

COMMUNITY ROAD SAFETY EDUCATION PROGRAMMES THE SOUTH AFRICAN CASE STUDY

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ABSTRACT

The study, which took place in the community of Leroro, Mpumalanga, formed part of an international project including four countries (South Africa, Ghana, Bangladesh and India). The initiative was funded by the UK Department for International Development (DFID) and initiated by the Transport Research Laboratory (TRL) in the UK, with CSIR Roads and Transport Technology (Transportek) acting as South African project leader, partnered by the Mpumalanga Government Road Safety Division and various other stakeholders.

In 2003, there were more crashes involving pedestrians in the rural areas of South Africa, compared to the urban areas. The age group 15-19 years constitute 70% of fatalities and this was also the age group on which the study focused. The project followed the steps of the CSIR's Community Driven Approach. Various participatory rural appraisal techniques were used along with quantitative techniques to gather information regarding the knowledge, perception and attitudes of this community. One of the most common problems, were drug and alcohol abuse by secondary school learners. Community education programmes can play an integral part of the solution. In Leroro, project specific educational material was used to address this specific problem in the rural community. Evaluation three months after the project, proved the project to be successful.



1. BACKGROUND TO PROBLEM

Every year in South Africa about 10 000 people are killed and 150 000 injured in approximately 500 000 accidents. The cost of road traffic accidents is estimated at more than 13 billion rand (1.66 billion US dollars) a year.

Of those killed, pedestrians constituted 4086 of these crashes during 2003. There were more pedestrian crashes in rural areas of South Africa, namely 2660, compared to the urban areas – 1426 pedestrian crashes.

The South African pilot study was done in a rural community with a focus on learners from the ages of 14 – 24. In terms of fatalities in rural areas, the age group 15-19 years constitutes 70% of road fatalities, compared to their urban counterparts, and the age group 20 – 24 take up 73% of fatalities compared to their urban counterparts who constitute only 27% of fatalities. This is a cause for concern considering that urban areas are more densely populated. In the rural areas of South Africa, crashes tend to be more severe in nature, than in urban areas. This could be because of high speeds travelled in rural areas.

Community road safety education programmes can play an integral part of the solution. Presently, in South Africa, safety is tackled mostly as various isolated issues, with different organizations working on different issues. Existing community structures are not used to their full potential to solve safety problems which are common to all communities as well as problems which are typical of the specific community. A great need exists for an integrated, comprehensive and coordinated approach to solve the community's safety problems. Communities are in the best position to affect improvements in their own safety related problems. When a community takes ownership of an issue, change happens.

This pilot project was embedded in the CSIR's community-driven road safety model which has the following definition: "Empowerment of people by enhancing their personal capacity and self-worth so that they can become aware of their potential to meet their needs through participation and ownership of the process of development".

The objective of the study was to introduce effective and sustainable community education programmes to improve the safety of vulnerable road users and the poor. Thus, key factors required for the implementation of a community road safety education programme were explored through a three-year study.

2. METHODOLOGY

A systematic literature review was conducted to identify relevant knowledge and programmes. This informed the focus group discussions and key informant interviews with stakeholders from the community. Various participatory research techniques were used to investigate community beliefs, knowledge and needs and develop appropriate materials to modify behaviour. These were pre-tested before conducting a more extensive intervention/evaluation trial.

The research process formed part of the community-driven process which entailed the facilitation of the following steps: identification of a pilot community with an existing need; identification of key stakeholders; making contact and getting to know the community; getting buy-in and commitment from relevant stakeholders; facilitating a participatory needs assessment with the community; establishment of a volunteer community group; feedback to the community on the results of the needs assessment; prioritising of road safety issues with the community; identification of the primary target audience and

behaviour; development and testing of an audience-centred intervention/programme; training in road safety issues; implementation of the community programme and monitoring and evaluation.

3. IDENTIFICATION OF KEY ROAD SAFETY ISSUES IN THE COMMUNITY

A number of steps were followed to identify the road safety problems in Leroro, including the following:

- Various stakeholder and community meetings, to introduce the project and explain the process;
- Informal discussions, mapping and key informant interviews with various stakeholders in the community to determine what their perceptions were;
- Focus groups discussions and surveys with the different groups in the community to determine their perceptions of and recommendations on the road safety problem;
- Observation of road-user behaviour in the community; and
- Data was collected, recorded and analyzed.

