ABNUS JOURNAL
Your Research Partner

Jurnal Transportasi, Logistik, dan Aviasi (JTLA)
E-ISSN: 2807-145X | Vol. 3, No. 1 (2023) | pp. 12–24

Analysis of Maximum Speed Limit Violations Intensity in School Safety Zones

Sri Handayani[1*], Sarinah Sihombing[2], Sumillah Irwan[3], Tri Mulyani Setyowati[4]

[1,2,3,4]*Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia*

***Corresponding author:** srihandayaniaddress@gmail.com |

Received: 26 June 2023 | Revised: 13 July 2023 | Published: 22 July 2023

Abstract

Purpose: This study analyzes important aspects of the intention to violate the maximum speed limit in the School Safety Zone (ZoSS) in DKI Jakarta, specifically in five different areas: Central Jakarta, East Jakarta, South Jakarta, West Jakarta, and North Jakarta.
Research Methodology: A quantitative survey was conducted using primary data collected through an online questionnaire distributed via social media to educational groups and community centers in June–July 2020. The dependent variable was the intention to violate the maximum speed limit, and independent variables included attitude, subjective norms, perceived control, gender, age, education, and driving license ownership. Data were analyzed using t-tests and multiple linear regression.
Results: The t-test results indicate that only subjective norms had a significant effect on the intention to violate speed limits. Other variables, including attitude, perceived control, gender, age, education, and license ownership, were not significant predictors. F-test results showed that all variables simultaneously had a significant effect on intention.
Conclusions: Environmental influences, particularly social and moral norms, play a crucial role in shaping intentions to violate speed limits, highlighting the importance of normative pressure in reducing speeding in school zones.
Limitations: The study is limited to Jakarta and relies on self-reported online survey data, which may not fully capture actual behavior.
Contributions: This research provides empirical evidence on the determinants of speed limit violations in school zones and offers insights for traffic safety policy and educational programs targeting road user behavior in urban Indonesia.

Keywords: *Attitude, Intention, Measurable Control, School Safety Zone, Subjective Norms*

How to Cite: Handayani, S., Sihombing, S., Irwan, S., & Setyowati, T. M. (2023). Analysis of Maximum Speed Limit Violations Intensity in School Safety Zones. *Jurnal Transportasi, Logistik, dan Aviasi (JTLA)*, *3*(1), 12–24.
https://doi.org/10.52909/jtla.v1i1.44

1. Introduction

Region Province DKI Jakarta own wide as big as 661.5 Km^2, with density resident as much as 15,367 people/km^2 and the number of schools located in DKI Jakarta from elementary to high school level is 4,573 schools (excluding the Thousand Islands Regency) (Kementerian Pendidikan dan Kebudayaan, n.d.). Students are inexperienced road users and tend to be less careful, so students often become victims of traffic accidents (Kamal et al., 2019). As road users, whether as pedestrians, cyclists, drivers of two-wheeled, three-wheeled, four-wheeled, or more motorized vehicles, roads can connect people with other people, one place with another, or even one culture with another. On a more practical level, roads

are a means of traveling to work and transporting goods (International Federation of Red Cross and Red Crescent Societies, 2007); therefore, the availability of roads creates derivative demand in the transportation and logistics industry.

The number of motorized vehicles in 2017 was 138,556,669 units, with growth in the last two years reaching 6–7 percent per year. The largest contributor to this growth was motorcycles (**bps2019a**). From the explanation above, it can be said that the issue of road safety is not only seen from the absence of accidents, but is broader because this issue is also important to create a safe, comfortable environment and ensure safety for road users (Handayani et al., 2019; Kuncoro & Harahap, 2021; Setyawati & Aristiyanto, 2021).

According to World Health Organization (2014), traffic accidents are the main cause of death worldwide for people aged 15–29 years. Meanwhile, Jakarta Open Data shows that in 2013, 3,710 traffic accidents resulted in the death of 401 people, the majority of whom were aged between 10–30 year (Indonesian Central Agency of Statistics, 2019). In 2018, the number of Jakarta residents aged between 15 and 39 years was close to 49 percent of the total population of Jakarta (Indonesian Central Agency of Statistics, 2019), so this age group is considered more dominant as road users.

The limited and uneven distribution of land transportation facilities and infrastructure in Jakarta results in congestion at certain points in the city center, increased transportation costs, loss of time, and a decrease in transportation safety. Based on BPS data available in 2013, it is known that every There were 10 traffic accidents in Jakarta today.

