



An Analysis of the Influence of Deviant Car Drivers in North Maluku

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ABSTRACT

The deviant behavior of car drivers becomes a concern for the North Halmahera Police in handling the risk of accidents along the Sofifi-Tobelo road. Therefore, this study focuses on identifying the effect of gender on the deviant behavior of car drivers, identifying the effect of age on the deviant behavior of car drivers, identifying the effect of education level on the deviant behavior of car drivers, identifying type of work on the deviant behavior of car drivers, and identifying the effect of gender, age, education level, and type of work simultaneously on the deviant behavior of car drivers on the Sofifi Tobelo road, North Halmahera Regency, North Maluku Province. The quantitative descriptive research was used as a tool to obtain significant findings from a number of research variables involved. The results of this research is expected to be an in-depth evaluation for the increasing incidence of traffic accidents along the Sofifi-Tobelo road, particularly, in five accident-prone points, namely Mount Cut, Dum Village, Paca Village, Tanjung Barnabas and Bori Village.

INTRODUCTION

The deviant behavior of the car drivers becomes a concern for the North Halmahera Police in handling the risk of accidents on the Sofifi-Tobelo road. Accidents and traffic violations are a frequencies and recurring problem. This statement is supported by research data from Jusuf et al., (2017), there were 250,000 deaths due to traffic accidents from 2004 to 2014 and indicators of fatal accidents can be seen from the total deaths of each 100,000 resident population of 10,000 vehicles. Traffic accidents were recorded 61% due to human error (Ministry of Communication and Informatics, 2017). The data and this study are linear. They are related to the alleged influence of gender, age, education level and the variety of work on the deviant behavior of car drivers as the basis for frequent accidents along the Sofifi-Tobelo road. Locus accident vulnerability in this research is supported by similar comparative studies.

It stated, although sex is one of the most often measured variables in studies of driving behavior, there have been only a few studies (e.g., Kirkham & Landauer, 1985; Laapotti, 2003; Mayhew, Ferguson, Desmond, & Simpson, 2003; McKenna, Stainer, & Lewis, 1991) whose primary interest was sex differences in traffic behavior. Meanwhile, other factors of traffic accidents influenced by the level of education and the work variety of car drivers that are linear with the research of Lajunen and Summala (1995) that stated, also showed that safety skills are negatively related to risky driving and outcomes. Therefore, it is necessary to incorporate safety skills into general driving style through driver education. In this way, safe progress in traffic might be improved by preventing biased risk assessment and high level of risk acceptance (e.g., Matthews & Moran, 1986), the development of the false sense of safety, overestimation of control over traffic situations (unrealistic optimism and illusion of control, McKenna, 1993) because of overconfidence to perceptual-motor skills, and indifference to messages of road safety campaigns (e.g., Ulleberg, 2002).

The target of this research is focused on a number of aspects related to research variables, those are coherent with the focus of the problem, including identifying the influence of sex on the deviant behavior of car drivers, identifying the influence of age on the deviant behavior of car drivers, identifying the influence of education levels on the deviant behavior of car drivers, identifying the type of work on deviant behavior of car drivers, and identifying the influence of gender, age, education level, and variety of work simultaneously on the deviant behavior of car drivers along the Sofifi-Tobelo road section of North Halmahera Regency, North Maluku Province. It is concluded that the strategy of improving traffic safety is crucial and must be accelerated, including the traffic accident management system as an effort to provide education to car drivers who have deviant behavior when driving a car passing along the Sofifi-Tobelo road section. Meanwhile, driver skills in identifying risks and hazards are distinctive and essential skills that every driver must possess (Borowsky, Shinar & Oron-Gilad 2010).

THEORETICAL REVIEW

The description of the macro hypothesis showed that the gender, age, level of education, and variety of work of car drivers simultaneously have a significant positive effect on the deviant behavior of car drivers on the Sofifi - Tobelo road section of North Halmahera Regency, North Maluku Province and the implementation of the study is expected to be able to prove the initial conjecture of the study through a number of stages of quantitative descriptive research.

