The importance of empowerment in preventing pedestrian fatalities in Limpopo Province (South Africa)

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Abstract: This paper explores the importance of empowerment in preventing pedestrian fatalities in Limpopo Province. Empowerment of road users is crucial to preventing road traffic accidents. The more people are informed about road safety, the better the conduct on the road as it is the responsibility of everyone. The inability of law enforcement agencies to equip road users with knowledge, skills and attitude contribute high rate of road traffic accidents. The study utilised quantitative approach. The sample consisted of 195 respondents comprises of 15 civil engineering companies, 23 civil society organisations, 52 community members, 51 teachers and 54 traffic police officials. The findings from the study revealed among many others, that 73% of the respondents agreed to strongly agree that lack of facilities contribute to ineffective road safety campaigns; 60.5% of the respondents agreed to strongly agree that pedestrians are not informed about wearing reflective clothes at night and 61.5% of the respondents agreed to strongly agree that civil society organisations are not using their platforms to inform their members about the importance of road safety. Based on the findings of the study the author provided possible recommendations such as; Provincial traffic department should be provided with facilities to host road safety campaigns throughout the province; Awareness campaigns should be strengthened; Department of Transport should strengthen partnerships with all major stakeholders in road safety.

Keywords: Empowerment, Road Safety Campaigns, Law Enforcement Agencies, Prevention, Pedestrians and Limpopo Province

Introduction

Pedestrian safety remains a burning issue for law enforcement authorities globally even in South Africa is prevalent where many pedestrians are being killed on the road. Vulnerable groups such as pedestrians should be protected and informed about the rules of the road. The World Health Organisation (2021), notes that most of the road users who are killed on the roads are pedestrians, because of their vulnerability. If struck by vehicle, they cannot protect themselves and they end up in hospitals or die at the accident scene. Pedestrians have the right to adequate opportunities to safely and conveniently cross roads. However, a lack of knowledge of a pedestrian's right of way by motorists and pedestrians, could endanger pedestrians who try to accomplish this simple, but dangerous task of sharing the same road with motorists. This single fact is backed up by both local and international statistical figures which, flawed as they are, agree that travelling on South African roads is a gamble against time (Arrive Alive, 2022). They face the likelihood of fatalities every time they travel to work, walk to the grocery store, or simply take a stroll around the block. Horrific collisions reach the headlines of various local news publications on a frequent basis, from trucks overturning on top of family cars to informal taxis colliding with school buses and killing children and pedestrians. According to Smith (2014), South Africa is one of the world's most dangerous countries to drive in and is deemed by the World Health Organisation (2021), as having the world's sixth deadliest roads, with a death rate of 31,9% people per 100,000. Human factor is a main contributory factor to fatalities on the road worldwide and countermeasures or strategies should be developed to address this problem. Countries should aim to ensure that sufficient resources are available, commensurate with the size of the road safety problem in their country (United Nations, 2022). The history and segregated development within South Africa further necessitate that more should be done for the protection of pedestrians. With a multi-disciplinary approach and the implementation of global best practices, it is possible to significantly reduce pedestrian fatalities and make Limpopo's roads safer to all road users. This article aimed to analyse the importance of empowerment in preventing pedestrian

fatalities and identify existing challenges in preventing this problem and recommend practical solutions in line with United Nation Decade of Action for Road Safety 2016-2030.

