



Unveiling Social Consequences: Examining Effects of Tricycle Transportation's Riders (Keke Napep) Growth from a Community Service Perspective

Ayuba Olaniyi Jibril, Usman Adisa Issa, Sanusi Ramat Abidemi*

Department of Arts and Social Sciences, Al-Hikmah University Ilorin, Nigeria

*Correspondence: E-mail: imamabujamilat@gmail.com

ABSTRACT

This study aims to critically examine the activities of tricycle transportation riders (known as Keke Napep) and their implications on the social life of teachers and students. Four research questions were raised and answered using the percentage. A simple random sampling technique was used to select 150 riders, 75 teachers, and 450 students while interviews, observation, and questionnaires were used to gather data from the respondents. The percentage index was used to answer the research questions raised in the study. The value of the correlation coefficient obtained was 0.87. The findings of the study revealed that it had a significant impact on poverty alleviation of the tricycles riders in the Ilorin metropolis and the majority of the riders are professionally trained and affirmed to be experts in riding tricycles in Kwara State. The study further revealed that the attitude and activities of Keke Napep riders on both the teachers and students in the Ilorin metropolis are bad. The study recommended that Keke Napep riders should undergo routine training, re-training, and sensitization for both new and old members on the necessity of being security conscious and avoiding any illicit act that is capable of tarnishing their reputation.

ARTICLE INFO

Article History:

Submitted/Received 26 Apr 2023

First Revised 03 May 2023

Accepted 26 Jul 2023

First Available online 27 Jul 2023

Publication Date 01 Sep 2023

Keyword:

Keke napep riders,

Social life,

Students,

Teachers.

1. INTRODUCTION

Keke is a Yoruba word meaning Bicycle used in transporting human beings and other valuable items from one place to another. NAPEP is an acronym that stands for National Poverty Eradication Programme. Hence, Keke NAPEP is a commercial tricycle used as a mode of transportation in the country. Traditionally, in Kwara State Keke NAPEP began their association as an Emirate under the umbrella of National Road Transport which later metamorphosed into the Tricycle Owner Association of Nigeria (TOAN) with no viable constitution that governs the union till the present time. Hence, the absence of fundamental rules and regulations paved the way for different kinds of indiscipline among the riders in the state. Also, the individual rider takes the law into his/her hand. Radicalism, insolence, ill talks, hooliganism, and the motive of the majority of the riders. Moreover, no standard uniform format for billing the customers, each rider bills based on his consent and distance especially during and after the recent fuel scarcity witnessed in Kwara State and nationwide (Maheshvari, 2022).

It is pertinent to note that the head of the association has no absolute control over any member and if he does the affected member has the right to leave that association and join another or move to National Road Transport Association. In addition, monthly and weekly agreement is very common between the parent association and the rider. However, the majority of the riders usually convey parents, teachers, and students to schools based on their agreed mode of paying the transport fare which may be daily, weekly, monthly, or at the end of each term (Onia, 2022). It was observed that any disappointment from either the parents, schools, teachers, students, and riders would discontinue the operation though the report on that is very minimal. The intending tricycle riders usually undergo compulsory training on how to ride Keke NAPEP but are not certified. However, He further stated that there were some miscreants among the tricycle riders that do not follow the normal step thereby passing through the backdoor to gain entrance and disguise themselves as being bonafide members of the Tricycle Owner Association of Nigeria (TOAN) in the state. All hands are on deck to put to shame those bad elements that are causing road accidents and perpetrating evils on the commuters particularly the teachers and the school children.

The pervasiveness of Keke Napep in the Ilorin metropolis has brought about the rapid growth in the socio-economic and educational fortunes of Kwara State, particularly the Ilorin metropolis. This has eventuated in the proliferation of the Keke NAPEP which has become a household name that is playing a pivotal role in the transportation of Kwarans, particularly teachers and students. Virtually, in every nook and cranny of the Ilorin metropolis, hardly you move to a street without counting the number of Keke NAPEPs used for commercial purposes and are regarded and adopted as a cheap alternative means of transportation by parents, teachers, and students (Cabanatuan & Ahmad, 2022).

