



## Comparing national road safety culture in three African and three European countries

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### Introduction

The present study compares road safety culture (RSC) in three African countries (Tanzania, Ghana, Zambia) with three EU countries with record of excellence in traffic safety (Norway, Netherlands, Sweden). We define road safety culture as shared norms prescribing certain road safety behaviours, and thus shared expectations regarding the behaviours of others (Nævestad & Bjørnskau 2012; Nævestad et al., 2019), and shared values and attitudes signifying what is important (e.g. safety, mobility, respect, politeness) (cf. Elvebakk, 2015). Several factors that could influence RSC are national (e.g. traffic rules, the police enforcing the rules, driver licensing, and driver education). For these reasons, we could expect the existence of different national RSCs (cf. Nævestad et al., 2019). In accordance with this, previous studies have found differences in national RSC, which corresponds with differences in national road safety records (cf. Nævestad et al., 2019).

The aims of the present study are to: 1) Compare road safety behaviours and RSC among car drivers in the studied countries, 2) Examine the factors influencing road safety behaviours, focusing especially on national RSC, 3) Examine the influence of road safety behaviours and other factors (e.g., demographic and work-related variables) on accident involvement, and 4) Discuss factors influencing RSC in the studied countries.

### Research methodology

The study is based on two methods. The first is qualitative interviews and focus groups with drivers and national road safety experts within each of the studied countries. The purpose is to



get in-depth information about typical road safety behaviours, national RSC and factors influencing RSC. The second method is quantitative surveys distributed to representative samples of car drivers within each study country. We have conducted two multivariate regression analyses. Examining factors (e.g. road safety behaviours) influencing whether respondents have been involved in a traffic accident while driving a bus in the last two years, we employ binary logistic regression analyses. In the second analysis, we use a linear regression analysis, analysing how RSC and other factors influence road safety behaviours. The three African and European countries were selected for comparison since the road safety record of these countries differ substantially. While the road fatality rates of Norway, Sweden and the Netherlands were 15, 20 and 33 per million population in 2021, corresponding numbers in Ghana, Zambia and Tanzania were 88, 111 and 284. Thus, the average number of road fatalities in the European countries is 26 per million population, while it is 200 in the African countries. In accordance with these differences, we hypothesize differences in national RSC in the studied countries (Hypothesis 1). Based on previous research, we expect a relationship between RSC and road safety behaviours (Hypothesis 2). The background is that descriptive norms create a "mild social pressure" to do as the others do (Cialdini et al 1990). National RSC concerns what we think of as "normal" road safety behaviour in our own country, what we generally expect from other road users (Nævestad et al 2019). Identifying differences in the types of road safety behaviour that are considered "normal" in the studied countries is important, as this might shed light on the different road safety records. Finally, we also expect a relationship between road safety behaviours and accident involvement (Hypothesis 3).

### **Discussion and conclusions**

Discussing factors influencing RSC in the studied countries, we focus on five factors: road user interaction, road infrastructure, education, enforcement, national economy and composition of road users. We also relate the differences in RSC to different levels of Safe system implementation in the studied countries.

Based on the observed relationships and a discussion of factors influencing road safety culture in the studied countries, we suggest measures to improve national road safety culture. The present study is part of the AfroSAFE project, funded by the European Union. Grant agreement ID: 101069500