts "all the time", the interviewer is to record a "10" for the question. If, in question GG7, respondents specify "automatic seat belts and airbags" or "manual belts and airbags", the interviewer should code the item as a "4".

Appendix C

Letter to Potential Respondents

The University of Michigan

June 8, 1987

James P.

, MI

The Survey Research Center at The University of Michigan has been conducting interviews with Michigan residents for a number of years. These surveys have measured the opinions of people about current affairs, the economy, and many important issues of the day.

Your household is one of a small number which will be asked to give their opinions on these kinds of issues. It was drawn in a random sample from all Michigan households with telephones, and an interviewer will be calling you in a few days. In order that the results will truly represent the thinking of people in Michigan, it is important that we conduct an interview with an adult in each sampled household.

You may be assured of the confidentiality of your responses, and the interview is completely voluntary. The results of the survey will be used for aggregated statistical purposes only.

I would be most happy to answer any questions which you might have about the survey. Please feel free to call me, collect if necessary, at (313) 764-5199.

Thank you in advance for your cooperation.

Sincerely,

Michael W. Traugott

Dr. Michael W. Traugott
Senior Study Director

Appendix D

Questionnaire

HIGHWAY SAFETY QUESTIONNAIRE

--- AA1 ----------

Now we have some questions about highway safety.

Would you favor or oppose a law that would require all cars to pass an annual safety inspection costing $20 to check things like their brakes, lights, and tires?

1. FAVOR
3. DEPENDS (VOLUNTEERED)
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V250

--- AA2a,b ----------

In general, do you think the expressways in Michigan are in good condition, average condition. or poor condition?

How about the condition of major roads in your area?

1. GOOD CONDITION
2. AVERAGE CONDITION
3. POOR CONDITION
8. DON'T KNOW; NO OPINION

NUM # : V251
NUM # : V252

--- AA3 ----------

Do you feel that there are enough police patrolling the roads in Michigan looking for traffic violations, or should there be more police or fewer police patrolling the roads?

1. SHOULD BE MORE POLICE PATROLLING
3. ENOUGH POLICE PATROLLING
5. SHOULD BE FEWER POLICE PATROLLING
8. DON'T KNOW; NO OPINION

NUM # : V254

HIGHWAY SAFETY QUESTIONNAIRE

--- AA4 ----------

How fast do you generally drive on Michigan's expressways and highways? (How many miles per hour is that?)

00. R DOES NOT DRIVE
1-96. ENTER ACTUAL MPH
97. MORE THAN 96 MPH
98. DON'T KNOW; NO OPINION

NUM ## : V255

--- AA4a ----------

What do you think the speed limit should be on most Michigan expressways?

1-96. ENTER ACTUAL MPH
97. MORE THAN 96 MPH
98. DON'T KNOW; NO OPINION

NUM ## : V256

--- AA4b ----------

Currently the speed limit on most Michigan expressways is 55 miles per hour. Where the limit is 55, how fast do you think you have to be driving before police using radar at the roadside will decide to stop you and give you a ticket?

1-96. ENTER ACTUAL MPH
97. MORE THAN 96 MPH
98. DON'T KNOW; NO OPINION

NUM ## : V257

--- AA4c ----------

Do you think that the use of radar detectors - also called "fuzz busters" - should or should not be legal in Michigan?

1. SHOULD BE LEGAL
5. SHOULD NOT BE LEGAL
8. DON'T KNOW; NO OPINION

NUM # : V258

HIGHWAY SAFETY QUESTIONNAIRE

--- AA5 ----------

What do you think should be the youngest age at which a person can get a driver's license? (What age would that be?)

1-21. ENTER AGE
97. MORE THAN 21
98. DON'T KNOW; NO OPINION

NUM ## : V260

--- AA6 ----------

Would you favor or oppose a law which would not allow people above a certain age to drive?

1. FAVOR
3. DEPENDS (VOLUNTEERED)
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V261

--- AA7a ----------

Would you favor or oppose a law which would prevent persons under the age of 18 from driving between 11 o'clock at night and 5 o'clock in the morning, unless they could show a need to drive to or from school or work?