Moreover, the significance of tricycles in rural and urban transportation cannot be over-emphasized due to the inefficiencies in the operation of the formal public transport services to meet people's demands of a fast-growing population of schools, teachers, and learners. The use of tricycles has tremendously helped in the alleviation of poverty for many unemployed youths and also provides jobs for roadside mechanics, vulcanizers, and sellers of tricycles spare parts business (Kurniati et al., 2021). Indeed, Keke NAPEP significantly enhanced easy transportation of parents, teachers, and students and boosts the socio-economic activities of the schools (Pathania, 2023). It is a commercial activity that has both socio-economic effects and defects on commuters.

Despite the numerous benefits of Keke NAPEP to society, it is disturbing to see the high level of damages, recklessness, over-speeding, immorality, disobedience to traffic rules, meandering through every little available space between vehicles in twisted traffic situations, incessant stop-over without mindful of locations and overloading are the common habits of these tricycle riders across the states in Nigeria (Juliadi *et al.*, 2022). These had degenerated into constant road accidents leading to the loss of lives and properties. It is disheartening to see that many parents, teachers, and students who are regular commuters of the Keke NAPEP suffer several injuries and loss of lives as a result of over-speeding, overloading, lack of expertise in tricycles-riding, in-take of alcohol, India hemp and any other hard substance that are capable of intoxicating them while on the road. Based on the aforementioned challenges bedeviling the transporting system of Keke NAPEP, especially in Ilorin, the researchers intend to critically examine the proliferation of Keke NAPEP: Implications on the social life of riders, teachers and students in Ilorin, Kwara State, Nigeria.

The main purpose of this study was to examine the proliferation of Keke NAPEP: Implications on the social life of riders, teachers, and school children in Ilorin, Kwara State, Nigeria. Specifically, the study investigated:

- (i) Assess the impact of Keke NAPEP on poverty alleviation of the Tricycle riders in the Ilorin metropolis.
- (ii) Assess the level of Keke NAPEP riders in the Ilorin metropolis.
- (iii) Assess the attitude of Keke NAPEP riders on the social relations of teachers and students in the Ilorin metropolis.
- (iv) Assess the impact of the activities of Keke NAPEP riders on the social feelings of teachers and students in the Ilorin metropolis.

The following research questions were raised to guide this study:

- (i) What is the impact of Keke NAPEP on poverty alleviation of the Tricycle riders in the Ilorin metropolis?
- (ii) What is the expertise level of the Keke NAPEP riders in the Ilorin metropolis?
- (iii) What is the attitude of Keke NAPEP riders on the social relations of teachers and students in the Ilorin metropolis?
- (iv) What is the impact of the activities of Keke NAPEP riders on the social feelings of teachers and students in the Ilorin metropolis?

2. METHODS

This study adopted a mixed method of research (quantitative and qualitative). Interview, observation, and the researchers-designed questionnaire tagged “Questionnaire on Proliferation of Keke NAPEP: Implications on Teachers and Students in Ilorin Metropolis (QPKNITS)” were used as instruments for this study. A simple random sampling technique was used to select 330 riders of Keke NAPEP, 75 teachers, and 450 students in the Ilorin metropolis. The instrument used for data collection was validated by three experts in Test & Measurement who found it appropriate for this study. The reliability of the instrument was determined using the test re-test reliability technique within a two-week interval. The scores of the two tests were correlated using Pearson’s Product Moment Correlation (PPMC). The value of the correlation coefficient obtained was 0.87. Four research questions were raised and answered using the percentage.

Similarly, the instrument was personally administered by the researchers to all the 150 tricycle riders, 75 teachers, and 450 school children within the Ilorin metropolis, Kwara State, Nigeria. The researchers sought permission from all the heads of the sampled schools in the

Ilorin metropolis. Fifteen items were designed for the respondents to react to by ticking "Yes" or "No".

3. RESULTS AND DISCUSSION

3.1. Keke NAPEP: Implications on parents, teachers, and students in Nigeria

Keke Napep has been a common transportation system through which parents, teachers, and students patronize dailies while going and coming from school. It was observed that most of the schools, parents, teachers, and students agreed with the tricycle riders temporarily or permanently as their transporters while some had to move out to the street for any available tricycle that would convey them to school. The majority of tricycle riders are not reliable, transparent, honest, and morally indisciplined ([Ratsame et al., 2021](#)). He added that every morning before going out, they usually drink alcohol, paraga (a local gin laced with herbs), smoking of cigarettes, Indian hemp, marijuana, and any other hard substance which hurt their mental state while on the road. Most of the accidents recorded recently involving parents; teachers and students were a result of careless, wreck-less, overloading, speeding, non-challans attitude to road safety rules, over-taking and influence of various hard substances taking before, during, and after riding their riding their tricycles ([Ahsan, 2022](#)).