1. Interview Location and Research Questionnaires Distribution

The researcher observed five strategic locations on the deviant behavior of car drivers based the repeated accidents data occurred in Gunung Potong, Dum Village, Paca Village, Tanjung Barnabas and Bori Village. The results of filling out offline and online questionnaires for respondents were then tabulated and measured parameters and degrees of validity using a likert scale based on Djaali's opinion (2008: 28), is a measurement category used as a variable measurement parameter for gender, age, education *level and type* of work of car drivers whose levels are arranged in gradations agree (S), strongly agree (SS), doubt (R), disagree (TS), strongly disagree (STS).

2. Location of Research Implementation

Lokus was served as the basis for the acquisition of primary and secondary data of the research along the Sofifi-Tobelo road. The selection of the locus was based on a number of reasons that based on data from the North Halmahera Police; there was a significant and simultaneous increase in traffic accidents, especially in Gunung Potong, Dum Village, Paca Village, Tanjung Barnabas and Bori Village. From July to December 2022 (before and during the research conducting), the researcher made intensive observations of car driver behavior and accident events which became a medium for field research and strengthened the validity of primary and secondary data. In the end, the proof to provide comprehensive research findings that were able to represent all research variables can be ensued.

3. Stages of Research

This research was begun by conducting the preliminary survey at the locus of research along the Sofifi-Tobelo road section to obtain the basis for determining the research hypothesis before determining the title of the study. The researcher believe in the phenomenon of deviant car driving behavior at the locus of the study is supported by primary data obtained by the researcher from the North Halmahera Police, which is in the form of the incidence rate of traffic accidents on the Sofifi-Tobelo road section. The data showed that the fifth location of the research were concerned for conducting more focused observations in order to obtain secondary data in the form of field research obtained through interviews and distributing questionnaires to 72 car driver respondents as the research samples. The research stage continued by calculating the results of data tabulation based on the collection of questionnaire scores using SPSS software version 25 through

multiple linear regression equations. The results of these statistical calculations are then described using linear narratives and dictions related to empirical theories that are the basis for the discussion of this research, including the theory of accident management systems and road safety, the definition of car drivers and a number of literal definitions and definitions of research variables, gender, age, education level and type of work of deviant car drivers passing on the Sofifi-Tobelo road during the period of July until December 2022.

METHODOLOGY

Quantitative approach is a tool used to support the achievement of research findings. It is expected to give empirical and practical benefits. Previously, there have been similar studies conducted by several researchers but novelty is the target of the researcher in providing research updates along the Sofifi-Tobelo road that has the characteristic of distinctive drivers and are different from previous comparative studies. The basis of mutual relationship influenced between research variables, both partial and simultaneous. These provide a comprehensive description that the initial hypothesis compiled linearly with the findings of the study. It is suspected that there is a significant positive influence of driver sex variables on deviant driving behavior. Before the study conducted, it was also suspected that the age factor had a significant positive effect on deviant driving behavior. Furthermore, the researcher also suspected that the level of education has a significant positive effect on deviant driving behavior and it is suspected that the variety work of the drivers has a significant positive effect on deviant driving behavior when passing along the Sofifi-Tobelo road. The description of the research hypothesis is shown in the flowchart of the following research thinking framework.

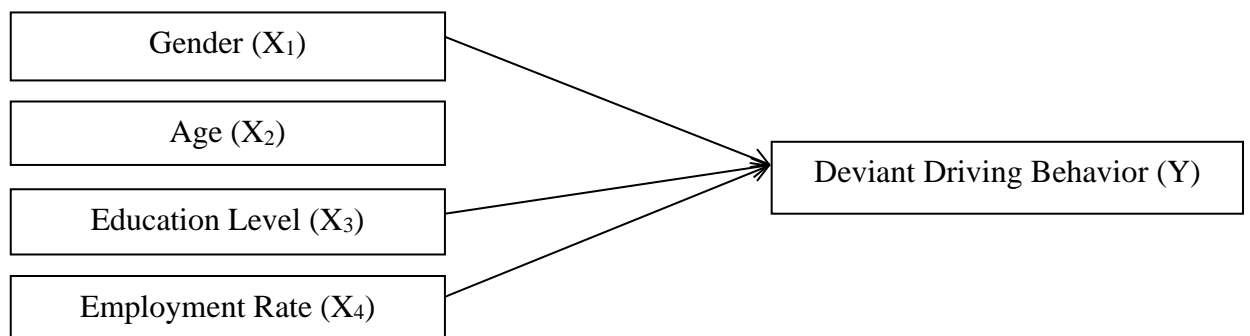


Figure 1. The Description of the Research Hypothesis is Shown in the Flowchart of the Following Research Thinking Framework