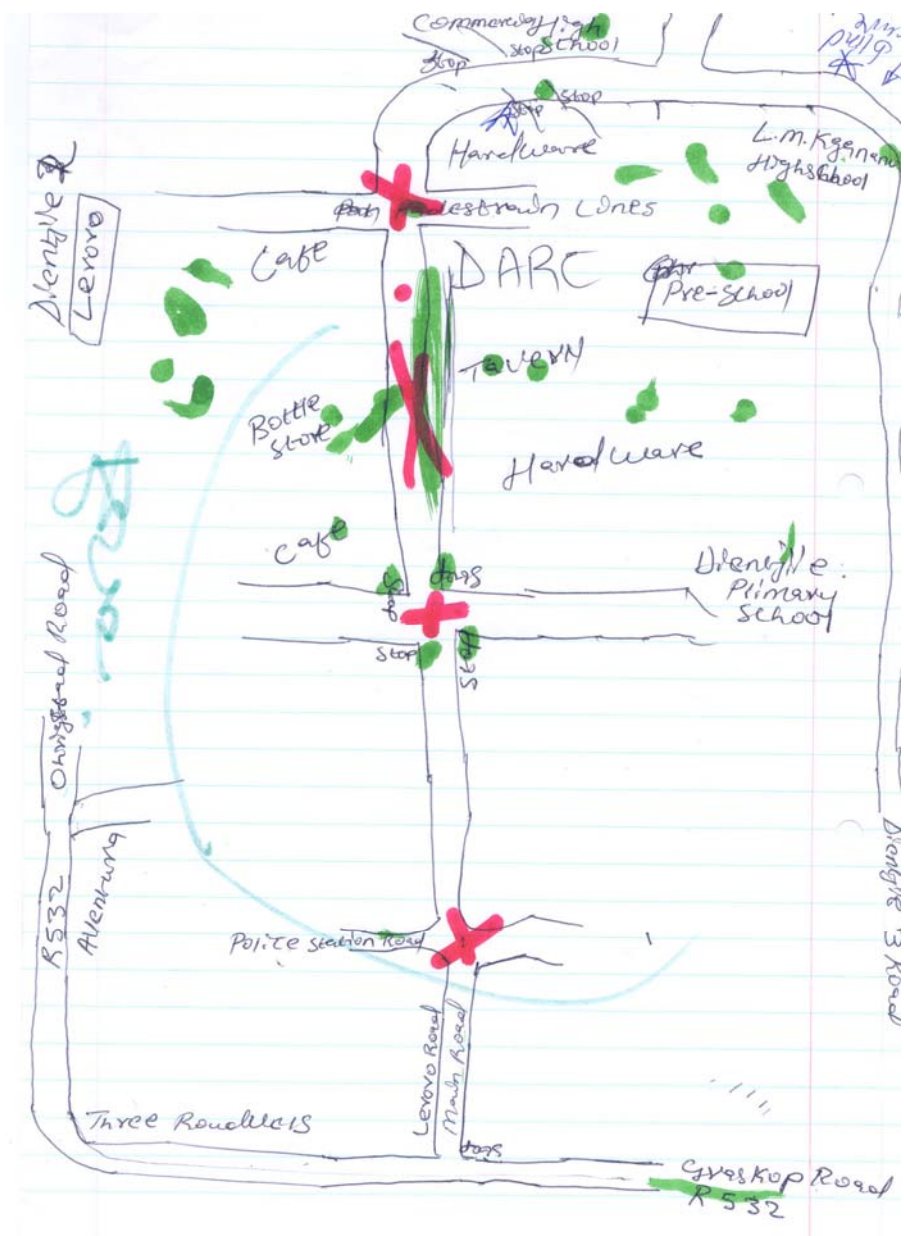


Figure 1: Leroro Community Map of road safety hazardous locations

Use was made of participatory rural appraisal techniques, such as mapping as can be seen in diagramme 1. Mapping is a participatory rural appraisal technique (PRA), where participants are requested to map their communities and identify what they perceive to be the road safety problems in their communities. This technique was also used as part of the focus group discussions held with primary school learners in Leroro. The technique facilitates bridging the gap of understanding between the researchers and the participants, so that everyone is brought to the same level of understanding of what, where, why and how things are taking place in the community. It also encourages crosschecking of data between participants and facilitates interaction between all participants. Chambers describes the PRA technique as, "...a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, to plan and to act." Various groups in the community mapped their perceptions of the road safety problem. This technique also assists in mobilising people into action and ownership of the issues.

The following is a summary of some of the key issues that arose during the needs assessment:

- "Before the main road was tarred, people use to walk in the road all the time. It was more of a pedestrian road. Since the road has been tarred, people still use it, as before – it is a habit, which is going to be difficult to change". (quote from community member).
- "A road safety programme is needed to inform and teach people about road safety" (quote from community member).
- "Workshops with teachers and principals could also work" (quote from community member).
- "There are drugs such as 'patsa' (dagga) that are being used" (quote from community member).
- "People also make their own homemade brew 'umqomboti' that can be bought for R2 a bottle. This consists of anything from battery acid, hot water, yeast to a slice of brown bread...it is hot stuff...people drink it to get drunk and then walk in the streets. They know they shouldn't but they ignore it" (quote from community member).
- "Children drink after the school is closed. They get their liquor from the bottle store on the corner. Even homemade ones!...the learners are exposed to drugs at a very early age. They think it is their right to drink. They smoke patsa and then they do not know how to be safe on the road!" (quote from community member).
- "children have an attitude problem – they do not get out of the way of motorists – they keep on walking in the road" (quote from community member).