Empowerment of road users

The aim of safety promotion is to change attitudes and behaviour to achieve a milieu and a social environment with built in safety (Thebe, 2011). It is important to promote road safety so that the everyday action of using our roads, whether by driving, walking, or cycling is safe. Donegal Road Safety Working Group (2016), stated that empowerment is extremely important as it underpins the cultural shift, which will be required to effectively achieve road safety within the county. This means that all of us as road users, in all our various roles within our communities, such as family members, education providers, community leaders, volunteers, care givers and employees must take personal responsibility for both their own safety and the safety of others. Empowerment is the overarching element of this plan and forms the fundamental foundation on which the other elements will be achieved (Donegal Road Safety Working Group, 2016). To promote and foster community engagement under the Safer People, Safer Streets plan, the Resident's Guide for Creating Safe and Walk-able Communities, which is designed to help people take an active role in addressing pedestrian safety in their own neighbourhoods, has been updated by Federal Highway Administration (2011). The Guide includes examples of how communities are working to improve pedestrian and bicycle safety along with fact sheets, worksheets and materials that may be adapted for local distribution (United State Department of Transport, 2014). Raising awareness about these important issues is not easy. In a world where there are bombarded every day with information from emails, voicemails, cell phones, personal communication devices, websites with popup ads and telemarketing calls at dinnertime (Federal Highway Administration, 2011). Furthermore, it's easy to overlook devices that are designed to keep us safe while walking; like crosswalks, pedestrian signals, and pedestrian warning signs. It may seem like a daunting task, but with this campaign, they can educate both pedestrians and drivers about what to look for, what to expect and how to proceed to reduce pedestrian injuries and fatalities and achieve greater pedestrian safety. This problem also affects passengers because, in most, passengers are passive when the driver drives recklessly, and that behaviour will also impact other vulnerable road users, such as pedestrians, but if the passengers could play their role, some of the road traffic accidents could be prevented. Passengers should play an active role when the vehicle in which they are seated is not roadworthy, speeding, incorrectly overtaking, etc. They should speak out about these kinds of behaviours by drivers because their lives, at that specific moment, are in the hands of the drivers and it also impacts negatively on other road users. The emphasis should be on empowering road users about the risk of not following the rules of the road, and the end results of such incidents as it leaves children without parents or vice-versa. It is of utmost important for institutions which are responsible for road safety to work with communities and other stakeholders in ensuring road safety to all road users.

Road safety campaigns

The increase of road safety campaigns in the country is needed especially in Limpopo Province, to promote road safety. Most young drivers and pedestrians are involved in road traffic accidents and as a result the focused area on the campaigns should be on the youth to make them aware of the dangers of risk behaviour and other road safety measures which could help them in their lives in the future in order to become good road users. There are several reasons why young drivers are among the most vulnerable on the roads. Lack of experience is one of the main reasons, but attitude can also come into play. Younger drivers, especially men, tend to be over-confident and are more likely to drive in risky ways such as, too fast, too close to the vehicle in front and by overtaking dangerously (Royal Society for the Prevention of Accidents, 2017). Young drivers should be aware of the dangers they impose on other road users with their negligent and reckless driving, especially on weekends and if they're under the influence of alcohol. Therefore, it is important when the authorities are coming up with campaigns, especially for the youth, to involve risk factors associated with their behaviour. Alcohol, in most cases, is the main contributory factor as it clouds the judgement of a driver or pedestrian which, may result, being involved in a road traffic accident. Campaigns on pedestrians is key in informing road users about the danger of not following the rules of the road. For example, most of the pedestrians cross the road where they are not supposed to (Jaywalking), and they end-up being hit by motorists.

Therefore, much should be done to create awareness of this kind of problem to pedestrians. It is even worse in cases where there is no tar road where they just cross anywhere and it causes confusion among drivers which leads to accidents. Television, Radio, Billboards, and social media could be used to highlight the importance of crossing the road at signalised positions to avoid unnecessary collisions. For example, in areas where there are no traffic lights and road signs, it is important for road users to always be vigilant when they cross the road, especially at intersections because most of the accidents involving pedestrians occur at intersections. Road safety campaigns should also focus on speeding and come up with ways in which passengers could speak up against drivers who are driving at high speed.