Table 1. 28 Point Vulnerable Accident in DKI Jakarta

Region	**Location**
Jakarta Center	Road Space from direction west to east Road Gate Youth, Senayan
Jakarta North	Road Lodan Raya Road RE Martadinata Bridge coal-fired power plant Road Yos Sudarso Road Raya Cakung-Cilincing (Worm)
Jakarta West	Road Raya Day Stop Road Raya Tubagus Angke
Jakarta South	Road Sultan Alexander Young direction south Road Raya Market Sunday south direction Road Raya TB Simatupang direction west Road Prof. Dr. Saharjo Road KH. Abdullah Syafei
Jakarta East	Road Bogor direction to South and direction north, Ciracas District Road I Lord Ngurah Rai direction to west and direction east, Duren Sawit District Road Head of Household Dr Rajiman Widyodiningrat direction to north and south, Cakung District

Source: Republika, 2019

Table 1 shows 28 accident-prone areas in Jakarta. Since 2006, the Indonesian government has implemented School Safe Zones (ZoSS) to improve road safety, namely locations on certain road sections that are time-based speed zones to regulate vehicle speeds in school environments. The speed limit set for the

ZoSS is approximately 20–25 km/h. The explanation above provides an overview of the traffic density around ZoSS in the morning and after school, indicating the importance of implementing School Safe Zones.

Speeding beyond the designated speed limit is one of the five main risk factors for traffic accidents and deaths (World Health Organization, 2014). This speeding behavior is directly linked to the cause and severity of road accidents. consists of two behaviors, which are different, that is, exceeding the limit speed and excessive speeding. Therefore, intention can be used as a reasonable approach to understand how maximum speed limit violations occur in the School Safe Zone. Identification of speed limit violation intentions maximum This can potential saving lives And reduce cost safety traffic through improving driver behavior.

This study analyzes the important aspects of the intention to violate the maximum speed limit, so that by conducting this study, it is hoped that it can provide a comprehensive picture of the intention to violate the maximum speed limit in the School Safety Zone (ZoSS) in DKI Jakarta, especially in five different areas, namely Central Jakarta, East Jakarta, South Jakarta, West Jakarta, and North Jakarta.

2. Literature Review

2.1 Intention (Intention) Violation Limit Speed Maximum

Intention reflects a cognitive representation of an individual's readiness to perform a particular action (Agusinta et al., 2021; Ajzen, 1991). Intention tends to be the best predictor of a single action, such as the intention to read a book or attend a lecture (Sheeran, 2017), or even the intention to violate the maximum speed limit when driving.

In general, individuals are aware of the actions required to achieve certain goals (Ajzen, 1985). For example, driving a car is a relatively routine behavior. Driving a vehicle or driving at a speed above the permitted speed limit is known as speeding. Driving behavior without paying attention to traffic rules, for example, at a speed exceeding the established speed limit, has the potential to cause accidents and can have other detrimental impacts (Heriyanto, 2021; Keke et al., 2021). Based on previous research (Jones et al., 2012), the intention to speed is based on individual attitudes, perceived behavioral control, and sense of arousal.

2.2 Attitude

Attitude is the behavior or movement that is visible and displayed in interactions with the social environment. This interaction can be a process of mutual response, influence, and adjustment to the social environment (Albarracin & Shavitt, 2018; Duarte et al., 2017). Based on its character, attitude is a reaction or response that is still closed from somebody to something stimulus or object. Attitude in a way real show The connotation is that there is a harmony of reactions with certain stimuli or stimuli obtained in the individual's daily life and is emotional towards stimuli or stimuli from their surrounding environment (Ansary, 2023).

Attitude is the willingness or desire to act, not the realization of a specific intention. Based on this, it can be said that an attitude is not yet an action or an activity (Putri et al., 2022). Attitude has three main components: beliefs, which are ideas and concepts about an object, an assessment of an object, and a tendency to act. These three components together form a complete attitude (Kyrlitsias & Michael-Grigoriou, 2022; Mayasari et al., 2020).

There are several levels of attitude based on their indications. The first is acceptance, where the subject is willing and attentive to the stimulus provided by the object of the study. The second is response, where the subject provides answers when asked, works on, and completes the assigned tasks. The third is

respect, inviting others to work on or discuss problems. The final attitude is taking responsibility for everything one has chosen, regardless of the risks involved (Oh Kruzic et al., 2020; Saunderson & Nejat, 2019).

Attitudes toward relevant stimuli determine the type of behavioral traits or events of an individual. Attitude is an internal factor and has the following characteristics: attitude is the result of learning; attitude becomes stable through experience; attitude involves a relationship between individuals and others and between individuals and objects or situations; attitudes contain cognition or factual information, for example pleasant or unpleasant; and attitudes are a direct approach or avoidance (Ali, 2019; Gaiseanu, 2020).