Moreover, a parent also complained bitterly about the high level of exploitation, overspeeding, overloading, senseless overtaking and stops over, illicit utterances, and bullying nature of tricycle riders in the Ilorin metropolis ([Palma et al., 2021](#)). She added that urgent steps need to be taken to address this menace before it degenerated into a daily loss of lives of parents, teachers, students, and common people who are regular commuters of the Keke NAPEP in the state. A multiple accident involving two escort vans and three commercial Keke NAPEP in Ilorin, Kwara State capital. The accident occurred around the Ministry of Agriculture roundabout at about 10 am, when the two private escort vans, allegedly on high speed ran into the three tricycles at the frontage of the ministry. One of the escort vans somersaulted and hit the roundabout while the second one, crushed the three tricycles, killing two persons on the spot and others were seriously injured.

A saddened incident in Damaturu, Yobe State involving a notorious tricycle rider who was at high speed then suddenly lost control and knocked down Amina Mohammed Tanimu leaving the 8-year-old with multiple body fractures, deep external injuries and severe internal bleeding cost Amina's life after she was referred to Yobe State University Teaching Hospital from Damaturu specialist. He added that those tricycles usually engage in overloading to make extra gains, such as carrying an extra passenger at the driver's side after carrying the normal specified 3 passengers in the back seat, thereby affecting the proper operation of the tricycle in the event of any unforeseen circumstances that makes it difficult for the rider to maneuver the tricycle resulting in disaster.

An auto-crash involving tricycles claimed the life of an unidentified forty-eight years old man in Sharada, Kano Municipal area of the Kano State. According to Abdullahi, the Public Relations Officer, Kano State Fire Service, his men were on a rescue mission for one Haruna Murtala who was earlier involved in a lone accident, and while on their way to the hospital, they met another triple crash at Sharada by Hisbah headquarter, a Tricycle with registration number TRN 125 WZ ran into a moving bicycle which hit another Tricycle with registration number BKD 23 VM.

In Abia, 6 Keke NAPEP passengers die in the Aba auto crash. The ghastly auto accident involved a towing truck driving against traffic on the Alaoji-Aba axis of the Enugu-Port Harcourt Expressway which later lost control and ran into two oncoming public transport tricycles with registration numbers, both loaded with passengers that resulted in the deaths

of six people while several others sustained various degree of injuries. The Keke NAPEP driver was reported to have lost control due to brake failure which made him collide with another car that was put up for sale at the Ogun-Osun River Basin junction beside High Court of Justice, Ring-Road, Ibadan. He further revealed that the tricycle was heading to collide with the fence of an office complex which would have been fatal but was eventually saved by the vehicle that was on display (Aziz *et al.*, 2018). It also added that the driver was coming through the service road at High Court towards Mobil with a full load of provisions belonging to a passenger, who was also in front of the driver before the accidents occurred. Though, there was no casualty but the woman, who was the passenger, was unconscious as a result of shock while the driver sustained injury in his leg.

A train crushed a truck and Keke NAPEP in Kano State. A train conveying passengers has crushed a cement trailer and commercial tricycle on Obasanjo Road in the Kano metropolis. An eyewitness, who runs businesses near the rail track noted that the accident occurred, as a result of the train over-speeding which crushed the trailer. Bad roads, illicit drug usage, and the mental state of riders of Keke NAPEP were the three major notable causes of the high rate of road accidents in Lagos, Southwest, Nigeria. This was disclosed during a recent seminar organized for Keke NAPEP operators by the Federal Road Safety Commission at the Surulere unit of the command in Iponri, Lagos. In addition, overloading, drinking of paraga (a local gin laced with herbs), and consumption of cigarettes, Indian hemp, marijuana, and alcohol were identified as also the causes of the accident. World Health Organization posited that more than 1.25 million people die and several others are injured each year as a result of road accidents usually caused by Keke NAPEP. In a related development, thousands of people get seriously injured daily in tricycle accidents across Nigeria with an estimated rate of not fewer than 2,598 Nigerians as observed by the National Bureau of Statistics.