- "Education is pivotal. An awareness campaign should be implemented" (quote from community member).
- "Alcohol is a big problem. It is freely available. It is the biggest problem over weekends, and often you see people drinking and sitting in the road" (secondary school learner).
- "The tar road (Leroro's main road) is the meeting place for many people over a weekend, where people get together and drink in the road" (quote from community member).
- "Once the road came, shebeens came and the road became busy" (quote from community member).
- Alleged bribery of traffic officials..."It doesn't help to go to the police because they help each other and then the informant gets into trouble" (quote from community member).

- Speeding taxis along the main road of Leroro.
- Issue of cattle walking on the roads.
- Disrespect between drivers and pedestrians.
- Ignoring traffic signs, especially the stop signs along the main road of Leroro.
- No street lighting, pavements, bus stops.
- Drunken drivers.
- Drunken pedestrians.

The learner survey took place from the 18 to 19 February 2003, in Leroro. The survey was conducted at the two secondary schools in Leroro, namely Ganani and Commercial High School, with an estimated total of 614 learners. The total respondents from the two schools were 581 (199 learners from Commercial High and 382 learners from Ganani High).

Some of the results of the surveys done at the two community schools indicated the following:

Eighty seven per cent of girls and 39 % of boys had not used alcohol or drugs in the past month. The substance reported to be used by most learners was beer. As can be seen from Table 1, 19 % of males and 1.4% of females had used beer in the previous month. The substance used mostly by girls (3.6%) was heroin, while 2.9% mentioned other drugs. Since “other” drugs were mostly mentioned by the younger group (12 to 15 years of age), there is a possibility that this might include the sniffing of substances such as glue, petrol, and paraffin that is readily available to learners. This has also been known to be a drug of use amongst younger age groups, according to other studies. This was later confirmed when the results were discussed with stakeholders and with learners.

Overall the substance use is similar for the two schools (24.3 % of Ganani High used at least one substance in the previous month compared to the reported use of 25.6 % of Commercial High who had used at least one substance). Use of “other” drugs was mostly found in Commercial High. Drug use was higher than alcohol use for both schools (if “other” is taken as a drug). This finding is indicated in Table 1 below.