2.3 Norm Subjective (Subjective Norm)

Subjective norms are a person's perception of social pressure to perform or not perform a behavior (Ajzen, 1985). In the Theory of Reasoned Action and Theory of Planned Behavior models, subjective norms are a function of normative beliefs, which represent perceptions of significant societal judgments about whether a behavior should be performed (Anggraini & Patricia, 2018).

Subjective norms refer to the involvement of feelings of social pressure in a behavior (Hakim & Nuqul, 2011; Lesmini et al., 2022; Oktrivina, 2022). Moral norms are an individual's perception of the moral rightness or wrongness of behavior (Ajzen, 1991) and take into account personal feelings of responsibility to perform or refuse to perform certain behaviors. Moral norms are expected to significantly influence the performance of behaviors with moral and ethical dimensions (Hasan & Suciarto, 2020; Kashif et al., 2018; Saputra et al., 2022). Moral norms are values adopted or agreed upon by group members, while individual behavior is influenced by these group norms, including traffic behavior, especially driving behavior. Driving behavior is a moral behavior because it can potentially cause harm to oneself and others (Fylan & Stradling, 2018; Siaputra & Isaac, 2020).

The alignment or conformity of individual behavior in a group with the values and expectations of the group is usually in line. This is in line with the human tendency to live in groups, which ultimately forms social norms (Sheeran, 2017; Yasmin & Noermansyah, 2023). This tendency to live in groups is the main reason individuals dissolve and merge with their groups to gain approval or avoid ridicule from the group they join (Loria & Rodhiah, 2020; Mohammed et al., 2017).

Based on previous research, moral norms that favor speeding behavior significantly predict the intention to speed. Most studies that show moral norms on intention do not show a similar impact on behavior, at least when the intention factor is included in the research analysis. (Hakim & Nuqul, 2011) analyzed attitudes towards traffic rules in the motorcycling community in Malang City and found that group norms influence the behavior of its members in traffic.

2.4 Control Measurable (Perceived Control)

Most healthy behavioral theories believe that the single best predictor of an individual's behavior is their intention to engage in that behavior (Fylan & Stradling, 2018). The Theory of Reasoned Action is considered appropriate for explaining the influence of attitudes and subjective norms on driving behavior. Other studies have shown that emotional responses influence and encourage action. behavior risky like behavior speeding, although There is matter other Which more underlying behavior These include being late to keep an appointment, or keeping traffic flowing or unintentional intentions (Ardhianti et al., 2022; Jones et al., 2012).

2.5 Theory of Reasoned Action (TRA)

According to the Theory of Reasoned Action (TRA), intention is a proximal predictor that connects attitudes, subjective norms, and other variables (such as personality) to behavior (Sheeran, 2017).

Intention is defined as the amount of effort a person is willing to expend to achieve a goal. Actions are driven by intention, but not all intentions are carried out or realized; some are ignored while others are revised to suit changing circumstances (Ajzen, 1985).

The Theory of Reasoned Action (TRA) explains behavior that changes based on the result of behavioral intention, where the behavioral intention to perform or not perform a certain behavior is influenced by two things. The first is an individual's attitude towards behavior or attitude towards behavior. based on an individual's beliefs. The second is subjective norms, which describe an individual's beliefs about normal and acceptable behavior in society (Achir et al., 2022; Ajzen, 2019; Fadhilah et al., 2022).

2.6 Theory of Planned Behavior

The Theory of Planned Behavior (TBP) updates the basic assumption of TRA that intentions are the most important predictors of behavior but recognizes that individuals may not always have sufficient control over their actions. take action on the intention that individuals have (Ajzen, 1985). Control over this behavior can prevent the intention from being carried out.

The Theory of Planned Behavior (TBP) complements the TRA by adding individual beliefs and perceptions that the individual has the ability to exercise control over his or her behavior. This theory emphasizes that the intention to perform a particular behavior can be predicted with high accuracy based on an individual's attitude toward the behavior, subjective norms, and perceived behavioral control.

Some recent research on behavior has the assumption that 'people do what they want to do" and 'don't do what they don't want to do." Intention is often measured with a person's response to statements such as 'I intend to do x" or 'I intend not to do x".