3.2. Demography

Table 1 shows that 25 (33.3%) of the teachers that patronize the Keke NAPEP are male while 50 (66.7%) of the teachers that patronize Keke NAPEP are females. This implies the population of female teachers that patronize Keke NAPEP is more than their male counterparts in the Ilorin metropolis. Similarly, 203 (45.1%) of the male students patronize Keke NAPEP while 247 (54.9%) female students patronize Keke NAPEP in Ilorin metropolis, Kwara State. Also, 143 (95.3%) of the tricycle riders are male while 7 (4.7%) of the tricycle riders are females. This implies that the population of male tricycle riders is more than the female tricycle riders in the Ilorin metropolis, Kwara State, Nigeria.

Table 1. Gender distribution of the tricycle riders, teachers, and students that patronize tricycles in Ilorin Metropolis.

S/N	Items	Sex	Frequency	Percentage (%)
1	Teachers	Male	25	33.3
		Female	50	66.7
Total			75	100
2	School Children	Male	203	45.1
		Female	247	54.9
Total			450	100
3	Tricycle Riders	Male	143	95.3
		Female	7	4.7
Total				100%

This implies that the population of female students and female teachers that patronize Keke NAPEP is more than their male counterparts while the population of male tricycle riders is more than the female tricycle riders in Ilorin metropolis, Kwara State, Nigeria.

3.3. Research Question 1: What is the impact of Keke NAPEP on poverty alleviation of the Tricycle riders in the Ilorin metropolis?

Table 2 shows that 100 (66.7%) of the respondents are the rightful owner of the Keke NAPEP while 50(33.3%) of the respondents do not own their Keke NAPEP. Also, 123(82%) of the respondents agreed that Keke NAPEP reduces their suffering in terms of feeding themselves and their families while 27(18%) of the respondents disagreed. Similarly, 103(68.7%) of the respondents agreed that Keke NAPEP helps in paying for their house rent dues while 47(31.3%) of the respondents disagreed. Furthermore, 93(62%) of the respondents agreed that they do pay their children's school fees on time since they started riding Keke NAPEP while 57(38%) of the respondents disagreed. In addition, 56(37.3%) of the respondents agreed that they were able to buy new clothes for themselves, their wives, and their children while 94(62.7%) of the respondents disagreed.

Consequently, 133(88.7%) of the respondents agreed that they were able to make daily, weekly, and monthly contributions (savings) while 17(11.3%) of the respondents disagreed. In a similar vein, 147(98%) of the respondents agreed that they do spend half of their income from Keke NAPEP in taking care of their bodies due to the stress involved in riding the tricycle while 3(2%) of the respondents disagreed. 100(66.7%) of the respondents agreed that they were finding it difficult to buy domestic needs of the family while 50(33.3%) of the respondents disagreed. Furthermore, 145(96.5%) of the respondents agreed that they always spend their income generated for repairing Keke NAPEP while 5(3.3%) of the respondents disagreed. Finally, 121(80.7%) of the respondents agreed that they contended riding Keke NAPEP because it alleviates poverty while 29(19.3%) of the respondents disagreed. This implies that Keke NAPEP had a significant impact on poverty alleviation of the tricycle riders in the Ilorin metropolis, Kwara State, Nigeria.

3.4. Research Question 2: What is the expertise level of the Keke NAPEP riders in the Ilorin metropolis?

Table 3 shows that 85(56.7%) respondents representing 81(54%) are male and 4(2.7%) are female tricyclists who are professionally trained and affirmed to be experts in the riding of Keke NAPEP in Ilorin metropolis, Kwara State while 65(43.3%) respondents representing 62(41.3%) male and 3(2%) are female tricyclists who are neither professionally trained nor affirmed to be expert in riding of Keke NAPEP in Ilorin metropolis, Kwara State. This implies that the majority of the Keke NAPEP riders in the Ilorin metropolis are professionally trained and affirmed to be experts in riding tricycles in Kwara State.

3.5. Research Question 3: What is the expertise level of the Keke NAPEP riders in the Ilorin metropolis?

Table 4 shows that 407(77.5%) of the respondents (teachers and students) agreed that Keke NAPEP riders are not friendly while 118(22.5%) of the respondents disagree. Also, 501(95.4%) of the respondents agreed that Keke NAPEP riders often bully them while 24(4.6%) of the respondents disagreed. Similarly, 496(94.5%) of the respondents agreed that Keke NAPEP riders do fight with them while 29(5.5%) of the respondents disagreed. Furthermore, 483(92%) of the respondents agreed that Keke NAPEP riders do not respect the agreement while 42(8%) of the respondents disagreed. In addition, 511(97.3%) of the

respondents agreed that Keke NAPEP riders are not punctual while 14(2.7%) of the respondents disagreed. This implies that the attitude of Keke NAPEP riders on social relations of both the teachers and students in the Ilorin metropolis, Kwara State, Nigeria is bad.