RESULTS AND DISCUSSIONS

Regarding human aspects that are dominated by gender, age, education level and variety of work, special treatment is needed as a prevention. A linear description is shown in the finding of the research. It stated although traffic accidents kill people from all age groups, young-aged people are overrepresented in accident involvement virtually in every country, and the majority of these drivers are young men. Apart from being overrepresented in

accident statistics (Blockey & Hartley, 1995; Doherty, Andrey, & MacGregor, 1998), young male drivers are also more prone to take risks (Deery, 1999), use seat belts more infrequently (Jonah & Dawson, 1987), engage in aggressive driving, speed and commit more violations (Jonah, 1990) than other age groups.

The research showed that adolescent boys record a higher risk of accidents than adolescent girls. This statement is indicated by driving too aggressively and not wearing seat belts and driving cars at high speeds, as indicated by Krahe and Fenske (2002) studied the relationship between driving and macho personality rather than masculinity. Özkan and Lajunen (2005b) investigated how sex and gender roles are related to driving style, traffic offences and accidents among young drivers. It is necessary to manage the deviant behavior of the driver of the car that is not affected by the variables of sex. However, a number of studies indicate that male and female drivers have a deviant driving bent, men and young drivers tend to commit violations more frequently than women and older drivers, and that those who drive frequently violate traffic rules more often than those who drive less frequently. In contrast, female and older drivers committed more errors than male and young drivers (Aberg & Rimmo, 1998; Blockey & Hartley, 1995; Parker, McDonald's, Rabbitt, & Sutcliffe, 2000; Reason et al., 1990).

Table 1. The Influence of Gender on the Deviant Behavior of Car Drivers

Gender	Pilihan Kecepatan			Total
	Rendah	Sedang	Tinggi	
Laki-laki	50,3%	15,8%	17,7%	83,7%
Perempuan	9,3%	4,4%	2,7%	16,3%
				100%

The table description above explains that 50.3% of all male respondents in driving chose low speed, 17.7% chose high speed and 15.8% chose medium speed. Meanwhile, 9.3% of female respondents chose low speed, 2.7% high speed and 4.4% medium speed. There is no gender influence on the deviant behavior of car drivers on the Sofifi-Tobelo road section. The results of the statistical test implementing *Chisquare* obtained a Pvalue value = 0.900 > a0.05, then Ha was rejected and H0 was accepted. Therefore, it was concluded that there was no influence between the sexes on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on the results of the analysis obtained OR = 0.945 < 1. It is explained that gender is not the dominant factor in the deviant behavior of car drivers in North Maluku. The findings of the study are *linear* with the conclusions of Destina Mahariani's (2016) research related to a number of factors related to the behavior of adolescents driving cars.

Table 2. The Influence of Age on the Deviant Behavior of Car Drivers

Usia	Pilihan Kecepatan			Total
	Rendah	Sedang	Tinggi	
18-27	15,1%	8,9%	7,4%	31,4%
28-37	10,9%	4,0%	3,2%	18,0%
38-47	22,6%	5,0%	6,7%	34,3%
>47	11,0%	2,3%	3,0%	16,3%
				100%

The description of the table above explains that respondents aged 18-27 years tend to drive cars at high speeds. There is an influence of age on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on statistical tests using Chisquare, Pvalue values = 0.003 < 0.05 were obtained, then Ha was accepted and H0 was rejected. It was concluded that there is an influence of age on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on the results of the analysis obtained OR = 3.238 > 1. It means that respondents with an older age are less at risk of 3.2 having deviant behavior in driving a car compared to respondents with a younger age. The analysis of the study indicated that there was no influence of age on the deviant behavior of car drivers on the Sofifi-Tobelo road section by obtaining the results of the OR analysis = 0.945 < 1. It is explained that age is not the dominant factor in the deviant behavior of car drivers on the Sofifi-Tobelo road section.