Intention types can be divided into positive and negative. Positive intentions or tendencies refer to the intention to perform a behavior or not perform it. The next consideration is whether a person intends to act (Sheeran, 2017). Furthermore, the process by which intention consistency influences behavior is shown in the following table:

Table 2. Consistency between Intention and Behavior

Intention	Positive	Negative
Act	Perpetrator Which tend	Perpetrator Which disinclined
No act	Abstainer (abstainer) tend	Abstainer Which disinclined

Source: Sheeran, 2017

Table 2 explains the consistency between intention and behavior, with two groups. The group with positive intentions who will then act (defined as people who are inclined) and the group with negative intentions who do not take any action (people who do not act). action) (Sheeran, 2017). The decision to act or not is the result of considering the specific possible outcomes inherent in an individual's actions.

The scope of intention is influenced by habits and automaticity in human behavior (Sheeran, 2017). Previous research on speeding behavior was conducted to determine the speeding behavior (Jones et al., 2012) based on basic TBP indicators by incorporating emotions. This study did not specifically focus on school areas but on public roads. Another study conducted by Richards (Richards, 2010) found a relationship between speed and the risk of fatal accidents. Based on previous research, in the context of road safety in general and School Safe Zones, this study attempts to examine the factors influencing the intention to violate the maximum speed limit in School Safe Zones in the Special Capital Region of Jakarta in 2020, using the Theory of Planned Behavior model. To determine the relationship between the variables, the following framework was used:

1. The Relationship between Attitude and Intention to Violate the Maximum Speed Limit in School Safe Zones
   Intention (intention) to speed based on attitude (attitude) individual Where attitude influenced by habit and automaticity in behavior. Attitude can be connected with intention to violate the maximum speed limit in the School Safe Zone.
2. The Relationship between Subjective Norms and Intention to Violate the Maximum Speed Limit in the School Safe Zone
   Subjective norms reflect the normative beliefs held by individuals, which represent perceptions of significant societal judgments about whether a behavior should be performed. Norm Subjective can have a relationship with intent of violation speed limit maximum in the School Safe Zone.
3. The Relationship between Measured Control and Intention to Violate the Maximum Speed Limit in School Safe Zones
   Behavior own assumptions that 'person do What Which want them do" And 'No do what they do not want to do." Intention is often measured by a person's response to statements such as 'I intend to do x" or 'I intend not to do x". Measured control reflects an individual's belief and perception that they have the ability to exercise control over their behavior. The measured Control can be related to the intention to violate the maximum speed limit in the School Safe Zone.
4. The Relationship between Gender and Intention to Violate the Maximum Speed Limit in the School Safe Zone
   Sex or gender influences the way individuals believe and respond to something. Something and control his actions. Type Sex can own a relationship with the intention of violating the maximum speed limit in the School Safe Zone.
5. The Relationship between Young Age and Intention to Violate the Maximum Speed Limit in School Safe Zones
   Young age influences how individuals believe, trust, respond to, and control their actions. Young age may be associated with the intention to violate the maximum speed limit in the School Safe Zone.
6. The Relationship between Education and Intention to Violate the Maximum Speed Limit in School Safe Zones
   Education influences the way individuals believe, believe, and respond to something. something and exercise control over their actions. Education may be related to the intention to violate the maximum speed limit in school safe zones.
7. The Connection between Ownership of SIM with Intention Violation Limit Speed Maximum in Zone Happy School
   Driver's license ownership influences how individuals believe, trust, respond to, and exert control over their actions. Driver's license ownership may be associated with the intention to violate the maximum speed limit in the school's safe zone.

3. Methodology

This research uses a quantitative method, where the data obtained are presented in numerical form and analyzed further in a data analysis. The data analyzed consisted of eight research variables: Intention to Violate the Maximum Speed Limit as the dependent variable, and Attitude, Subjective Norms, Measurable Control, Gender, Age, Education, and SIM ownership as the independent variables. This study uses primary data collected through an online survey conducted in June and July 2020. The survey was distributed through social media in various educational groups and community centers in Jakarta, covering

five different areas: Central Jakarta, North Jakarta, East Jakarta, South Jakarta, and West Jakarta.

The population in this research is the whole resident Area Especially for the Capital City of Jakarta, and residents of Bodetabek (Bogor, Depok, Tangerang, and Bekasi) who are active (working, studying, and traveling) in DKI Jakarta. A sample is a portion of a certain number or characteristic taken from a population that will be studied in detail (Sugiyono, 2009). The sample that will be taken in the study is done using an online survey method in accordance with applicable procedures so that it can represent the population it represents.

4. Results and Discussion

4.1 Data Validity Test

To test the validity of the research data, Pearson's correlation analysis was used, where if the total of the analysis shows the calculated r value > r table value, then the research data are declared valid. The results of the data validity test are presented in Table 3.