Table 2. Impact of Keke NAPEP on poverty alleviation of tricycle riders in Ilorin Metropolis.

S/N	Item	Frequency				Inferencens
		Yes	Percentage	No	Percentage	
1	I am the rightful owner of the Keke NAPEP	100	66.7%	50	33.3%	Yes
2	Keke NAPEP reduces my suffering in terms of feeding myself and my family	123	82.0%	27	18.0%	Yes
3	Keke NAPEP helps in paying for my house rent dues	103	68.7%	47	31.3%	Yes
4	I paid my children's school fees on time since I joined riding Keke NAPEP	93	62.0%	57	38.0%	Yes
5	I can buy new clothes for myself, my wife, and my children		37.3%	94	62.7%	No
6	I can make daily, weekly, and monthly contributions (savings)	133	88.7%	17	11.3%	Yes
7	I do spend half of my income from Keke NAPEP on taking care of my body due to the stress involved in riding the tricycle	147	98.0%	3	2.0%	Yes
8	I am founding it difficult to buy domestic needs of my family	100	66.7%	50	33.3%	Yes
9	I always spend my income generated in repairing Keke NAPEP	145	96.7%	5	3.3%	Yes
10	I am contented riding Keke NAPEP because it alleviate poverty	121	80.7%	29	19.3%	Yes
	Cumulative		1121 (74.7%)		379 (25.3%)	Yes

Table 3. Showing the expertise level of Keke NAPEP riders in Ilorin Metropolis.

S/N	Items	Sex	Frequency	Percentage (%)
1	Expert (Professionally Trained)	Male	81	54.0
		Female	4	2.7
		Total	85	56.7
2	Not Expert (Not Professionally Trained)	Male	62	41.3
		Female	3	2.0
		Total	65	43.3

3.6. Research Question 4: What is the impact of the activities of Keke NAPEP riders on social feelings of teachers and students in Ilorin metropolis?

Table 5 shows that 501(95.4%) of the respondents (teachers and students) agreed that Keke NAPEP riders always over speeding while 24(4.6%) of the respondents disagreed. Also, 520(99%) of the respondents agreed that Keke NAPEP riders often overload while 5(1%) of the respondents disagreed. Similarly, 496(94.5%) of the respondents agreed that Keke NAPEP riders overtaking arbitrarily while 29(5.5%) of the respondents disagreed. Furthermore, 407(77.5%) of the respondents agreed that Keke NAPEP riders do move carelessly while 118(22.5%) of the respondents disagreed. In addition, 483(92%) of the respondents agreed that Keke NAPEP riders often delay them on the road due to incessant stop over because of fuel and mechanical faults while 42(8%) of the respondents disagreed. This implies that the

impact of the activities of Keke NAPEP riders on social feelings of both the teachers and students in Ilorin metropolis, Kwara State, Nigeria is bad.

Table 4. The Attitude of Keke NAPEP Riders on Social Relations of Teachers and Students in Ilorin Metropolis

S/N	Item	Frequency				Inferences
		Yes	Percentage	No	Percentage	
1	Keke NAPEP riders are not friendly	407	77.5%	118	22.5%	Yes
2	Keke NAPEP riders often bully us	501	95.4%	24	4.6%	Yes
3	Keke NAPEP riders do fight with us	496	94.5%	29	5.5%	Yes
4	Keke NAPEP riders do not respect the agreement	483	92.0%	42	8.0%	Yes
5	Keke NAPEP riders are not punctual	511	97.3%	14	2.7%	Yes
	Cumulative	2398(91.4%)		227 (8.6%)		Yes

Table 5. Impact of the Activities of Keke NAPEP Riders on Teachers and Students in Ilorin Metropolis