1. FAVOR
3. DEPENDS (VOLUNTEERED)
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V263

HIGHWAY SAFETY QUESTIONNAIRE

--- AA7c ----------

How about persons over the age of 70 - would you favor or oppose a law that would prevent older persons from driving between 11 o'clock at night and 5 o'clock in the morning unless they take a medical exam to show they are fit to drive at night?

1. FAVOR
3. DEPENDS (VOLUNTEERED)
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V264

--- AA8 ----------

Do you think that driver education classes should be paid for by local school taxes or a fee paid by the driver education students?

1. PAID BY LOCAL SCHOOL TAXES
5. FEE PAID BY DRIVER EDUCATION STUDENTS
7. OTHER - PF10 TO SPECIFY
8. DON'T KNOW; NO OPINION

NUM # : V265

[SK1 IF V7=1 THEN GOTO]

--- BB1 ----------

[L60]

The next few questions are about semi-trailer trucks. These are large trucks which include a cab and cargo-carrying trailer.

Currently the speed limit for semi-trailer trucks travelling on Michigan expressways is 55 miles per hour. Do you think that the speed limit for semi-trailer trucks should be increased, decreased, or left at 55 miles per hour?

1. DECREASED
3. LEFT AT 55 MPH
5. INCREASED
8. DON'T KNOW; NO OPINION

NUM # : V259

HIGHWAY SAFETY QUESTIONNAIRE

--- BB2 ----------

When you are driving, do you ever take any action such as avoiding roads with a lot of semi-trailer trucks, or slowing down or speeding up quickly to stay away from semi-trailer trucks?

0. R DOES NOT DRIVE (VOLUNTEERED)
1. YES
2. YES, AVOID (VOLUNTEERED)
3. YES, SLOW DOWN (VOLUNTEERED)
4. YES, SPEED UP (VOLUNTEERED)
5. NO
8. DON'T KNOW

NUM # : V266

--- BB3 ----------

Compared to most car drivers, would you say that drivers of semi-trailer trucks drive more safely, less safely, or about equally safely?

1. MORE SAFELY
3. ABOUT EQUALLY SAFELY
5. LESS SAFELY
8. DON'T KNOW; NO OPINION

NUM # : V267

--- BB4 ----------

How serious is the problem of objects coming off or falling off semi-trailer trucks? Would you say it is very serious, somewhat serious, not very serious, or not a problem at all?

1. VERY SERIOUS
3. SOMEWHAT SERIOUS
5. NOT VERY SERIOUS
7. NOT A PROBLEM AT ALL
8. DON'T KNOW; NO OPINION

NUM # : V269

HIGHWAY SAFETY QUESTIONNAIRE

--- BB6 ----------

Do you think police enforce traffic laws more strictly, less strictly, or about the same for drivers of semi-trailer trucks as they do for car drivers?

1. LAWS MORE STRICTLY ENFORCED FOR TRUCK DRIVERS
3. ABOUT THE SAME ENFORCEMENT
5. LAWS LESS STRICTLY ENFORCED FOR TRUCK DRIVERS
8. DON'T KNOW; NO OPINION

NUM # : V271

--- CC1 ----------

How serious do you think the drunk driving problem is in your community - would you say it is very serious, somewhat serious, or not at all serious?

1. VERY SERIOUS
3. SOMEWHAT SERIOUS
5. NOT AT ALL SERIOUS
8. DON'T KNOW; NO OPINION

NUM # : V273

--- CC2 ----------

If a customer gets drunk, leaves a restaurant or bar, and injures someone in a car crash, do you think the bartender or the person who served the drinks to the customer should be held responsible for all of the damages, most of the damages, some of the damages, or none of the damages caused by the customer?