In most cases, especially in the taxis, passengers just keep quiet, even if the driver is speeding. There should be an advertisement of a taxi driver and passengers where the driver is speeding, and passengers raise their concern about the negligent and reckless driving. The message should be clear to all other passengers to speak out against this reckless behaviour, because if you do not speak, you might not have a chance to speak again due to a road traffic accident. In Limpopo Province there is a lack of billboards on the road about reflective clothes for pedestrians. On Television and Radio, there are even less adverts on pedestrian's behaviour or conduct on the road. Pedestrians should be encouraged to wear reflective clothing at night. This should occur on all social media platforms with the help of the Department of Transport and other stakeholders, to spread the message to all involved. They should also erect billboards at high accident zones for pedestrians, so that the message could get to the relevant target group. Texting while driving or walking could also could put more road users at risk of being involved in road traffic accidents and therefore much should be done to increase coverage to discourage road users from using mobile phones when they are on the road. Pedestrian bridges help pedestrians to cross the road without interfering with traffic, which is a good thing, but, in most cases, pedestrians do not use the bridges. They cross the road on highways/freeways, which put themselves at high risk, because cars are travel at a speed, since it is a freeway. According to the law, pedestrians are not allowed to cross the road at freeways. Therefore, awareness campaigns will play a vital role in encouraging pedestrians to use the bridges and it is very unlikely to see advertisements on Television encouraging pedestrians to use bridges. It is of paramount importance to ensure that these messages are covered on all media outlets to ensure that the target group receive the message and in so doing save their lives on the road. Overall, the promotion of road safety messages is key in preventing pedestrian fatalities in the country and much more should be done to cover those messages and make the roads safer to all road users. It is important to inform road users when there are developments in terms of changes or amendments of laws and regulations concerning road safety, as well as educating and informing road users about the risks and dangers in traffic. It is important to ensure that road users know and understand the rules of the road and that they can also interpret them.

Campaigns and other ways of communication could be used for this purpose. Campaigns could also give advice on all major factors contributing to road traffic accidents and they can successfully be combined with educational material and other information activities. The message of the campaign should be simple and clear and in one single sentence for example: Don't Drink and Drive; Speed Kills; wear reflective clothes at night; avoid fatigue by taking breaks after two hours of driving. Ravn (2008), stated that a message is the shortest possible expression for what you want to tell about the problem. Consider all parts of the campaign according to the message. It makes it easier to target and choose media, activities, and other means of information. The message should give concrete directions to what they want the road user to do, simple, clear and specifically aimed at the target group. For example, it is important to use vehicles which were involved in road traffic accidents, at the site of the road, in order to send a message to those who do not adhere to the rules of the road. These tactics could change some of the behaviour of road users. This is in contrast to countries such as Australia, New Zealand, the United States, and Great Britain that often show explicit pictures of crashes, casualties, injuries and blood, and the resultant emotions of pain, sorrow and grief of traffic victims and relatives and this tactic could work to change the behaviour of road users (SWOV Institute for Road Safety Research, 2009). Road safety is a collective responsibility, therefore it is imperative for civil society organisations and business community to join hands with Department of Transport to promote road safety to road users. Provision of resources is key to successful road safety campaigns and by involving major stakeholders, the message of road safety will spread across the province and prevent fatalities on the road.

Research methodology

Study population

Bless, Higson-Smith and Sithole (2013: 164), noted that a study population is the set of elements that the research focuses on. In the case of quantitative research, the results obtained by testing the sample should be able to be generalised to the entire population. According to Statistics South Africa (2016), it was noted that Limpopo Province's population had an increase in terms of the people living in the province, from 5,4 million people in 2011 to 5,8 million in 2016, making it the fifth largest province in the country in terms of population size. It trails behind Gauteng (13,4 million), KwaZulu-Natal (11,1 million), Eastern Cape (7 million), and Western Cape (6,3 million). The number of households in the province has also increased to 1,6 million in 2016, from 1,4 million in 2011. This study was conducted in the Capricorn district. Only participants who were above the age of 18 years formed part of the research study, since most of them understand the issue of pedestrian fatalities. In this research, the sample consisted of Community members, Municipal/Traffic police officials, Civil Society Organisations (members), road construction companies and educators.

Sample size

Bless *et al.*, (2013: 165), noted that a sample is a subset of the population, and to be useful in research it must have all the properties of the population to be representative of the whole. The research sample consisted of 54 Municipal/Traffic police officials, 51 Teachers, 23 Civil Society Organisations, 15 Road construction companies and 52 Community members. The total size of the sample was 195.

