

Different but also alike? Ingroup-outgroup phenomena among cyclists and e-scooter riders.

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Keywords: micromobility, e-scooter, social identity, stereotypes, rule violation.

1 INTRODUCTION

Against the background of an increasing number of cyclists sharing the infrastructure with an also rising number of e-scooter riders in Germany, the question of considerate coexistence among both modes of transportation, especially on shared infrastructure (on- or off-road) arises.

In various contexts (e.g. work, education), studies have shown that social identity has an impact on how members of an ingroup ("us") and outgroup ("them") are perceived [1]. These studies are based on social identity theory [2], which postulates members of the ingroup are more likely to be favored and members of the outgroup are more likely discriminated and stereotyped.

This ingroup favorism or outgroup discrimination can refer to attitudes, cognition, and behavior. Initial research in the traffic context by [3], on which the present study builds, suggests that social identity also plays a role in traffic. Apart from that, research on social identity in traffic is scarce.

The aim of the study is to determine whether the role as cyclist or e-scooter rider in traffic can serve as social identity, and subsequently whether ingroup-outgroup phenomena, such as ingroup favorism and effects of outgroup discrimination can be observed.

2 METHODS

Currently, cyclists and e-scooter riders are recruited Germany-wide through an existing list of subjects, online forums about e-scooters and social media. To address the research aims, an online experimental survey was conducted that takes roughly 15 minutes to complete. Dependent on their stated usage frequency of e-scooters and bicycles participants are assigned to the respective group (between-subjects factor) and randomly assigned to watch either video clips showing an e-scooter rider or cyclist. Before the videos start participants are asked to indicate the degree of identification with the assigned group (social identification as e-scooter rider/ cyclist).

The six video clips were recorded from the perspective of a cyclist/ an e-scooter rider (the survey participant) following another road user (e-scooter rider/ cyclist). The participants are instructed to envision themselves as being on the road cycling/ e-scooter riding and observing the scene from the video in front of them. The road user shown in the video clips commits one rule violation in each of the six clips, pictured in Table 1.



Table 1: Clip snippets of the six different rule violations per condition rated by the participants.

	Cyclist	E-Scooter rider
Taking the right of way		
Overtaking too closely		
Riding two on one vehicle		
Riding against the direction of travel		
Close cutting in		
Side by side riding		

Each time a video ends, participants are asked to rate on a six-point Likert-scale their agreement with three given internal and external attributions regarding the observed rule violations by the shown road user. In addition, participants are asked to indicate their willingness to raise traffic fines for the observed rule violation and the respective amount of this fine.

The survey closes with the collection of demographic information.

3 RESULTS

At the time of submission, data collection is still ongoing.

4 OUTLOOK

Stereotypes and their negative companions, e.g. aggression, become effective especially in situations with high cognitive load and under time pressure [4], situations that occur frequently in road traffic. Against this background, the results of this study can provide initial indications of whether, in the coming years, we can expect considerate coexistence among e-scooter riders and cyclists or, in the worst case, aggressive riding behavior on shared cycling facilities.



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