Table 3. Data Validity Test

Variable	**Statement**	**r count**	**r table (product moment for N=252)**	**Valid r count > r table**
Attitude	1	0.500759404	0.126	valid
	2	0.534880743	0.126	valid
	3	0.517217467	0.126	valid
	4	0.592269731	0.126	valid
Norm Subjective	1	0.622754053	0.126	valid
	2	0.713008641	0.126	valid
	3	0.756846977	0.126	valid
	4	0.591783965	0.126	valid
Control Measurable	1	0.605138494	0.126	valid
	2	0.558659248	0.126	valid
	3	0.622759210	0.126	valid
	4	0.619958062	0.126	valid
Intention	1	0.389009238	0.126	valid
	2	0.141394473	0.126	valid
	3	0.331377774	0.126	valid

Source: Primary data, processed by researchers, 2020.

From Table 3, the Pearson product-moment correlation coefficient (ρ or r) is used as the limit of validity or invalidity of a statement item. With N = 252 and a significance level of 5%, all variables were declared valid using Pearson's correlation r test. This can be seen from the calculated r-value for all variables above, which is greater than the r-table value, with a significance level of 5%, using a two-tailed test.

4.2 Data Reliability Test

The reliability of a research variable or construct can be determined from the results of the Cronbach's alpha statistical test (α). Variables or constructs are said to be reliable if the Cronbach's alpha is > 0.6. The more mark alpha- nya The closer the value is to one, the more reliable the data reliability value is. The results of the reliability test are presented in Table 4.

Table 4. Reliability Test

Variables	Cronbach's Alpha	Provisions	Information
Attitude	0.6694	0.6	Reliable
Norm Subjective	0.9171	0.6	Reliable
Control Measurable	0.90314	0.6	Reliable
Intention	0.9844	0.6	Reliable

Source: Primary data, processed by researchers, 2020.

From Table 4 seen that all variables reliable (consistent), matter This seen from mark Cronbach alpha from all variables own marks above 0.6.

In multiple linear regression analysis, performing classical assumption tests is mandatory to obtain efficient and unbiased parameter values or the Best Linear Unbiased Estimator (BLUE) from the multiple linear regression equation using the least squares method. Testing is necessary to determine whether the resulting regression model meets the classical requirements or assumptions.

4.3 Multiple Linear Regression Analysis

Multiple linear regression analysis was used to determine the magnitude of the influence of attitude (SIKAP), Subjective Norm (NORMA), engrained control (KONTROL), gender (GENDER), age (AGE), education (EDUC), and Driving License Ownership (SIM) simultaneously on the Intention to Violate the Maximum Speed Limit (INTENSI). Hypothesis testing in this study was performed using multiple regression analysis. regression analysis). The test results for hypotheses 1 to 7 are shown in Table 5.

Table 5. Multiple Linear Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.934503	1.180046	5.029045	0.0000
SIKAP	0.046677	0.070380	0.663218	0.5078
NORMA	0.117794	0.056021	2.102675	0.0365
KONTROL	0.087616	0.060095	1.457962	0.1461
GENDER	-0.051937	0.280432	-0.185204	0.8532
USIA	0.278844	0.353670	0.788432	0.4312
EDUC	0.171001	0.266303	0.642131	0.5214
SIM	0.075307	0.277086	0.271782	0.7860
R-squared	0.089825	Mean dependent var		10.37302
Adjusted R-squared	0.063713	S.D. dependent var		1.944383
S.E. of regression	1.881422	Akaike info criterion		4.133164
Sum squared resid	863.6986	Schwarz criterion		4.245209
Log likelihood	-512.7786	Hannan-Quinn criter.		4.178249
F-statistic	3.440032	Durbin-Watson stat		1.898962
Prob(F-statistic)	0.001575			

Dependent Variable: INTENSI
Method: Least Squares
Date: 08/09/20 Time: 16:11
Sample: 1 252

Based on Table 5, the following regression formula can be obtained for the sample studied:

$$\text{Intensi} = 5.934503 + 0.117794\,\text{Norma} + e \tag{1}$$

The interpretation of the regression is as follows:

1. Constant (a)
   The constant value $a = 5.934503$ means that if the independent variable is ignored, or in other words, if there is no ATTITUDE variable, NORM, CONTROL, GENDER, AGE, EDUC, and SIM, then INTENSION will have a value of 5.934503.
2. Norm (Norm Subjective)
   The coefficient value b_2 for the norm variable is 0.117794 and is positive. This shows that Subjective Norms have a unidirectional relationship with intention, meaning that every one-unit change in Subjective Norms, assuming the variables ATTITUDE, CONTROL, GENDER, AGE, EDUCATION and SIM are constant, then INTENTION will experience an increase of 11.77% and move in the same direction.