Method of data collection

Survey/Questionnaire

De Vos *et al.*, (2011: 171), noted that quantitative data collection often employs measuring instruments. In the social and human sciences, measuring instruments refer to questionnaires, among others. Quantitative research aims to explain phenomena by collecting numerical data that are analysed using mathematically based methods (statistics). Therefore, as quantitative research is essentially about collecting numerical data to explain a phenomenon, questions seem immediately suited to being answered using quantitative methods. Data can be collected on a wide number of phenomena and made quantitative through data collection instruments such as questionnaires. The researcher constructed a questionnaire, which was distributed to all respondents.

Data analysis

Bless *et al.*, (2013: 21), noted that once data are collected, the data must be organised and checked for accuracy and completeness. When this process was completed, the researcher used a range of arithmetical and statistical tests to describe the sample data and to generalise from this data set to the population from which the sample was drawn. Data were collected by means of questionnaires from the following: community members, Civil Society Organisations, Teachers, municipal/traffic police members, and road construction companies. The data from these participants were collected, reviewed, and then analysed to form findings or conclusions. The data was received in questionnaire format; all these analyses were conducted using STATA version12 statistical software. Preliminary analysis and inferential statistics were used to analyse data. When the database was developed, it was made of rules with respect to the questionnaire and that set boundaries for different variables and the Likert scale was used.

Preliminary analysis

A Uni-variate descriptive analysis was performed on all the original variables; displaying frequencies, percentages, these descriptive statistics are shown in Table 1. The reliability of the statements in the questionnaire posed to the respondents of the survey was measured by using the Cronbach Alpha tests. **Inferential statistics**

Inferential statistics used are:

Cronbach Alpha test: Cronbach's Alpha is an index of reliability associated with the variation accounted for by the true score of the "underlying construct". Construct is the hypothetical variables that are being measured (Schindler and Cooper, 2001: 216–217). Another way to put it would be that Cronbach's alpha measures how well a set of items (or variables) measures a single uni-dimensional latent construct. When data has a multidimensional structure, Cronbach's Alpha will usually be low.

Fischer's exact tests for ordinal data: This was conducted to test for significant group differences. Chi-square was not conducted because some of the cells had less than five responses. Significance level was set at p<0.05.

Factor analysis: Factor analysis is used to reduce measurable and observable variables to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott, and Moustaki, 2011). Factor loading in factor analysis is the relationship of each variable to the underlying factor. In this study, factor analysis was conducted to generate latent variables for the main variables.

Kruskal Wallis or Wilcoxon Rank-sum tests: are non-parametric tests. Kruskal Wallis tests for more than 2 independent samples while Wilcoxon Rank-Sum (Mann-Whitney U) tests for two independent samples to compare the groups (Age groups, Gender, Marital status and membership of traffic police/education departments). In this study, the tests were used to test the hypotheses and p-value was set at p-value<0.05.

TABLE 1:	Descriptive sta	atistics for all	the variables

Variables	Categories	Frequency	Percentage out of total (%)
Section A: Biographic variables			
Categories of the study respondents	Civil Engineering	15	7.69
	companies		
	Civil Society	23	11.79
	Organization		
	Community Member	52	26.67
	Teachers	51	26.15
	Traffic Police	54	27.69
1. Age group	18–24 Years	33	16.92
	25–30 Years	45	23.08
	31–35 Years	33	16.92
	36 Years and above	81	41.54
	Missing	3	1.54
2. Gender	Male	90	46.15
	Female	101	51.79
	Missing	4	2.05
3. Marital status	Married	78	40.00
	Single	103	52.82
	Divorced	3	1.54
	Missing	11	5.64
4. Member of the Traffic	Yes	100	51.28
Police/Education Department	No	90	46.15
r once, Education Department	Missing	5	2.56
5. Years of service	Less than 5	31	29.25
	6–10	27	25.47
	11–15	12	11.32
	16-20	15	14.15
	More than 20	21	19.81
Section B: Empowerment		21	17.01
6. Lack of facilities for hosting road	Strongly Agree	84	43.08
safety campaigns	Agree	58	29.74
safety campaigns	Don't know	24	12.31
	Disagree	11	5.64
	Strongly Disagree	7	3.59
	Missing	11	5.64
7. Pedestrians are not informed	Strongly Agree	64	32.82
about wearing reflective clothes at	Agree	54	27.69
night	Don't know	9	4.62
ingit		37	
	Disagree Strongly Disagree		18.97
	Strongly Disagree	23	11.79
	Missing	8	4.10
8. Civil society organisations are not	Strongly Agree	66	33.85
using their platforms to inform	Agree	54	27.69
road users about road safety	Don't know	27	13.85
	Disagree	31	15.90
	Strongly Disagree	9	4.62
	Missing	8	4.10

