Traffic psychology and road education in Tanzanian Secondary School

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‘Ajali haina kinga’
Accidents have no prevention
(Lamont, 2012)
Background

Tanzania 2016
➢ 3,381 people were killed on the roads
➢ 9,549 people were injured on the roads (Tanzania Traffic Police Force, 2016)

WHO, estimated that the real figure was more than four times as much (WHO, 2015)

➢ 32.9 Death Rate per 100,000 inhabitants (WHO, 2015)
What is the connection between the data and Tanzanian beliefs?

‘Fatalistic beliefs contribute to risky behaviour and consequent negative outcomes’

‘Fatalistic beliefs can have an adverse impact upon road crash prevention’

(Kouabenan, 1998)

(Peltzer et al., 2003)
What role can a Traffic Psychologist play in road safety education in Tanzania?
Study Area

Tanzania
➢ Arusha Region
➢ Longido District
➢ Suma Engikaret Secondary School
Participants and procedure

➢ January-February 2016 and November 2016
➢ 212 students
➢ 2 hours lesson with a Traffic Psychologist
➢ Pre and Post Static Hazard Perception Test (SHPT) to measure the efficacy of the lesson and Follow-Up

Problem! How to create the lesson?
➢ Student knowledge
➢ Methodology of the lesson
Pre-Test

➢ Pre-Test: Questionnaire
Pre-Test

➢ Pre-Test: Static Hazard Perception Test (Tränkle, 1990)
## Results of the Pre-Test

<table>
<thead>
<tr>
<th>Students</th>
<th>Age</th>
<th>From</th>
<th>Bicycle</th>
<th>Piki-Piki</th>
<th>Car</th>
<th>Lorry</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>F</td>
<td>Tot</td>
<td>Urban</td>
<td>Rural</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Form 1</td>
<td></td>
<td></td>
<td>13.98</td>
<td></td>
<td>40</td>
<td>16</td>
</tr>
<tr>
<td>Form 2</td>
<td></td>
<td></td>
<td>14.82</td>
<td></td>
<td>59</td>
<td>15</td>
</tr>
<tr>
<td>Form 3</td>
<td></td>
<td></td>
<td>15.85</td>
<td></td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>Form 4</td>
<td></td>
<td></td>
<td>16.21</td>
<td></td>
<td>39</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>97</td>
<td>212</td>
<td>15.27</td>
<td>171</td>
<td>41</td>
</tr>
</tbody>
</table>

38% of the female students have never tried to ride a bicycle.
Lesson in the class

The lesson was divided into five tasks:

➢ What is the road?

➢ What is a hazard?

➢ What is a danger?

➢ Examples of Hazards
Lesson in the class

➢ Project “The right way to cross the road”
Post-Test

➢ Post-Test: Static Hazard Perception Test

Follow-Up in November 2016: Static Hazard Perception Test
Results

➢ Pre-post repeated measures analysis of variance (ANOVA) yield a principal effect of the training on hazard perception (F (1,210) = 27.519, p< .001).

➢ Follow-Up shows that the level of hazards perception at eight months after the training was lower than immediately after the training (repeated measures ANOVA: F (1,210) =11,700, p<.005) but higher than before the training (repeated measures ANOVA: F (1,210) =85,685, p<.001).

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Fol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.51</td>
<td>3.02</td>
<td>2.48</td>
</tr>
</tbody>
</table>
Conclusion

Although there were limits in the research the results suggest:

the Traffic Psychology approach seemed to help the students to think and improve their road knowledge

the Traffic Psychologist seemed to help to challenge their African beliefs
Future

➢ August 2018 Tinga Tinga Secondary School with 600 students to repeat the same project

Problems:
➢ Low level of education
➢ Different religions: Catholics, Muslims and practitioners of indigenous religions
Acknowledgments

➢ Father Renatus Karumuna  
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➢ Dr Mark King  
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Publications

www.witpress.com, ISSN 1743-3509 (Pages 393 - 401)
Asante sana
Thank you
Grazie per l’attenzione

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References


