Vol. 8, No. 1, 2022, pp. 74-78
DOI: https://doi.org/10.29210/1202221486

Contents lists available at Journal IICET

Jurnal EDUCATIO (Jurnal Pendidikan Indonesia)
ISSN: 2502-8103 (Print) ISSN: 2477-8524 (Electronic)

Journal homepage: https://jurnal.iicet.org/index.php/jppi

Modeling techniques group setting on increasing adolescent self-regulation in traffic violation prevention

Nurfarhanah Nurfarhanah*), Rezki Hariko, Firman Firman, Zikry Latupasjana Ersya, Maya Mashita Rachmi
Universitas Negeri Padang, Indonesia

Article Info

Article history:

Received Feb 07th, 2022
Revised Apr 19th, 2022
Accepted Aug 26th, 2022

Keyword:

Modeling technique
Group setting
Self-regulation
Traffic violation

ABSTRACT

Traffic accidents are the leading cause of death among young people aged 15–29. This study aims to reveal the efficiency of group setting modeling techniques to improve self-regulation in preventing traffic violations in adolescents. There are two groups of students in SMK 1 Padang City. The group consists of 25 students. This type of experimental research with Quasy-Experiment design. The research sample is Vocational High School (SMK) students. Sampling using random cluster sampling. The instrument used is a self-regulation questionnaire in traffic. Then analyzed using the Wilcoxon Signed Ranks test and the Kolmogorov-Smirnov Two Independent sample with the help of the Statistical Product and Service Solution (SPSS) version 22 program.This study found that adolescent self-regulation in traffic increased after being given counseling services using group setting modeling techniques. This research can be used to reduce the level of traffic violations on the highway, especially among teenagers, especially in the city of Padang. The average score of group members in the pretest was 73.8 while the posttest was 91.72, meaning that there was an increase in the score of 13.00. The provision of group setting modeling techniques can significantly improve adolescent self-regulation against traffic violations. This research can be an alternative in the world of education to prevent traffic violations, especially in adolescents.

Corresponding Author:

Nurfarhanah Nurfarhanah,
Universitas Negeri Padang
Email: nurfarhanah@fip.unp.ac.id

Introduction

Currently, there are many traffic violations both in big cities and small cities in various forms that can result in traffic accidents that can endanger other road users. Road accidents are the main cause of death at a young age, and motorcyclists, the majority of whom are teenagers, are also the highest cause of traffic accidents (Wahyurudhanto & Prisgunanto, 2018). Not only death and damage to motorized vehicles, but accidents also result in serious illness and disability(Yulianti et al., 2016). Driving safety is an urgent need for dynamic people moving from one place to another (Fitrianti & Nurhayati, 2017; Nurfarhanah et al., 2022).

One of the road users who has recently mushroomed in Indonesia comes from among teenagers. Many teenagers have driven two-wheeled or four-wheeled motorized vehicles on the highway(Rachmi & Firman, 2020; Subhi, 2021). However, there is something concerning where some of them do not have good driving competence. In fact, many of them do not have a driver's license (SIM) because they are not yet 17 years old(Ernawati & Afdal, 2018; Nurfarhanah et al., 2022; Rachmi & Firman, 2020). This condition is still accompanied by a number of other traffic violations such as driving at high or very high speeds (speeding), not

wearing a helmet, not carrying a vehicle registration certificate (STNK), missing or incomplete mirrors, making a loud exhaust sound, riding three one or more people and so on. Of course all this is a concern and a problem for the wider community, especially other motorists(Ainscough et al., 2018; Subhi, 2021).

According to the World Health Organization, traffic accidents in Indonesia are the third largest cause of death after coronary heart disease and tuberculosis (TBC)(Fitrianti & Nurhayati, 2017; Nurfarhanah et al., 2022; Rachmi & Firman, 2020; Wahyurudhanto & Prisgunanto, 2018). Of the number of accident victims, the first order is mostly experienced by teenagers and young adults (Fitrianti & Nurhayati, 2017; Nurfarhanah et al., 2022), the Padang Police Satlantas has taken action against 18,477 traffic violators. And the Regional Police (Polda) of West Sumatra recorded 955 traffic violations in the city of Padang through Electronic Law Enforcement (ETLE). The Head of Public Relations of the West Sumatra Police, Kombes Pol. SatakeBayu in Padang, said that most of the violations committed were violations of not wearing helmets, seat belts and turning roundabouts that were not allowed (padang.sumbar.polri.go.id). The high mortality rate due to traffic accidents at a young age is one of them due to their low perception of the risks of danger on the highway(Fitrianti & Nurhayati, 2017; Wahyurudhanto & Prisgunanto, 2018).