1. ALL OF THE DAMAGES
2. MOST OF THE DAMAGES
3. SOME OF THE DAMAGES
4. NONE OF THE DAMAGES
8. DON'T KNOW; NO OPINION

NUM # : V274

HIGHWAY SAFETY QUESTIONNAIRE

--- CC3 ----------

If a guest gets drunk, leaves a party, and injures someone in a car crash, do you think the host or hostess at the party should be held responsible for all of the damages, most of the damages, some of the damages, or none of the damages caused by the guest?

1. ALL OF THE DAMAGES
2. MOST OF THE DAMAGES
3. SOME OF THE DAMAGES
4. NONE OF THE DAMAGES
8. DON'T KNOW; NO OPINION

NUM # : V275

--- CC4 ----------

How many drinks - that is, how many 12 ounce cans or bottles of beer, 4 ounce glasses of wine, or drinks with 1 1/2 ounces of liquor could you drink in an hour and still drive safely?

0-96. ENTER NUMBER
96. MORE THAN 96
97. I DON'T DRINK (VOLUNTEERED)
98. DON'T KNOW

NUM ## : V276

--- CC5 ----------

How many drinks would a 160-pound adult male have to drink in an hour before he was over the legal limit to drive in Michigan?

0-96. ENTER NUMBER
97. MORE THAN 96
98. DON'T KNOW [DO NOT PROBE]

NUM ## : V277

[SK1 IF V7=2 THEN GOTO EE1

HIGHWAY SAFETY QUESTIONNAIRE

--- DD1 ----------

[L60]

A number of different proposals have been made to deal with the problem of people who drive after drinking. One proposal is to use sobriety check lanes where all cars traveling on a road are stopped briefly to check for drivers who have been drinking. Do you favor or oppose the use of sobriety check lanes to prevent drunk driving?

1. FAVOR
3. DEPENDS (VOLUNTEERED)
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V278

--- DD2a ----------

In general, people convicted of drunk driving for the first time pay a fine and have their driver's license suspended for a period of time. How much of a fine do you think a person should have to pay for drunk driving for the first time?

0-9995. ENTER AMOUNT
9996. MORE THAN $9995
9997. DEPENDS (VOLUNTEERED)
9998. DON'T KNOW; NO OPINION

NUM #### : V279

--- DD2b ----------

For how many months should their driver's license be suspended?

0-996. ENTER NUMBER OF MONTHS
997. MORE THAN 996
998. DON'T KNOW; NO OPINION

NUM ### : V281

HIGHWAY SAFETY QUESTIONNAIRE

--- DD3 ----------

Currently, alcoholic beverages can be sold on most days from 7 o'clock in the morning until 2 o'clock the next morning. Do you think these hours should be reduced, increased, or left as they are now?

1. HOURS SHOULD BE REDUCED
3. HOURS LEFT AS THEY ARE NOW
5. HOURS SHOULD BE INCREASED
8. DON'T KNOW; NO OPINION

NUM # : V280

--- DD5 ----------

In your community, do you think the current number of stores that sell carry-out beer and wine is too high, too low, or about right?

1. TOO HIGH
3. ABOUT RIGHT
5. TOO LOW
8. DON'T KNOW; NO OPINION

NUM # : V282

--- DD6 ----------

In your community, do you think the current number of bars that serve alcoholic beverages is too high, too low, or about right?

1. TOO HIGH
3. ABOUT RIGHT
5. TOO LOW
8. DON'T KNOW; NO OPINION

NUM # : V283

HIGHWAY SAFETY QUESTIONNAIRE

--- DD7 ----------

Do you think the number of stores or bars selling alcoholic beverages should or should not be limited by government agencies?

1. NUMBER SHOULD BE LIMITED
5. NUMBER SHOULD NOT BE LIMITED
8. DON'T KNOW; NO OPINION

NUM # : V284

--- DD8 ----------

Should gas stations and other stores that sell gasoline be allowed to sell beer and wine?