The findings of the study are linear with Nova Mega's research (2017) related to the influence of age on the deviant behavior of car drivers on the Sofifi-Tobelo road section which is indicated through the results of the Chi Square statistical test to get a value of 0.721 (p > 0.05). It was concluded that no significant influence of age variables was found on the deviant behavior of car drivers on the Sofifi-Tobelo road section. The results of the study are linear with the theory of Rukhfiati (2010) which states that age can affect deviant behavior in driving a car and if the driver is over 30 years old are wiser and more experienced in car driving behavior than drivers under 30 years old. The results of the analysis showed that there was an influence of age on the deviant behavior of car drivers on the Sofifi-Tobelo road section as indicated by the results of the OR analysis = 11,263 > 1

Table 3. The Effect of Education Level on the Deviant Behavior of Car Drivers

Status	Pilihan Kecepatan			Total
	Rendah	Sedang	Tinggi	
Menikah	44,9%	10,9%	13,4%	69,2%
Belum Menikah	14,3%	9,0%	6,9%	30,2%
Duda	0,4%	0,2%	0,0%	0,6%
				100%

The description of the table above is an illustration of respondents with an undergraduate education level tending to drive at high speeds, which is 69.2%. There is no influence on the level of education with the deviant behavior of car drivers on the Sofifi-Tobelo road section. The results of the Chi square implementation statistical test obtained a Pvalue value = $0.939 > \alpha 0.05$, then H_a was rejected and H_0 was accepted. It was concluded that there was no influence of the level of education on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on the results of the analysis obtained $OR = 0.969 < 1$. It is explained that the level of education is not the dominant factor in the deviant behavior of car drivers on the Sofifi-Tobelo road section.

Analytical test studies show that there is an influence of education level on the deviant behavior of car drivers in North Maluku. Based on the results of the analysis obtained $OR = 3.238 > 1$. It was explained that respondents with a low level of education were not too at risk of 3.2 affecting the deviant behavior of car drivers in North Maluku compared to respondents with a higher education level. The findings of the study are in line with the research of Rendri Hendrawan (2019), that there is an influence of education level on the deviant behavior of car drivers on the Sofifi-Tobelo road section. It was described that the respondents were highly educated by 218 respondents (54.5%) and had low deviant car driving behavior of 128 respondents (45.5%), the results of the statistical test showed that there was an influence of education level on the deviant behavior of car drivers on the Sofifi-Tobelo road section with a p-value of $0.03 < 0.05$.

The findings of the study are linear with the research of Destina Maharani (2016) related to a number of factors that influence the deviant behavior of car drivers on the Sofifi-Tobelo road section. It was concluded that the results of the cross-table analysis proved that more respondents had a low level of education on the deviant behavior of car drivers in North Maluku by 62%. This conclusion is supported by the results of statistical tests which show that there is a significant influence between the levels of education on the deviant behavior of car drivers on the Sofifi-Tobelo road section.

Table 4. The Effect of Job Type on the Deviant Behavior of Car Drivers

Pengeluaran	Pilihan Kecepatan			Total
	Rendah	Sedang	Tinggi	
> 5 Juta	12,0%	2,5%	2,9%	17,4%
3-5 Juta	16,3%	5,7%	5,3%	27,3%
1-3 Juta	21,6%	4,9%	6,9%	33,4%
< 1 Juta	9,6%	7,0%	4,8%	21,4%
				100%

The table above describes respondents with 1-3 job types tend to drive cars at high speeds. There is no influence of the type of work on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Chisquare statistical test results obtained Pvalue values = $0.039 < 0.05$, then H_a was accepted and

H₀ was rejected. It was concluded that there is an influence of this type of work on the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on the results of the analysis obtained OR = 2.917 > 1. Thus, respondents with an unfavorable type of work were at 2.9 times the risk of misbehaving in driving a car compared to respondents with good work.