Based on this phenomenon, self-regulation is felt to play a significant role in influencing the level of traffic violations, especially among teenagers. According to Boekaerts, there are several factors that influence the success of a student to achieve optimal performance. Among them are intelligence, personality, school environment, and home environment. However, apart from these factors, it turns out that self-regulation also affects the success of students in achieving optimal performance(Ernawati & Afdal, 2018; Rachmi & Firman, 2020). The inability of children to manage learning schedules by playing is one of the abilities in academic self-regulation that makes the learning process neglected(Wahyurudhanto & Prisgunanto, 2018).

Self-regulation is an individual ability. organize and direct his life goals, learn from mistakes, make changes, move forward to get the maximum final achievement. When a person is able to develop self-regulation abilities optimally (Ainscough et al., 2018; Yulianti et al., 2016). With the fulfillment of one's self-regulation, it is hoped that it will be able to prevent the increase in traffic violations at a young age. Adolescence itself is defined as a period of transitional development between childhood and adulthood which undergoes changes in biological, cognitive, and socio-emotional conditions(Bjork et al., 2013; Blair & Raver, 2015; Daniela, 2015; Ursache et al., 2012). The changes that occur have an impact on adolescent behavior. One of the changes that occur is emotional and social changes, where adolescents will spend more time interacting with friends and the opposite sex than family or parents(Mega et al., 2014; Zimmerman, 2013b).

Self-regulation or better known as self-regulation is a person's process of thinking, organizing, and act in accordance with the objectives has been planned(Winne, 2013). So, someone can give value to success above has reached the target. self-regulation process rotating learning, process overview this spin is done by Zimmerman with a three-stage management model(Bjork et al., 2013; Blair & Raver, 2015; Zimmerman, 2013b). First, the forethought phase, namely the actual performance that precedes and relates to the rare gathering process for an action. Second, performance (volitional) control phase, which includes the processes that occur prior to learning that affects attention and behavior. Third, as long as the self-reflection phase occurs after performance individual responds to his efforts(Setianingsih & Dharsana, 2018; Winne, 2013); (Latupasjana & Firman, 2020).

Referring to this, Guidance and Counseling Teachers have an important role in developing students' personalities (Winne, 2013; Zimmerman, 2013a). This problem must be addressed as soon as possible so as not to hinder students in the social process at school and in the community. But what happened in the field, the implementation of counseling only discussed tackling learning, social, personal and career problems (Firman et al., 2018). One of the efforts that can be made by Guidance and Counseling Teachers is by using group setting modeling techniques. Modeling is one of the techniques in the behavioristic approach which views that all human behavior is the result of learning and the result of interaction with the surrounding environment or the outside world (Ernawati&Afdal, 2018). This technique emphasizes the addition or subtraction of observed behavior, which involves cognitive processes, not just imitating or repeating what the model (others) is doing (Damayanti &Aeni, 2016). So, modeling is one of the techniques in behavioralcounseling where a person learns new behavior through observation, observing models or examples that play a role in providing stimulation to thoughts, attitudes or other individual behavior that involves cognitive processes not only imitating what the model does(Fassinger, 1987; Setianingsih & Dharsana, 2018; Winne, 2013).

Method

This type of research uses a quantitative method with an experimental approach, one of which is classified as a quasi-experimental design with an unequal type of control group. The research population was students of

vocational 1 Padang City and the sample was taken using cluster random sampling, namely the sample was selected with certain considerations (Yusuf, 2016). The sample is 25 students. Data were collected using a self-regulation questionnaire in traffic which was designed with a Likert scale model. The Likert scale was chosen because of its accuracy in measuring attitudes, opinions and perceptions (Riduwan&Sunarto: 2012: 38), besides being easy and accurate (Yusuf, 2016).