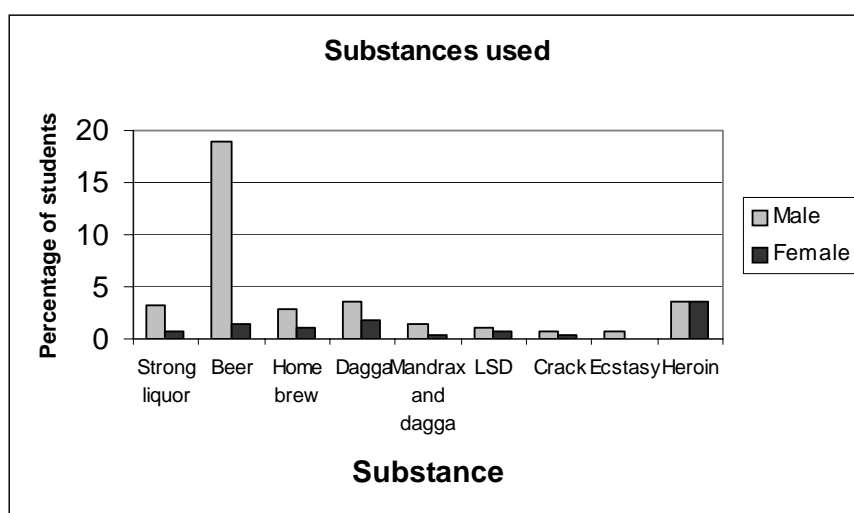


Table 1: Substances used by learners at the two schools

Twenty per cent of the group answered positive to taking alcohol. 74.4 per cent of those that answered this question took alcohol at least once a week, while 33.3 % took alcohol 3 or more times per week.

Eight per cent of the group answered positive to taking drugs. 54.2 per cent of those that answered used drugs 3 or more times per week.

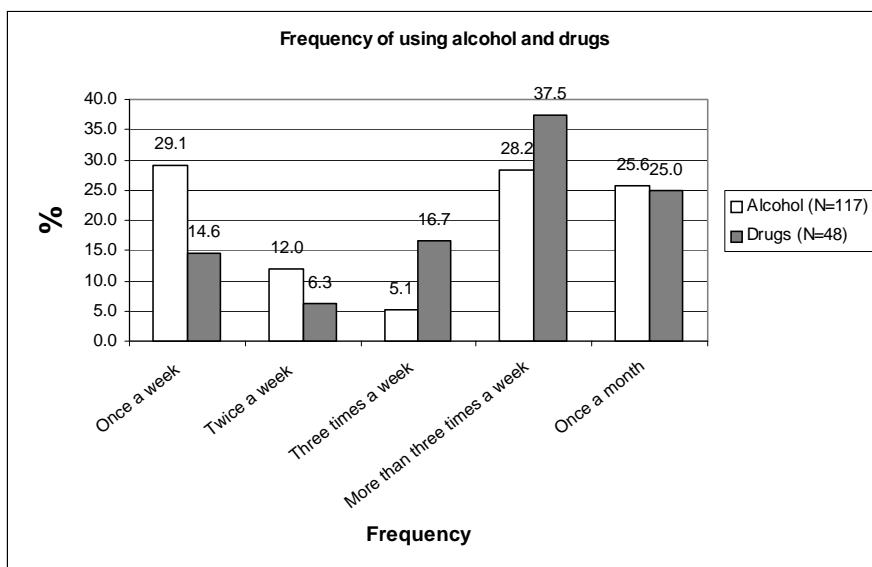


Table 2: Frequency of substance use at the two schools

In terms of where the learners accessed alcohol, 23 % answered positively to this question (excluding not applicable answers). Of these 34 % get alcohol from a shebeen (community bar), followed by 22 % from the liquor store and 21 % of learners make it themselves (home brew).

When asked whether their friends made use of alcohol and drugs, 21 % answered positive to this question. 73 % indicated that their friends used alcohol, 13 % used drugs and 14 % used both drugs and alcohol.

The reasons given as to why their friends use substances were as follows:

16 % gave reasons why they thought their friends drank: Most (47 %) drank because it was fun, 22% drank because their friends drank, or due to peer pressure; 10 % drank to relieve stress or to forget problems. Other reasons were: boredom or just to socialize, a way of life, unemployment.