The findings of the study are linear with the research of Destina Maharani (2016) related to factors that influence the deviant behavior of car drivers on the Sofifi-Tobelo road section as an indicator based on statistical tests showing that there is no significant influence of the type of work on the deviant behavior of car drivers on the Sofifi-Tobelo road section. This condition is in accordance with Green's theory (2005) which explains that the higher the type of work and the level of education a person is able to cause behavioral turnover. This conclusion is also in accordance with Utari's (2010) research related to safety riding, that there is no significant influence of work type variables on the deviant behavior of car drivers on the Sofifi-Tobelo road section which means that the higher the driver's employment rate, the safer the deviant behavior of car drivers on the Sofifi-Tobelo road section. Based on the survey results and table descriptions above, multiple regression analysis can be carried out to identify the influence of age (X₁), gender (X₂) and education level (X₃) on deviant behavior in driving a car (Y).

Table 5. Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	275,080	3	91,693	5,133	,002 ^b
	Residual	3000,920	168	17,863		
	Total	3276,000	171			

a. Dependent Variable: TotalY

b. Predictors: (Constant), TotalX3, TotalX2, TotalX1

Tabel 6. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,290 ^a	0,084	0,068	4,22642

The Anova table above indicates that all free variables have a simultaneous influence on bound variables. In other words age, gender, and level of education simultaneously have an influence on the behavior of driving a car deviating from the sig value. < 0.05. Meanwhile, the summary model table obtained the value of the influence of free variables simultaneously 8.4%. The remaining 91.6% must be explained by a number of other causal factors outside this study. The description of the discussion of driving behavior is defined as a form of driver response due to the external or internal influence of the driver during driving and deviant driving behavior is categorized into three, namely

errors, lapses, and violations (Reason et al., 1990). Error as an error involving failure to observe traffic rules or signs, lapses refer to deviations that arise due to the presence of impaired driver attention such as distractions and the result of memory limitations, while violations refer to intentional deviations by the driver.

The description of the synthesis above is supported by novelty problems on the Sofifi-Tobelo road section of North Maluku Province, underlying the author to provide a comprehensive overview of research entitled analysis of deviant car drivers on the Sofifi-Tobelo road section of North Maluku Province. This research took the locus of research on the Sofifi - Tobelo road section, North Halmahera Regency, North Maluku Province. The findings of this study are expected to be able to provide a comprehensive understanding of the road safety management system of the North Halmahera Police and provide scientific education to car drivers in the North Halmahera region and macro targets to drivers in North Maluku Province. Regarding the research target, an understanding and empirical basis is needed before discussing the quantitative descriptive analysis of this research.

Human behavior is determined by personality while human personality is determined by the principle of seeking individual satisfaction. Thus, it is concluded that behavior is a factual act that can be seen and felt. Human beings have behaviors in the fulfillment of their life needs that are controlled by their ratios and emotions. (Notoadmojo, 2010). Behavior is a form of response or reaction to a stimulus or stimulus from outside the organism but in giving a response depends largely on the characteristics or a number of other aspects of the individual concerned. This condition means that although the stimulus is the same for a number of individuals but the response of each individual is different, a number of aspects that distinguish the response to different stimuli are called behavioral determinants (Triwibowo & Pusphadani, 2018). Determinants of human behavior are difficult to limit because behavior is the resultant of a number of factors, both internal and external or from the surrounding environment. While in reality, it is difficult to detect psychiatric symptoms that determine a person's behavior (Notoatmodjo, 2012).

Gender is often defined as a sex. Based on the opinion of Fakhri (2016: 112), it is explained that gender is a grammatical classification of some words and a number of other terminologies that are interconnected with the existence of two sexes or neutrality. Gender is related to the differentiation of roles, functions and responsibilities of men and women as a result of agreements or the results of the formation of society. Gender is a cultural construct that is open to all change (Juditha, 2015:2). Based on Hungu's opinion (2016:43), gender is a biological difference between women and men from the moment a person is born. The biological differences and biological functions of men and women are not interchangeable. This condition can be seen in the fact of the locus of research that a number of car drivers are predominantly male. This condition is not a coincidence, but the existence of various conditions that occur in the phenomenon of car drivers. The variables of the sex of the car driver determine the level of productivity and ability to drive the car. Car drivers are basically

indistinguishable only by gender. But in general, men are more productive and have more abilities than women's driving skills. However, in certain circumstances sometimes women's driving patience is higher than that of men.