There are two research groups, namely the experimental group and the control group. The experimental group was treated with a group setting modeling technique, while the control group was not given a group setting modeling technique. After the treatment was carried out, the analysis of pretest and posttest data from the experimental group and the control group was carried out using a non-parametric statistical technique, namely the Wilcoxon Signed Ranks Test. Then, to see the difference in the increase in adolescent self-regulation between the experimental group that was given (group guidance services) and the control group that was not given, data analysis was carried out using non-parametric statistical techniques, namely: Kolmogorov-Smirnov Two Independent Sample, using the SPSS version 22.00 program.

Results and Discussions

This research was conducted at the State Vocational High School 1 Padang City with the number of subjects 25 students. The data obtained are the results of the pretest and posttest related to self-regulation in traffic. In accordance with the purpose of doing the pre-test, which is to find out the initial description of the condition of adolescent self-regulation in traffic before being given treatment in the form of group modeling setting techniques. While the post-test was given to see changes in the condition of adolescent self-regulation in traffic after the research subjects received treatment. To see changes in the level of meaningfulness of students' lives in cross-traffic in the experimental group from the results of the pretest and posttest, it can be explained as follows:

Tabel1. Pretest and Posttest Experimental Results Of Adolescent Self-Regulation In Traffic

Pretest		***Posttest***	
Respondent Code	**Score**	**Respondent Code**	**Score**
D1	67	D1	85
D2	59	D2	80
D3	79	D3	90
D4	65	D4	85
D5	82	D5	95
D6	74	D6	86
D7	75	D7	88
D8	85	D8	96
D9	82	D9	97
D10	83	D10	97
D11	83	D11	98
D12	62	D12	85
D13	73	D13	90
D14	74	D14	90
D15	82	D15	98
D16	59	D16	95
D17	79	D17	96
D18	67	D18	98
D19	71	D19	95
D20	73	D20	95
D21	64	D21	87
D22	71	D22	89
D23	67	D23	88
D24	85	D24	95
D25	84	D25	95
Total	73,8	**Total**	91,72

Based on the table above, it can be seen that the 25 research subjects involved in the calculation experienced an increase in scores from pretest to posttest or experienced an increase in self-regulation in traffic after being given treatment in the form of group modeling setting techniques. Than 25 students who received treatment overall increased

self-regulation in traffic. The results showed that self-regulation of adolescents in traffic can be improved through group setting modeling techniques. Group setting using the right model is able to have an influence in forming an increase in adolescent self-regulation, especially in preventing traffic violations. The results of the posttest showed that there was an increase in the self-regulation score of group members, which was seen from the comparison of the group's average score or the score of each group member. The average score of group members at the pretest 73.8 while at the posttest 91.72 it means that there is an increase in the score of 13.00.

Table 2. Results Of Independent Analysis Of Kolmogorov Smirnov 2 Post-Test Modeling Group Setting Techniques On Improving Adolescent Self-Regulation In Traffic Violation Prevention Experiment And Control Group

		Self Control
N		25
Normal Parameters[a,b]	Mean	161.87
	Std. Deviation	26.612
Most Extreme Differences	Absolute	.261
	Positive	.261
	Negative	-.252
Kolmogorov-Smirnov Z		1.429
Asymp. Sig. (2-tailed)		.034

Based on the data in table 3, it can be seen that Z is 1.429 by obtaining Asymp. Signature. (2-tailed) students' self-control in the experimental group and the control group was 0.034. According to these results, it can be stated that "there is a significant difference in students' self-control between the experimental and control groups. For students who have a level moderate self-regulation variable, can be help their friends who have very low and low levels of self-regulation, and can learn from their friends how to have good self-regulation skills such as friends who have high levels of self-regulation, and for students who have high levels of self-regulation variables. very low and low, can learn from the experience of his friends, how can you have adequate self-regulation skills in preventing traffic violations.

Student self-regulation can be improved through modeling technique group guidance services. It is shown with changes in behavior and students' understanding of each group guidance meeting conducted has led to an increase in Student self-regulation is better than before.

Conclusions

Based on the results of the study, it can be interpreted that there is a significant difference in the increase in self-regulation between the experimental group and the control group. The results of the posttest showed that there was an increase in the self-regulation of group members, which was seen from the comparison of the group's average score or the score of each group member. The average score of group members in the pretest was 73.8 while the posttest was 91.72, meaning that there was an increase in the score of 13.00. The provision of group setting modeling techniques can significantly improve adolescent self-regulation against traffic violations. The experimental group experienced a significant increase in self-regulation in preventing traffic violations in adolescents, while the control group did not experience a significant increase in self-regulation in traffic violations in adolescents.