1. YES, SHOULD BE ALLOWED TO SELL BEER AND WINE
5. NO, SHOULD NOT BE ALLOWED TO SELL BEER AND WINE
8. DON'T KNOW; NO OPINION

NUM # : V285

--- DD9a-c ----------

Increasing efforts to reduce drunk driving will cost money. I am going to read you some proposals that have been made to raise the money, and I would like you to consider each one separately. For example, would you favor or oppose an increase in the fee for a driver's license as a way to pay for programs to reduce drunk driving?

How about an increase in the state sales tax to pay for programs to reduce drunk driving?

An increase in the state income tax to pay for programs to reduce drunk driving?

1. FAVOR
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V286
NUM # : V287
NUM # : V288

HIGHWAY SAFETY QUESTIONNAIRE

--- DD9d-f ----------

(Increasing efforts to reduce drunk driving will cost money. In order to raise the money, would you favor or oppose ...)

An increase in the fee for car license plates (to pay for programs to reduce drunk driving)?

An increase in the tax on each gallon of gas sold (to pay for programs to reduce drunk driving)?

An increase in the tax on each bottle of beer, wine, or liquor sold (to pay for programs to reduce drunk driving)?

1. FAVOR
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V289 NUM # : V291
NUM # : V290

[SK3 IF V7=3 THEN GOTO]

--- EE1 ----------

For the purpose of the following questions, when I say one drink, I mean one 12 ounce can or bottle of beer, one 4 ounce glass of wine, or one drink with 1 1/2 ounces of liquor.

How often would you say that you drink alcoholic beverages? Would you say that you never drink, that you drink once or twice a year, once or twice a month, once a week, more than once a week, or every day?

1. NEVER DRINK
2. DRINK ONCE OR TWICE A YEAR
3. DRINK ONCE OR TWICE A MONTH
4. DRINK ONCE A WEEK
5. DRINK MORE THAN ONCE A WEEK
6. DRINK EVERY DAY

NUM # : V292

[SK1 IF V292=1 THEN GOTO]

HIGHWAY SAFETY QUESTIONNAIRE

--- EE1a ----------

(For the purpose of the following questions, when I say one drink I mean one 12 ounce can or bottle of beer, one 4 ounce glass of wine, or one drink with 1 1/2 ounces of liquor.)

Thinking about any drinking you may have done in the last two weeks, how many times did you have 4 or more drinks within two hours?

0-21. ENTER NUMBER OF TIMES
97. MORE THAN 21

NUM # : V293

[SK1 IF V293=0 THEN GOTO]

--- EE1b ----------

The last time you had 4 or more drinks, where were you drinking?

01. AT HOME
02. IN ANOTHER PERSON'S HOME
03. IN A TAVERN, BAR, OR COCKTAIL LOUNGE
04. IN A RESTAURANT (WITH A MEAL)
05. AT WORK
06. IN A PRIVATE OR FRATERNAL CLUB
07. AT A SOCIAL EVENT (WEDDING, DANCE, ETC.)
08. AT A BUSINESS MEETING OR CONFERENCE
09. IN A PARKED CAR
10. IN A CAR WHILE DRIVING
11. OUT OF DOORS (HUNTING, FISHING, GOLFING, ETC.)
12. WHILE AT A SPORTING EVENT
70. OTHER - PF10 TO SPECIFY

IWER: ENTER ALL THAT APPLY. ENTER 00 FOR NO FURTHER MENTIONS.

NUM ## : V294 NUM ## : V296 NUM ## : V298
NUM ## : V295 NUM ## : V297 NUM ## : V299

[SK2 IF V295=00 THEN GOTO EE1c
[SK3 IF V296=00 THEN GOTO EE1c
[SK4 IF V297=00 THEN GOTO EE1c
[SK5 IF V298=00 THEN GOTO EE1c

--- EE1c ----------

On that occasion, did you do any driving after drinking?

1. YES
5. NO

NUM # : V300

[SK1 IF V300>1 AND V7="" THEN GOTO FF1
[SK1 IF V300>1 THEN GOTO]

HIGHWAY SAFETY QUESTIONNAIRE

--- EE1d ----------

If you had been pulled over by the police on that occasion, do you think you would have been in trouble for drinking too much?