4.4 Analysis Coefficient Determination (R^2)

The coefficient of determination is used to determine the extent of the relationship between several variables in a clearer sense. The coefficient of determination explains how much change or variation in one variable can be explained by changes or variations in other variables (**Santosa2005**). In everyday language, it is the ability of independent variables outside the model to contribute to the fixed variable as a percentage. The value of this coefficient ranges from 0 to 1. If the result is closer to 0, it means that the ability of the independent variables to explain the variation of the variable is very limited. However, if the result is closer to 1, it means that the independent variables provide almost all the information needed to predict the variation in the dependent variable. For the analysis, we used the EViews output, which is presented in Table 3.9.

R^2 value = 0.089825, which means that variables Norm Subjective (Norm) can explain the Intention variable by 8.98%, while 91.02% is explained by other variables outside the model of other variables that are not studied. Because the R Square value tends to be far from 1, it can be concluded that the independent variables do not provide all the information needed to predict the dependent variation.

4.5 t-test

The t-test, indicated by the "t-statistic" value, was used to determine whether the independent variables partially had a significant effect on the dependent variable. The significance level was set at 0.05. If the significance value is smaller than the confidence level, we accept the alternative hypothesis, which states that the independent variable partially influences the dependent variable. The t-test analysis is also shown in the "Coefficient" table. From the regression results table above, we obtain the following:

- Norms on Intention

The t-statistics column has a sig value of 2.102675. The sig value is greater than the probability value of 0.05, or the p value is $0.0365 < 0.05$, so H_0 is rejected, and H_a is accepted. The Norm variable has a calculated t value of 2.102675 with t table (0.05) = 2.0422. using a 2-sided test, the calculated $t > t$ table for a significance level of 95% ($2.102675 > 2.0422$), it can be concluded that the Subjective Norm variable has an effect on intention, but with a tolerance level of error (α) = 5%.

4.6 f-test Statistics

The F-test was used to determine whether the independent variables simultaneously had a significant effect on the dependent variable. The confidence interval was set at 0.05. If the calculated F value is greater than the F value according to the table, then the alternative hypothesis, which states that all

independent variables simultaneously have a significant effect on the dependent variable, is rejected. This test was carried out to determine whether the variables ATTITUDE, NORMS, CONTROL, GENDER, AGE, EDUCATION, and SIM jointly or simultaneously had a significant effect on INTENTION. For the analysis of the Eviews10 output, the regression results can be seen in Table 4.10. From Table 4.10, the calculated F value is 3.440032 with a probability value (sig) of 0.001575. The calculated F value (3.440032) $>$ F table (2.06), and the significance. If the value is smaller than the probability value of 0.05 or a value of 0.000 $<$ 0.05, then H_1 is accepted, meaning that simultaneously the variables ATTITUDE, NORMS, CONTROL, GENDER, AGE, EDUC, and SIM simultaneously have a significant effect on INTENSION.

5. Conclusions

From the data obtained and the analyses conducted, this study demonstrates that among the variables examined, only Subjective Norms (Norm) have a significant effect on the Intention to Violate the Maximum Speed Limit in School Safety Zones (ZoSS). This finding indicates that social, moral, environmental, educational, and legal norms play an important role in shaping individuals' intentions regarding speed limit compliance. The existence of community values, socialization, and sanctions related to speeding behavior can reduce the intention to violate speed limits in ZoSS. In contrast, the variables of Attitude, Perceived Control, Gender, Age, Education, and Driving License Ownership (SIM) were found to have no significant effect on the Intention to Violate the Maximum Speed Limit in ZoSS, indicating that these factors are not sufficient to explain variations in respondents' intentions to engage in speeding behavior within school safety zones.

Acknowledgements

The authors express gratitude to the educational institutions, community centers, and survey respondents in Jakarta for their cooperation. Appreciation is extended to colleagues and mentors who provided guidance and feedback throughout the research process, contributing to the completion of this study.

Author Contributions

SH conceptualized the study, designed the methodology, and drafted the manuscript. SS conducted data collection, managed the online survey, and performed statistical analysis. SS and SI contributed to the literature review, validation of findings, and manuscript revision. TMS participated in reviewing, editing, and finalizing the manuscript to ensure clarity and coherence. All authors read and approved the final manuscript.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this study. This research was conducted independently, and no financial or personal relationships influenced the results or interpretation of the findings.