Acknowledgments

Thank you to LP2M Padang State University who have made material contributions so that they can carry out the research and publication process

References

Ainscough, L., Stewart, E., Colthorpe, K., & Zimbardi, K. (2018). Learning hindrances and self-regulated learning strategies reported by undergraduate students: identifying characteristics of resilient students. *Studies in Higher Education*, *43*(12), 2194–2209.

Bjork, R. A., Dunlosky, J., & Kornell, N. (2013). Self-regulated learning: Beliefs, techniques, and illusions. *Annual Review of Psychology*, *64*, 417–444.

Blair, C., & Raver, C. C. (2015). School readiness and self-regulation: A developmental psychobiological approach. *Annual Review of Psychology*, *66*, 711.

Daniela, P. (2015). The relationship between self-regulation, motivation and performance at secondary school students. *Procedia-Social and Behavioral Sciences*, *191*, 2549–2553.

Ernawati, R., & Afdal, A. (2018). Peningkatan disiplin siswa dalam menaati tata tertib dengan menggunakan teknik modelling melalui layanan penguasaan konten di SMPN 49 Jakarta pada siswa kelas 8 tahun ajaran 2018-2019. *Jurnal Selaras: Kajian Bimbingan Dan Konseling Serta Psikologi Pendidikan*, *1*(2), 81–95.

Fassinger, R. E. (1987). Use of structural equation modeling in counseling psychology research. *Journal of Counseling Psychology*, *34*(4), 425.

Fitrianti, H., & Nurhayati, N. (2017). Model Faktor-Faktor Banyaknya Kecelakaan Lalu Lintas Pada Kendaraan Sepeda Motor Dengan Pendekatan Generalized Linear Model. *Magistra: Jurnal Keguruan Dan Ilmu Pendidikan*, *4*(2), 94–104.

Latupasjana, Z., & Firman, F. (2020). Guidelines for implementing group counseling using a gestalt counseling approach to reduce student aggressivity. *JRTI (Jurnal Riset Tindakan Indonesia)*, *5*(2), 22–27.

Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, *106*(1), 121.

Nurfarhanah, N., Hariko, R., Firman, F., & Rachmi, M. M. (2022). Kemampuan motivasi mengatur diri dalam pencegahan pelanggaran lalu lintas pada remaja. *JPGI (Jurnal Penelitian Guru Indonesia)*, *7*(2).

Rachmi, M. M., & Firman, F. (2020). The meaning of youth life in traffic violation prevention. *Journal of Counseling and Educational Technology*, *3*(2), 56–61.

Setianingsih, A. N., & Dharsana, I. K. (2018). Effects of Behavioral Counseling on Modeling Techniques Improving Self Achievment. *Bisma The Journal of Counseling*, *2*(1), 39–47.

Subhi, M. S. (2021). Efektivitas cognitive behavior therapy untuk menurunkan ptsd kecelakaan berkendaraan motor pada mahasiswa. *JRTI (Jurnal Riset Tindakan Indonesia)*, *6*(2), 684–689.

Ursache, A., Blair, C., & Raver, C. C. (2012). The promotion of self-regulation as a means of enhancing school readiness and early achievement in children at risk for school failure. *Child Development Perspectives*, *6*(2), 122–128.

Wahyurudhanto, A., & Prisgunanto, I. (2018). Pelanggaran melawan arah arus lalu lintas pada remaja pengendara sepeda motor di daerah khusus ibukota Jakarta: Analisis disonansi kognitif. *Journal of Indonesia Road Safety*, *1*(2), 104–115.

Winne, P. H. (2013). Self-regulated learning viewed from models of information processing. *Self-Regulated Learning and Academic Achievement*, 145–178.

Yulianti, P., Sano, A., & Ifdil, I. (2016). Self Regulated Learning Siswa Dilihat dari Hasil Belajar. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, *2*(1), 98–102.

Yusuf, A. M. (2016). *Metode penelitian kuantitatif, kualitatif & penelitian gabungan*. Prenada Media.

Zimmerman, B. J. (2013a). From cognitive modeling to self-regulation: A social cognitive career path. *Educational Psychologist*, *48*(3), 135–147.

Zimmerman, B. J. (2013b). Theories of self-regulated learning and academic achievement: An overview and analysis. *Self-Regulated Learning and Academic Achievement*, 1–36.