In **Table 1**, most of the respondents were 36 years and above (41.54%; N=81) and female (51.79%; N=101). Also, 51.28% were either members of the traffic police or education department. For all the statements, most of the respondents chose either "Strongly Agree" or "Agree". For the empowerment factors, most of the study respondents agreed to strongly agree to all the components.

Reliability test

Cronbach's alpha is a measure of assessing the reliability, or internal consistency, of a set of scale or test items. The reliability of a given measurement is the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency. A score below .70 suggests that the items within the tool may not be measuring the same underlying construct.

The scores of above 0.90 for all the items forming the measuring instrument in this study, show that these measurements were consistent measures of factors responsible to prevent pedestrian fatalities in Limpopo Province (**Table 1**). These items (statements), also proved to be reliable and consistent for all the items in the scale measuring enforcement factors (**Table 1**).

No	Statement (Test all statements without current one's input)	Variable number	Item-rest correlation	Cronbach's Alpha Coefficient
	Empowerment			
19	Lack of facilities	qd19	0.5697	0.8090
20	Pedestrians are not informed about wearing reflective clothes at night.	qd20	0.5941	0.8043
21	Civil society organisations are not using their platforms to inform road users about road safety	qd21	0.7170	0.7802

Table 2: Cronbach's Alpha Coefficient for 3 items in the questionnaire referring to empowerment factors

Test of hypothesis

To test the null hypothesis, latent variables were generated from factor analysis. Then, comparisons were carried out to see whether the different groups responded differently on the latent variables generated as a result of adding the variables that loaded on the empowerment factor. These were done by using the Non-parametric Kruskal Wallis test for more than 2 independent samples or Wilcoxon Rank-Sum (Mann-Whitney U) tests for two independent samples to compare the groups (Age groups, Gender, Marital status and membership of traffic police/education departments).

The following were the hypotheses that were tested:

Hypothesis: Empowerment could prevent pedestrian fatalities in Limpopo Province.

Age group compared with respect to Empowerment factor

There is no statistically significant difference between age group for the latent variable "*Empowerment*". There is no difference in the response to the questions that make up this factor between the age groups (Kruskal-Wallis test statistic chi-square=1.910, Degrees of freedom=3, P-value=0.569). This means that no age group agrees more than the other that empowerment could prevent pedestrian fatalities in Limpopo Province.

Gender compared with respect to Empowerment factor

There was no statistically significant difference between genders for the latent variable "*Empowerment*". There is no difference in the response to the questions that make up this factor between gender (Wilcoxon Rank-Sum (Mann-Whitney U) p=0.355). This means that both male and female agree the same way that empowerment could prevent pedestrian fatalities in Limpopo Province.

Marital status compared with respect to Empowerment factor

Similar to other variables, there was no statistical significant difference between the marital status groups (Kruskal-Wallis test statistic chi-square=0.887, Degrees of freedom=2, P-value=0.642). No group agreed more than the others that empowerment could prevent pedestrian fatalities in Limpopo Province.

Membership of traffic police/education departments with respect to Empowerment factor

There was no statistical significant difference between the responses from the two groups (p-value= 0.243). Being a member of the traffic police/education department or not, did not affect the responses of the participant to empowerment. Both groups i.e. members and non-members, agreed the same level to empowerment, preventing pedestrian fatalities in Limpopo Province.

With respect to the distribution of the respondents in this survey the following analogies can be drawn from this research:

Most of the respondents were Traffic police officers.

