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STUDY ON SWITCHING OFF HEADLIGHT CUSTOM  
OF VEHICLES AT NIGHT

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1. INTRODUCTION

In Japan, it is common to observe that the vehicles switch off their headlights when they stop at intersections of the road or while waiting for right turn at night ( In this study we call this phenomena as "The headlight custom" hereinafter ). However, as far as the author is concerned, we can't find this custom in any other countries. Switching off headlights at night must affect traffic environment and therefore have some relations with traffic safety. But very few research have been conducted regarding this custom, and the reasons of this custom and its effect on traffic safety have not been clear yet. In this study, present condition of the headlight custom and the reasons were studied using survey questionnaires collected from 318 people in two areas in Japan.

2. QUESTIONNAIRES

The unnamed questionnaire survey was carried out in Tokyo and Tyugoku (West part of Main Land) area in Japan. Condition of the reporter of the questionnaires is to have driver's license. In Tokyo area and Tyugoku area 103 and 215 questionnaires were collected respectively, with a total of 318 respondents.

The questionnaire is consist of 18 items, namely : affiliations, sex, age, driver's experience with licence, frequency of using vehicles, type of vehicles which they are riding and several questions about whether they switch off headlights or not, reasons of doing it and opinions about traffic safety and their custom.

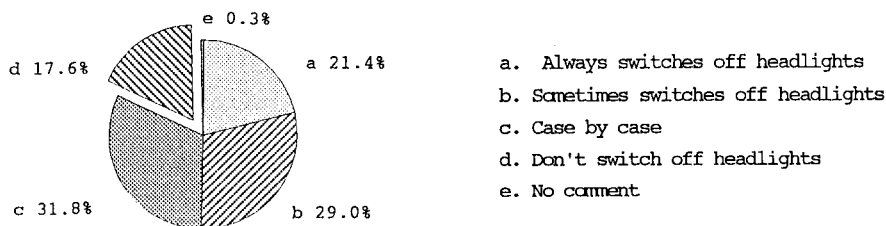
3. RESULTS

(1) Switching off headlights

In the questionnaires, there were five choices of answer about whether he or she switches off headlight or not. The choices were in Fig - 1.

Percentages of people who switch off headlights no matter how much he or she is doing it ("a"+"b"+"c") is 82%, and only 17% of people don't switch off headlights at all.

Fig - 1 Switching off Headlights

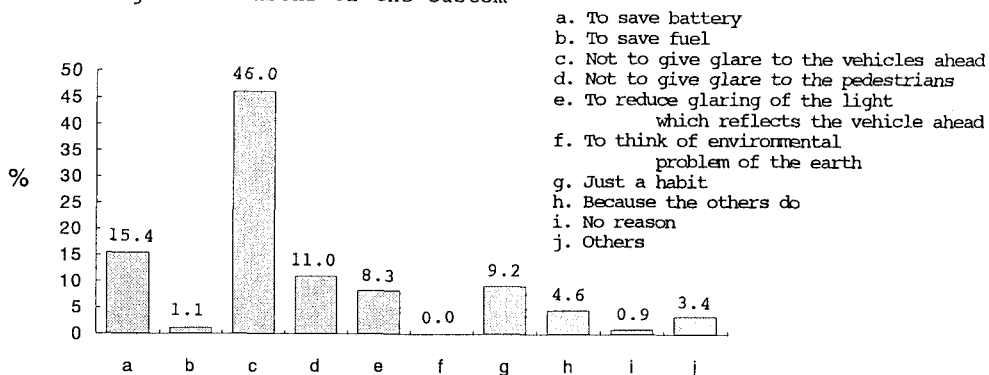


(2) Reasons

it is said that this custom is still remaining of the old days when the

capacity of the battery was not enough to provide electric power when the vehicle was not running, but it is not clear whether this is true or not. To know the reasons of the custom, the questionnaires were analyzed. For people who's answer were positive for switching off headlights, the reasons were collected (Fig - 2). The results showed that the first reason was " Not to give glare to the vehicles ahead " (46%), the second was " To save battery " (15%), the third is " Not to give glare to the pedestrians " (11%). According to this, to save batteries is not a main reason.

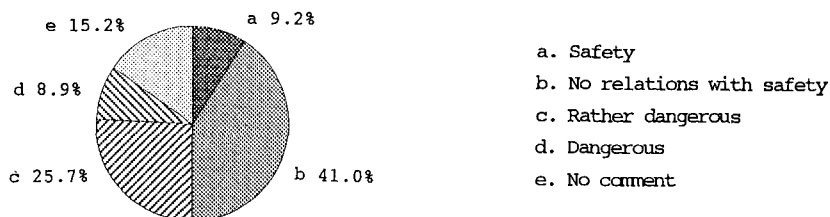
Fig - 2 Reasons of the Custom



### (3) Safety or not safety

The questionnaire asked reporters whether he or she thinks this custom is safety or not. Fig -3 shows the result. As a result of this survey, there were 41% respondents who think the custom has no relations with safety, while not a few people ("c" + "d")(35%) who think the custom is dangerous.

Fig - 3 Opinions of Safety



## 4. CONCLUSIONS AND FUTURE RESEARCH

Following conclusions were obtained in this study.

- (1) The majority of the people ( 82% ) have " the headlight custom ".
- (2) The main reason is not to give glare to the vehicles ahead.
- (3) However, not a few people think the custom is dangerous.

For future research, it is necessary to carry out site observation of the headlight custom and to observe traffic conflict to judge whether this custom is useful or harmful.'

## 5. ACKNOWLEDGMENT

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