In terms of their risk taking attitudes, the learners responded as follows:

Do you think getting drunk or high is right or wrong? 76 % thought it was wrong, 17 % was unsure and 7 % thought it was right.

Do you walk or drive whilst under the influence? 71 % said no, 17 % were unsure and 13 % said yes.

Is it dangerous to walk in the road, when under the influence of a substance? 70 % thought it was dangerous, 3 % thought it was dangerous to some extent, and 21 % thought it was not dangerous while 7 % was unsure. Boys in the older groups had more risky attitudes than boys in the younger age groups, but girls in the older age groups had less risky attitudes than girls in the younger age groups.

In terms of alcohol and drug use in the community, 68% thought it was a big problem, 20% thought it was not really a problem, while 12 % thought it was a problem to some extent.

After feedback of the assessment to the community and consultation with stakeholders, the issue of pedestrian safety related to alcohol and drugs was selected as the focus of the implementation of the community education programme. The target audience that was identified as 'most at risk' was that of secondary school learners. This selection was done on the basis of the analysis of the focus group discussions, interviews, community meetings and the survey done at the two schools.

4. IMPLEMENTATION

This multicomponent programme consisted of an educational intervention for the two secondary schools in Leroro, a training session on pedestrian safety with the out- of-school youth and volunteers of Leroro, a school-based competition, as well as a community-wide awareness campaign that took place by means of a community pedestrian safety day.

Parents were also actively involved in the programme through the pledge that had to be signed by the learner and parent, as well as participation in the community pedestrian safety day that was held at the primary school in the community.

The primary behavioural message of this programme was focused on raising awareness and educating youth on walking safely in Leroro, as well as the importance of walking sober. The channel used for reaching the youth was that of the school, as it was regarded as being the 'heart/node' of the community. The message of pedestrian safety was conveyed with a focus on the following programme theme: "Tomorrow's accidents haven't happened yet, you can make the difference!" This message was selected to inspire and mobilize the learners into action, because of the level of despondency of youth, as indicated by focus group participants, during the needs assessment phase of the project.

Implementation of the community education and communication programme entailed running the following processes:

- Participatory, interactive training on the impact of alcohol and drugs on pedestrian behaviour by means of the flipchart developed with learners and youth volunteers. The focus of the flipchart was on educating learners about the dangers and effects of alcohol and drugs; and the impact it has on pedestrian safety, road safety and the impact it has on community life. The flipchart was developed in such a way that encouraged participation and discussion between the trainer and learners. Use was made of perceptual mapping – a technique where a word is placed in the centre of a page, and participants are encouraged to give the first words that come to their mind when they see the word. This provides the facilitator with an understanding of the level of knowledge and the attitude of the learner towards the word. Thereafter, a discussion takes place. Perceptual mapping was used as an introduction to the topics of 'pedestrian', 'pedestrian safety', 'alcohol', 'drugs' and 'alternatives to drinking and taking drugs'. Key topics discussed in the flipchart were: the extent of the road safety problem in South Africa and Leroro; the problem of pedestrian safety; alcohol as a road safety problem; drugs as a road safety problem; how to say 'no' to peer pressure; the impact of alcohol and drugs on the community; alternatives to drinking and taking drugs; how to be a safe pedestrian; how to make a difference in Leroro so that 'tomorrow's accidents don't happen'.

- Pedestrian safety training provided by the regional road safety officer – training done by means of the Department of Transport’s Adult Pedestrian Flipchart.
- Training of volunteers and out-of-school youth in pedestrian safety and the impact of alcohol and drugs on road safety.
- Facilitation of the school-based competitions between the community secondary schools;
- Organization and facilitation of the community pedestrian safety day;
- Distribution of the pedestrian safety pledge to learners and parents;
- Distribution of the pedestrian safety bookmark to learners; and
- Distribution of pedestrian safety peaks to learners and volunteers.

5. EVALUATION OF PROGRAMME WITH THE COMMUNITY

Evaluation of the community education interventions took place by means of focus group discussions with learners, surveys with learners, and a participatory evaluation game of ‘snakes and ladders’ with educators and stakeholders. Thus, a combination of quantitative and qualitative data was used.