References

Achir, M. M., Suryawan, R. F., Maulina, E., & Tannady, H. (2022). Handling of incoming cargo to support smooth goods delivery: A review of four aspects. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 96–105. https://doi.org/10.52909/jtla.v1i2.62

Agusinta, L., Nugroho, A. E., Fachrial, P., & Suryawan, R. F. (2021). Assessment model of employee competence, ground support equipment effectiveness, and satisfaction on service quality. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 55–69. https://doi.org/10.52909/jtla.v1i1.37

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control: From cognition to behavior*. Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.

Ajzen, I. (2019). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. https://doi.org/10.1016/0749-5978(91)90020-T

Albarracin, D., & Shavitt, S. (2018). Attitudes and attitude change. *Annual Review of Psychology*, *69*, 299–327. https://doi.org/10.1146/annurev-psych-122216-011911

Ali, M. I. (2019). The consequences of illegal mining in the environment: Perspectives behavioral, knowledge and attitude. *International Journal of Environment, Engineering and Education*, *1*(1), 25–33. https://doi.org/10.55151/ijeedu.v1i1.10

Anggraini, R. D. S., & Patricia, P. (2018). Pengaruh attitude toward behavior, perceived behavioral control, dan subjective norm terhadap entrepreneurial intention mahasiswa non-ekonomi. *Ekonomi dan Bisnis*, *5*(2), 96–105. https://doi.org/10.35590/jeb.v5i2.745

Ansary, K. (2023). Social attitude and adjustment: A critical review. *Galore International Journal of Applied Sciences and Humanities*, *7*(1), 26–32. https://doi.org/10.52403/gijash.20230104

Ardhianti, M. P., Hermawan, M. A., & Suryawan, R. F. (2022). The impact of lifestyle and service quality on purchase decisions at jne express bekasi. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 114–123. https://doi.org/10.52909/jtla.v1i2.64

Duarte, R., Escario, J. J., & Sanagustín, M. V. (2017). The influence of the family, the school, and the group on the environmental attitudes of european students. *Environmental Education Research*, *23*(1), 23–42. https://doi.org/10.1080/13504622.2015.1074660

Fadhilah, F., Suryawan, R. F., Suryaningsih, L., & Lestari, L. (2022). Theoretical perspectives on warehouse operations: A review of four key aspects. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 106–113. https://doi.org/10.52909/jtla.v1i2.63

Fylan, S., & Stradling, S. (2018). Intention to speed in a rural area: Reasoned but not reasonable. *Transportation Research Part F: Traffic Psychology and Behaviour*. https://doi.org/10.1016/j.trf.2010.04.002

Gaiseanu, F. (2020). Attitude as an expressible info-operational reaction to a perceived/purposed object/objective. *International Journal on Neuropsychology and Behavioural Sciences*, *1*(1), 12–16. https://doi.org/10.51626/ijnbs.2020.01.00002

Hakim, L., & Nuqul, F. L. (2011). Analisa sikap terhadap aturan lalu lintas pada komunitas bermotor [p. 11].

Handayani, S., Mulyani, T., & Iqbal, M. (2019). Budaya keselamatan pada transportasi jalan indonesia. *Jurnal Transportasi*, 201–210.

Hasan, H. N., & Suciarto, S. (2020). The influence of attitude, subjective norm and perceived behavioral control towards organic food purchase intention. *Journal of Management and Business Environment (JMBE)*, *1*(2), 132. https://doi.org/10.24167/jmbe.v1i2.2260

Heriyanto, D. (2021). The impact of service quality and compensation on crew satisfaction in manning companies. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 31–41. https://doi.org/10.52909/jtla.v1i1.35

Indonesian Central Agency of Statistics. (2019). Bps-file.

International Federation of Red Cross and Red Crescent Societies. (2007). *Practical guide on road safety: A toolkit for national red cross and red crescent societies*. IFRC.

Jones, C., Ferguson, C., & Robinson, K. (2012). Emotion and speeding intention: Predicting intention and differences between intenders and non-intenders, 1–10.

Kamal, I., Wulandari, S., & Gunawan, A. (2019). Penerapan zona selamat sekolah (zoss) terhadap keselamatan lalu lintas. *Jurnal Transportasi*, *5*(3), 353–358.

Kashif, M., Zarkada, A., & Ramayah, T. (2018). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management & Business Excellence*, *29*(5–6), 481–501. https://doi.org/10.1080/14783363.2016.1209970

Keke, Y., Tobing, N. G. L., & Tanjung, I. (2021). The effect of occupational safety and health on employee performance at pt. angkasa kargo. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 42–54. https://doi.org/10.52909/jtla.v1i1.36

Kementerian Pendidikan dan Kebudayaan. (n.d.). Data sekolah provinsi dki jakarta.