S/N	Item	Frequency				Inferences
		Yes	Percentage	No	Percentage	
1	Keke NAPEP riders are always overspeeding	501	95.4%	24	4.6%	Yes
2	Keke NAPEP riders often overload	520	99.0%	5	1.0%	Yes
3	Keke NAPEP riders overtaking arbitrarily	496	94.5%	29	5.5%	Yes
4	Keke NAPEP riders move carelessly	407	77.5%	118	22.5%	Yes
5	Keke NAPEP riders often delay us on the road due to incessant stop over because of fuel and mechanical faults	483	92.0%	42	8.0%	Yes
	Cumulative	2407 (91.7%)		218(8.3%)		Yes

4. CONCLUSION

The study investigates how the expansion of Keke NAPEP has affected students, teachers, and transit users in the Ilorin metropolis. It was concluded that Keke Napep had a significant impact on poverty alleviation of the tricycle riders in the Ilorin metropolis, Kwara State, Nigeria. The riders' quality of life has improved as a result of Keke NAPEP's growth. Students' attendance rates have increased as a result of Keke NAPEP's accessibility which offers an easy-to-use transportation option. Safety issues have also arisen as a result of improper regulation and enforcement of traffic laws for Keke NAPEP riders. Many riders drive recklessly, endangering both themselves and other drivers on the road. This demonstrates the necessity for more stringent laws and oversight to guarantee the safety of both passengers and the general public. The following are recommendations based on the findings of the study:

- (i) The executives of the Tricycle Owners Association of Nigeria, Kwara state branch should orientate their members to develop good social relations with their commuters, especially teachers and students.
- (ii) Regular training, re-training, seminars, workshops, conferences, and sensitization should be organized for both the new and old members of the Keke Napep riders on the need to be socially responsible, security conscious, avoid any illicit act that is capable of destroying their image and that of their association.

- (iii) Organize public awareness initiatives to inform drivers and the general public about the value of safe driving and riding habits. This can lower accidents and injuries and promote a culture of safety.
- (iv) Tricycle Owner Association of Nigeria (TOAN), Federal Road Safety Commission, Federal and State Ministry of Transport, and other relevant NGOs should orientate the Tricycle Riders on the need to develop good attitudes and respect the social feelings of the teachers and students in Ilorin, Kwara State.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

6. REFERENCES

- Ahsan, M., Uzair, M., and Ali, M. (2022). Attitudes and perceptions towards cultured meat among general population in Pakistan. *ASEAN Journal of Science and Engineering Education*, 2(1), 111-122.
- Aziz, M., Huda, M., Nandiyanto, A. B. D., Abdullah, A. G. (2018). Opportunity of frequency regulation using electric vehicles in Denmark. *Journal of Engineering Science and Technology*, 13(6), 1700-1712.
- Cabanatuan, D., and Ahmad, C. (2022). Permissive parenting style and maladaptive behavioral tendencies among junior high school students of notre dame of Tacurong College, Mindanao, Philippines. *ASEAN Journal of Science and Engineering Education*, 2(1), 87-96.
- Juliadi, A. A., Oktirellia, A. S., Fadhilah, G. C. N., Shaffiyah, I., and DwiYanti, V. (2023). Indonesia toll roads: Its effect on the trade routes in ASEAN. *ASEAN Journal of Science and Engineering*, 1(1), 33-38.
- Kurniati, P. S., Sholihin, I., Winarta, R., and Insan, M. H. (2021). Information technology policy through the e-government programs in improving public services quality. *International Journal of Computer in Law and Political Science*, 1, 1-8.
- Maheshvari, R. (2022). Study on economic, sustainable development, and fuel consumption. *ASEAN Journal of Economic and Economic Education*, 1(1), 41-46.
- Onia, S. I. (2022). Education policy of sudan and utilization of the mobile device (ipad) technology: Opportunities and challenges. *Indonesian Journal of Educational Research and Technology*, 2(3), 205-212.
- Palma, M. C., Escucha, T. N. V., Distor, Z. B., Tuyao, B. V., Malaco, A., and Estrellan, J. (2021). Parental academic support in online and modular learners amidst pandemic: A comparative study. *Indonesian Journal of Community and Special Needs Education*, 1(1), 31-36.
- Pathania, R. S. (2023). Assessment of achievement motivation, personality, and their relationship with socio-economic class of the engineering students. *ASEAN Journal of Science and Engineering Education*, 3(2), 163-170.

Ratsame, P., Koedsaksit, M., Jitsoontron, S., Jaisamak, U., and Puengsungewan, S. (2021). Vehicle-tracking mobile application without a GPS sensor. *Indonesian Journal of Educational Research and Technology*, 1(2), 11-14.