

## Road crossing behaviour among primary and secondary school students in Tanzania

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### Abstract

Tanzanian police reported that in 2016 over 3,381 people were killed on the roads, another 9,549 were injured in road accidents and 30% of all crashes involved pedestrians. This abstract shows the results of a study conducted in primary and secondary schools in the Arusha Region. The students were asked to identify the areas of interest within several road scenarios representing road crossings. The preliminary data analysis suggests that 90% of 205 subjects, aged 8 to 18, identified only left and right areas of the various images without controlling other areas from which other possible dangers could have arisen.

### Background, Method, Results and Conclusions

The United Republic of Tanzania is located on the east coast of Africa and has a population of almost 55 million (National Bureau of Statistics, 2016). The Tanzanian police reported that in 2016 over 3,381 people were killed on the roads, and another 9,549 were injured in road accidents (Tanzania Traffic Police Force, 2016). The WHO (2018) estimates that the real figure is more than five times as much, with an estimated mortality rate of 29.2 per 100,000 inhabitants. As in many high-income countries, a significant part of the Tanzanian road toll is the victims of road accidents, which account for 30% of all road accidents (WHO, 2018), about twice the proportion in developed countries. Since the population of Tanzania is relatively young, with around 44% under the age of 15 (National Bureau of Statistics, 2016), school-age children are therefore exposed to a high level of risk as pedestrians. Possible reasons should be investigated, for example the lack of effective road safety education in schools or common fatalistic beliefs (Perego et al, 2018). A reading of the road education syllabus used in Tanzania showed little explanation and even a lack of road crossing guidance. This abstract shows the results of a study conducted in three different primary and secondary schools in the Arusha Region in January 2019 to investigate the students' representation of areas of interest within nine selected road scenarios, showing road crossings. The results will then be compared with those of other studies conducted in Europe, where road safety education has road crossing rules as one of its main concerns (Biassoni et al, 2018). The images were chosen from over 100 photographs taken on both urban and rural roads in Tanzania. 205 students responded to the questionnaire, which was divided into two parts: the first with questions about age, gender, how the subject arrives and returns to school, with whom and if the subject has ever had an accident as a pedestrian. In the second part, nine street scenarios were shown to the subjects in random order. The subjects were asked to imagine being in the position of the person who took the photo, waiting to cross the street, and to point to the areas in the picture where he would look at first, second and third. The picture was divided into nine quadrants, as in Figure 1. A first analysis of the data suggests that 90% of the subjects aged between 8 and 18 years (average age = 12.33 SD = 2.61, 103 males and 102 females) indicated only the A2 and C2 quadrants of the various images without controlling other areas from which other possible dangers could have arisen. One of the reasons for these results could be related to the lack of proper road safety education. The complete analysis of data, which will be carried out in March 2019, could be a starting point to improve this part of the national program in primary and secondary schools.



**Figure 1. One of the 9 selected road scenario imagines**

## References

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