Most of them were female

Most of the respondents were 36 years above.

There were more respondents from the traffic police/education department than those who were not.

Most of the respondents were single at the time of this study.

As for the results obtained through this study with respect to the empowerment factors preventing pedestrian fatalities in Limpopo, the following analogies can be drawn from this study:

All the study respondents irrespective of their ages, gender, marital status, membership of the traffic police/education department either strongly agreed or agreed that empowerment could prevent pedestrian fatalities in Limpopo Province.

Based on the hypothesis of the study, the following results came out of the analysis: Lack of facilities to host road safety campaigns

73% of the respondents agreed to strongly agree that lack of facilities contribute to ineffective road safety campaigns while 12.3% of the respondents indicated do not know response to the statement and lastly, 9.23% of the respondents disagreed to strongly disagree that lack of facilities contribute to ineffective road safety campaigns. Therefore, based on the responses, lack of facilities contribute to ineffective road safety campaigns in Limpopo Province. Thebe (2011), stated that local authorities are mandated to promote road Safety as part of their democratic mandate and because of their close involvement with local communities. They are the key players in the promotion of road safety initiatives within the local municipalities. Central to this approach is the promotion of each local authority, based on their democratic mandate and close involvement with local communities as a key player in the pursuit and promotion of road safety initiatives at local level. To promote and foster community engagement under the Safer People, Safer Streets plan, the Resident's Guide for Creating Safe and Walk-able Communities, which is designed to help people take an active role in addressing pedestrian safety in their own neighbourhoods, has been updated by Federal Highway Administration (2011). It is of paramount importance for local government to provide facilities in rural areas to promote road safety and change the behaviour of road users.

Pedestrians are not informed about wearing reflective clothes at night

60.5% of the respondents agreed to strongly agree that pedestrians are not informed about wearing reflective clothes at night while 4.6% of the respondents indicated "do not know" response to the statement and lastly, 30.76% of the respondents disagreed to strongly disagree that pedestrians are not informed about wearing reflective clothes at night. Therefore, based on the responses, pedestrians are not informed about wearing reflective clothes at night. Road safety should be supported by equally effective public awareness, communication and education programmes, as well as a highly efficient, transparent, and expeditious adjudication process to bring traffic offenders to task (Road Traffic Infringement Agency, 2018). On Television and Radio, there are even less adverts on pedestrian's behaviour or conduct on the road. Pedestrians should be encouraged to wear reflective clothing at night. This should occur on all social media platforms with the help of the Department of Transport and other stakeholders, to spread the message to all involved. They should also erect billboards at high accident zones for pedestrians, so that the message could get to the relevant target group. Inadequate visibility is an important factor that influences the risk of a road crash among all types of road users and in South Africa, approximately 40% of road fatalities are pedestrians and accident investigations often reveal that pedestrians have not been visible to motorists (Arrive Alive, 2022).

Civil society organisations are not using their platforms to inform members about road safety

61.5% of the respondents agreed to strongly agree that civil society organisations are not using their platforms to inform their members about the importance of road safety while 13.85% of the respondents indicated "do not know" response to the statement and lastly, 20.5% of the respondents disagreed to strongly disagree that civil society

organisations are not using their platforms to inform their members about the importance of road safety. Therefore, based on the responses, civil society organisations are not using their platforms to inform their members about the importance of road safety. Ghaus-Pasha (2004), stated that Civil Society Organisations are formed by people who have common needs, interests and values like tolerance, inclusion, cooperation and equality and development through fundamentally having an internal cause and autonomous process, which cannot easily be controlled from outside. These organisations include traditional organizations, religious organizations, modern groups and organizations, mass movements and action groups, political parties, trade and professional associations, non-commercial organizations, and community-based organizations. It could have a positive influence on the state and the market. Civil society is therefore seen as an increasingly important agent for promoting good governance like transparency, effectiveness, openness, responsiveness and accountability, by mobilizing constituencies, particularly the vulnerable and marginalized sections of masses, to participate more fully in politics and public affairs; and fifth, by development work to improve the well-being of their own and other communities. Leaders should emphasise the issue of road safety during their rallies, where most of their supporters attend and they should deliver messages of road safety which could make a significant impact in terms of the conduct of road users on the road.

