

School children, parents and teachers' perception of Traffic Safety: A before and after study

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Background: Vulnerable road users (VRU) are the largest but most underprivileged road user group in Africa, disproportionately impacted by traffic accidents with fatalities share of 44% (*WHO, 2018*). The AfroSAFE project focuses on changing the vision of seeing VRUs as 'less important' in the traffic system and develop recommendations for a safer integration of them in the traffic environment. Children face a significant risk, particularly in school zones, where a large number of accidents occur. In Zambia alone 350 children are annually killed when they travel to and from schools. This emphasizes an immediate need for targeted interventions to enhance the safety of school zones for children. Recognizing the urgency of this issue, AfroSAFE in cooperation with the Zambia Road Safety Trust has launched initiatives aimed at improving road safety outside two schools in Zambia.

Aim: The general aim of the study was to increase safety outside two different schools in Lusaka. A secondary aim was to understand the impact of safety measures using so-called subjective and objective measures.

Method and methodological issues:

Changes to the infrastructure outside the schools: This included the installation of bollards to separate pedestrians from vehicles, safe pedestrian crossings featuring raised Zebra crossings with proper signage, the implementation of speed reduction measures such as speed humps and traffic calming signage.

Before and after study: Three different questionnaires were used to collect the perception of the area around the school before and after reconstruction. The participants were school children (aged 8 to 12), parents and teachers. A ‘control school’ was included in the study to control for any confounding factors. In the after study the participants from the ‘experimental schools’ were also asked about the changes to the infrastructure. In addition to subjective measures some more objective measures were included which consisted of speed counts and visual assessments to document changes and measure the effectiveness of the improvements. This approach ensures a comprehensive analysis that not only involves data based personal experiences and insights but also observations. In this presentation the focus will be on so-called subjective measures, i.e., the results from the surveys.

Results: A total of 230 participants from the three schools responded to the surveys before the implementation, 150 children (71 boys and 77 girls), 50 teachers and 30 parents. The results from the before study showed that the lack of safety was a concern of all groups. For instance, the majority of children were very afraid of crossing the road and this was mainly due to the speed of vehicles. Parents were more worried about safety around the school than teachers, although teachers were more likely to argue that drivers did not pay enough attention to the children crossing the road. The results from the post implementation and the difference between before and after will be presented at the conference.

Conclusions: The study is anticipated to provide valuable insights into the effectiveness of traffic safety improvements in school zones and inform future policy decisions and educational initiatives are aimed at improving the traffic safety of school children.