1. YES
3. DEPENDS (VOLUNTEERED)
5. NO
8. DON'T KNOW; NO OPINION

NUM # : V301

[GO TO]

--- FF1 ----------

If a person is not using a seat belt and is stopped for speeding, how likely is it they will get a ticket for not having a seat belt on? Would you say there is almost no chance they would get a ticket; it is unlikely, but it happens sometimes; there is a good chance of a ticket; they will get a ticket nearly every time; or they will always get a ticket for not having a seat belt on?

1. ALMOST NO CHANCE THEY WILL GET A TICKET
2. UNLIKELY, BUT IT HAPPENS SOMETIMES
3. THERE IS A GOOD CHANCE
4. WILL GET A TICKET NEARLY EVERY TIME
5. WILL ALWAYS GET A TICKET
8. DON'T KNOW; NO OPINION

NUM # : V306

--- FF3 ----------

Currently, Michigan law requires motorcycle riders to wear helmets. Some people oppose this law because they believe it infringes on individual rights. Others favor the law because they believe it reduces injuries and saves lives. How about you - do you favor or oppose the law requiring helmet use?

1. FAVOR
5. OPPOSE
8. DON'T KNOW; NO OPINION

NUM # : V307

[SK1 IF V7="" THEN GOTO]
[GO TO]

HIGHWAY SAFETY QUESTIONNAIRE

--- GG1 ----------

Do you have a valid driver's license?

1. YES
5. NO

NUM # : V308

--- GG1a ----------

About how many miles did you drive a motor vehicle in the last year?

0-999996. ENTER EXACT AMOUNT
999997. MORE THAN 999,996 MILES
999998. DON'T KNOW

NUM ######: V309

[SK1 IF V309=0 THEN GOTO GG6

--- GG3a ----------

During the last week, did you drive a car, van, or a pickup truck?

1. YES
5. NO

NUM # : V310

--- GG3b ----------

During the last week, did you drive a motorcycle?

1. YES
5. NO

[IF YES] Did you wear a helmet the last time you drove a motorcycle?

1. YES
5. NO

NUM # : V311
NUM # : V316

[SK1 IF V311>1 THEN GOTO GG3d

--- GG3d ----------

During the last week, did you drive a semi-trailer truck?

1. YES
5. NO

NUM # : V313

--- GG5 ----------

Of the last 10 times you drove in a car or truck, how many times did you use a seat belt when one was available?

0-10. ENTER NUMBER
40. NO BELTS IN CAR
50. R DOES NOT DRIVE A CAR OR TRUCK
98. DON'T KNOW

NUM ## : V317

[SK1 IF V317=50 THEN GOTO GG6

--- GG5a ----------

Do you think that people in other cars notice whether you are using your seat belt when you are driving your car or truck?

1. YES
5. NO
8. DON'T KNOW; NO OPINION

NUM # : V318

HIGHWAY SAFETY QUESTIONNAIRE

--- GG6 ----------

An air bag is a device which inflates in a collision to prevent people from hitting the steering column or dashboard. If your car had air bags, how often would you use your seat belt - always, most of the time, some of the time, seldom, or never?

1. ALWAYS
2. MOST OF THE TIME
3. SOME OF THE TIME
4. SELDOM
5. NEVER
8. DON'T KNOW; NO OPINION

NUM # : V319

--- GG7 ----------

If you had your choice - and there was no difference in cost - would you prefer to drive a car equipped with only seat belts that you have to buckle yourself; only seat belts that automatically fit around you when you get in the car; only air bags; air bags and seat belts; neither seat belts nor air bags?

1. ONLY SEAT BELTS THAT YOU BUCKLE YOURSELF
2. ONLY AUTOMATIC SEAT BELTS
3. ONLY AIR BAGS
4. AIR BAGS AND SEAT BELTS
5. NEITHER SEAT BELTS NOR AIR BAGS

NUM # : V320

[SK1 IF V7="" THEN GOTO]
[GO TO]