The South African Trade Unions need to play their role by ensuring that they deliver the message of road safety during their Lekgotla or Central Executive Committee and agree on using their platforms to accommodate the issue of road safety. Trade unions such as FEDUSA, Confederation of South African Trade Unions, South African Federation of Trade Unions and National Council of Trade Unions should lead their members in road safety and ensure that their members are informed about the rules of the road and they are able to interpret them. These unions could change the behaviour of those who conduct themselves incorrectly on the road and they should also try to influence their companies, especially in the manufacturing industries, to emphasise the issue of safety, especially on their vehicles.

Conclusion and recommendations

Based on the discussions above it is true that pedestrian fatalities in Limpopo Province is a serious problem where many pedestrians lose their lives on daily basis as reported on media platforms and traffic authorities' websites. The study would make significant improvement to road safety and ensure that road users are protected on the road and that could be achieved through changing behaviours of road users. Pedestrians also have a right to usage of the road, it is of paramount importance for motorists to respect pedestrians and share the road by means of applying the rules of the road. Collective responsibility should be strengthened in the province and empower road users about the rules of the road. It is critically important for law enforcement agencies to curb fatalities on the road by applying the law consistently and ensure that those who are not adhering to the rules of the road are arrested and prosecuted. Empowerment is one of the traffic calming measures which should be applied in terms of changing the behaviour of road users. Empowerment of road users could be done by hosting road safety campaigns to raise awareness amongst road users and send a strong message about road safety and the importance of following the rules of the road.

Provincial traffic department should be provided with facilities to host road safety campaigns

Facilities should be provided to host road safety campaigns in the province. Department of Transport (DoT), Road Traffic Management Corporation (RTMC) and provincial traffic department should ensure that they prioritise road safety and use empowerment as a traffic calming measure to change the behaviour of road users and to achieve this goal, more should be done by ensuring that facilities are available to host road safety campaigns especially at hotspot areas in the province. This task should also be supported by business community and all other major stakeholders as road traffic accidents is a collective responsibility.

Awareness campaigns should be strengthened

Raising awareness campaigns is a critical component for road safety authorities globally even in South Africa play important role in empowering road users with messages of road safety in order to prevent pedestrian fatalities in the province. Pedestrian fatalities could be prevented through the use of road safety campaigns to change the behaviour of road users. Department of Transport, Road Traffic Management Corporation and Provincial Traffic Authorities should strengthen road safety campaigns and this could be done by using Television, Radio, Billboards, and social media to send message to road users. The message of road safety campaigns should be clear to all road users as its intention is to speak to all road users in terms of changing their behaviour. Compliance to the rules of the road is important as this would contribute effectively to the prevention of fatalities on the road. Therefore, it is imperative for government through its department responsible for road safety and other agencies to work together with business community to raise awareness campaigns throughout the year as one death is too many.

Department of Transport should strengthen partnerships

Road traffic accidents is a collective responsibility. Therefore, Department of Transport should strengthen partnerships with other law enforcement agencies, business community and society at large to counteract road traffic accidents. Pedestrians are vulnerable road users and they should be prioritised in terms of ensuring their safety on the road. This could be done by working together with all stakeholders and formulate road safety campaigns which could assist in preventing fatalities on the road and through empowerment the behaviour of road users could be changed as the more road users are informed about road safety the better in terms of compliance to the rules of the road. Adjudication of Administration of Road Traffic Offences (AARTO act) should be implemented in order to change the behaviour of road users. AARTO act would send a message of zero tolerance towards violation of road traffic rules and as result, road users would change their behaviour as they know that they might lose their drivers licenses if they continue to be reckless on the road. It is critically important for all major stakeholders to support this legislation and Road Traffic Act to address fatalities on the road as well as reporting corrupt activities involving law enforcement officials as this problem is anti-road safety.

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Institutional Review Board Statement: Ethical review and approval were waived for this study by Tshwane University of Technology Ethics Committee, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data is not publicly available due to privacy.

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