The definition of age refers to the definition according to age or age is a unit of time that measures the existence of objects or beings, both living and dead. The age of a human being is measured from birth to the time that age is calculated. The age of the car driver is an age parameter that is categorized as feasible and good in car driving activities. Novice drivers are a high-risk group in the aspect of deviant driver behavior. Most traffic accidents occur due to age factors that have not been met and result in no maturity in driving cars. The level of education is an indicator that education is a process of developing the knowledge and personality of the workforce. Basically, education is aimed at adding knowledge of a theoretical nature. The level of education is measured based on the last education certificate owned. Education is a number of experiences that have a beneficial influence on habits, attitudes and knowledge related to the health of individuals, communities and nations. Education contains a number of aspects and is very complex in nature. Formal education is a stage of the process of developing abilities in the desired direction (Notoatmodjo, 2003: 27). The opinion of Kusnendi (2003: 8.27), states that education is a process aimed at improving the knowledge and personality of individuals which includes theory and skills in solving problems related to the achievement of a goal. Meanwhile, based on BPS data (2017: 7), the highest education completed is categorized as individuals who leave school after attending lessons at the highest level and have obtained graduation marks / diplomas in both public and private schools.

Meanwhile, Marx (2016) concluded that the reason a person does not work is because he/she interprets work as a result of working as a compulsion and not developing himself mentally or physically. The requirements and manner of work are controlled and determined by the manager, so that workers do not use the creative capacity of workers to feel alienated from each other due to the specifics of the work, so it is not possible to identify each other's productive activities. Based on the quote of the Big Dictionary of Indonesian (2005) work is defined as an activity to do something that is done or done and something that is done for a living, livelihood. Based on a number of definitions of work above, researchers conclude that work is an activity carried out by a person to complete or do something that produces tools to meet existing needs such as goods or services and obtain pay or wages. Performance is the result of work achieved by a person in carrying out his duties charged to him which are based on experiential skills, and sincerity and time, performance is a combination of three important aspects, namely the ability and interest of a worker, acceptance of the explanation of task delegation and the role and level of motivation of a worker. Based on Mangkunegara's opinion, the terminology of performance comes from the word job performance or actual performance or achievement achieved truly. So that employee performance is the result of the achievement of an employee's work in carrying out the duties and obligations that have been given.

The driver of a deviant car can cost traffic activity a considerable amount, not only in the aspect of maintenance and insurance costs, but also insurance claims. Zamorski and Kelley (2011) state that there are a number of deviant driving behaviors that can lead to accidents, caused by drinking and drug use; Speeding; sudden change of path; does not signal; tailgating; not wearing seat belts; driving while drowsy; and engaging in disruptive behaviors such as cell phone use. Meanwhile, Klauer et al. (2006), describe that only four car driver behaviors are considered the riskiest, namely driving at excessive speed, seat belt use, distraction or inattention of the driver, and driver drowsiness. Consideration of the deviant behavior of car drivers in the context of public transport is described a little differently. Research conducted in the UK on the deviant behavior of public transport drivers was considered the riskiest and was identified as being caused by hard braking factors, sharp turns, lane handling, and acceleration and over speed (Milnes 2012). This condition is contrary to the situation in North America, where speeding is the most dominant deviant behavior of car drivers (Milnes 2012:1). The causes include sharp turns, hard braking, lane handling, and high acceleration.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis and discussion of research, it is concluded that age is a variable affected negatively and insignificantly the deviant behavior of car drivers, gender is a variable affected negatively and insignificantly the deviant behavior of car drivers, the level of education is a variable affected positively and significantly the deviant behavior of car drivers. Meanwhile, the variety of work is a variable contributed the negative and insignificant effect on the deviant behavior of car drivers on the Sofifi-Tobelo road.

FURTHER STUDY

Therefore, it is necessary to incorporate safety skills into general driving style through driver education. In this way, safe progress in traffic might be improved by preventing biased risk assessment and high level of risk acceptance the development of the false sense of safety, overestimation of control over traffic situations because of overconfidence to perceptual-motor skills, and indifference to messages of road safety campaigns. It is concluded that the strategy of improving traffic safety is crucial and must be accelerated, including the traffic accident management system as an effort to provide education to car drivers who have deviant behavior when driving a car passing along the Sofifi-Tobelo road section. Meanwhile, driver skills in identifying risks and hazards are distinctive and essential skills that every driver must possess.

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