Some of the key findings are summarised below.

Responses by learners included the following:

- “project was very much important. I learnt a lot”
- “don’t give up, keep trying to change”
- “we have learned more...all my friends who smoked, now stopped smoking”
- “project was good, did good things”
- “project taught us a lot...I learnt I must be responsible for my actions, decisions...I hope the project goes on”.
- “I know now how to take care of myself...I can make a difference”
- “I don’t play on the road anymore”
- “learned to respect the road”.

Key results from the post evaluation survey done at the two schools were as follows:

- 77% indicated that the training had made them think about their own behaviour, with 4 learners indicating furthermore that it had changed their behaviour.
- In terms of what they learnt, learners indicated the following – road safety, walking safely in the road, respecting the road, respecting the rules of the road so that they could stay alive, how to make a difference with regard to road safety in the community, impact of alcohol and drugs on themselves and on road safety.
- Learners indicated that the programme had assisted their parents to think and learn new things about road safety; it encouraged the community to take part in the programme and had improved primary school learners behaviour on the road.

Half of the learners (51%) indicated that it had changed their behaviour, with a further 8% indicating that most of the time their behaviour had changed, while 4% said that it had changed only a little, and 4% saying it had not changed at all. A further 33% did not respond to this question.

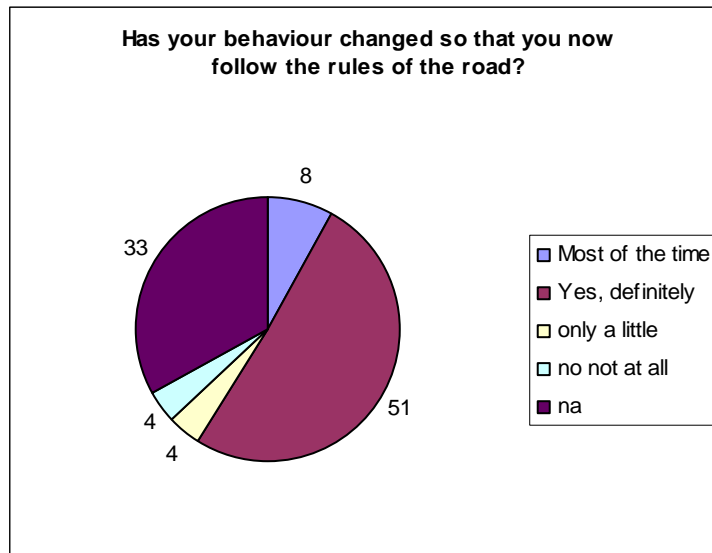


Table 3: Learners response to the programme

The majority of learners (137) responded that the training was important and necessary for learners in Leroro, with only 4 learners indicating that it was not necessary.

6. CONCLUSION

In conclusion, it appears that community road safety education programmes can make a difference in the lives of communities. A limitation of the study is that there is a great deal of self-reported behaviour which is normally reportedly higher than what actually transpires in reality. However, according to stakeholders and the community development advice office in Leroro, from their observations (which could again be regarded as subjective) the project has made a difference to the road-user behaviour in the community. It can also be noted that campaigns alone cannot change well-established behaviours, but they can raise awareness, which in this case did take place.

Also, the lack of recorded accident data makes it difficult to verify the evaluation in terms of the project making a difference through the reduction of accidents in the community. A recommendation would then be that a mechanism be established that will allow for official data to be collected in the community.

What is encouraging is that the learners from one of the secondary schools have been mobilized as a direct result from the project to establish their own traffic safety club. It is recommended that the local authority together with the road safety directorate of Mpumalanga, offer their continued support to this group of enthusiastic learners, to ensure sustainability of their initiative.

An issue to be addressed as a result of the study would be the monitoring of shebeen and liquor store owners in terms of selling liquor to minors. A further issue to be explored would be the education of shebeen owners and parents with regard to the impact of alcohol and drug abuse in the community.

Finally, it is recommended that a follow-up evaluation be conducted in two years time to assess the level of behaviour change.