Kuncoro, H., & Harahap, V. (2021). Effect of electronic flight bag usage and safety culture on flight safety performance at pt. garuda indonesia. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 18–30. https://doi.org/10.52909/jtla.v1i1.34

Kyrlitsias, C., & Michael-Grigoriou, D. (2022). Social interaction with agents and avatars in immersive virtual environments: A survey. *Frontiers in Virtual Reality*, *2*, 786665. https://doi.org/10.3389/frvir.2021.786665

Lesmini, L., Najoan, D. J., Ruslani, M. N., Firdaus, M. I., Susanto, P. C., & Suryawan, R. F. (2022). Service strategies of shipping agencies in managing ship arrivals and departures. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 70–84. https://doi.org/10.52909/jtla.v1i2.60

Loria, A., & Rodhiah, R. (2020). Pengaruh personal attitude, subjective norm, dan perceived behavioral control terhadap entrepreneurial intention. *Jurnal Manajerial dan Kewirausahaan*, *2*(3), 653–661. https://doi.org/10.24912/jmk.v2i3.9577

Mayasari, E., Hayu, R. E., & Permanasari, I. (2020). Education media videos and posters on healthy snacks behavior in elementary schools students. *STRADA: Jurnal Ilmiah Kesehatan*, *9*(2), 543–550. https://doi.org/10.30994/sjik.v9i2.229

Mohammed, B. S., Fethi, A., & Djaoued, O. B. (2017). The influence of attitude, subjective norms and perceived behavior control on entrepreneurial intentions: Case of algerian students. *American Journal of Economics*, *7*(6), 274–282. https://doi.org/10.5923/j.economics.20170706.02

Oh Kruzic, C., Kruzic, D., Herrera, F., & Bailenson, J. (2020). Facial expressions contribute more than body movements to conversational outcomes in avatar-mediated virtual environments. *Scientific Reports*, *10*(1), 20626. https://doi.org/10.1038/s41598-020-76672-4

Oktrivina, A. (2022). Attitude, subjective norm and perceived behavior control on whistleblowing intention in avoiding fraud. *AKURASI: Jurnal Riset Akuntansi dan Keuangan*, *4*(2), 175–186. https://doi.org/10.36407/akurasi.v4i2.704

Putri, K. Y. S., Sutjipto, V. W., Anindhita, W., Romli, N. A., Andriani, Y., & Deianeira, D. R. (2022). Health communication literacy in empowerment of community health in indonesian tourism area. *Scriptura*, *12*(1), 25–32. https://doi.org/10.9744/scriptura.4.1.1-9

Richards, D. C. (2010). *Relationship between speed and risk of fatal injury: Pedestrians and car occupants* (tech. rep. No. 16). Road Safety Web Publication.

Saputra, M. A., Suryawan, R. F., & Parmenas, N. H. (2022). Air cargo import service model: A review of four aspects. *Jurnal Transportasi, Logistik, Dan Aviasi*, *1*(2), 85–95. https://doi.org/10.52909/jtla.v1i2.61

Saunderson, S., & Nejat, G. (2019). How robots influence humans: A survey of nonverbal communication in social human–robot interaction. *International Journal of Social Robotics*, *11*(4), 575–608. https://doi.org/10.1007/s12369-019-00523-0

Setyawati, A., & Aristiyanto, F. K. (2021). Improving discipline through apron movement control (amc) at pt angkasa pura i adi soemarmo airport. *Jurnal Transportasi, Logistik, dan Aviasi*, *1*(1), 1–17. https://doi.org/10.52909/jtla.v1i1.33

Sheeran, P. (2017). Intention–behavior relations: A conceptual and empirical review. *European Review of Social Psychology*. https://doi.org/10.1080/14792772143000003

Siaputra, H., & Isaac, E. (2020). Pengaruh attitude, subjective norm, dan perceived behavior control terhadap purchase intention makanan sehat di crunchaus surabaya. *Jurnal Manajemen Perhotelan*, *6*(1), 9–18. https://doi.org/10.9744/jmp.6.1.9-18

Sugiyono. (2009). *Metode penelitian kuantitatif, kualitatif dan r&d*. Alfabeta.

World Health Organization. (2014). Road safety: Basic facts.

Yasmin, A., & Noermansyah, A. L. (2023). The impact of commitment, attitude, subjective norm and perception of behavioral control on intention to do whistleblowing. *MAKSIMUM: Media Akuntansi Universitas Muhammadiyah Semarang*, *13*(1), 97–102. https://doi.org/10.26714/mki.13.1.2023.97-102