Accident Analysis and Prevention 45 (2012) 522–528

Contents lists available at SciVerse ScienceDirect

Accident Analysis and Prevention

journal homepage: www.elsevier.com/locate/aap

The effects of non-evaluative feedback on drivers' self-evaluation and performance

Ebru Dogan[a,*], Linda Steg[a], Patricia Delhomme[b], Talib Rothengatter[1]

[a] Faculty of Behavioral and Social Sciences, University of Groningen, The Netherlands
[b] IFSTTAR, Laboratory of Driver Psychology, France

ARTICLE INFO

Article history:
Received 25 May 2011
Received in revised form 2 August 2011
Accepted 4 September 2011

Keywords:
Non-evaluative feedback
Self-evaluation
Self-regulation
Hazard perception
Self-enhancement bias

ABSTRACT

Drivers' tend to overestimate their competences, which may result in risk taking behavior. Providing drivers with feedback has been suggested as one of the solutions to overcome drivers' inaccurate self-evaluations. In practice, many tests and driving simulators provide drivers with non-evaluative feedback, which conveys information on the level of performance but not on what caused the performance. Is this type of feedback indeed effective in reducing self-enhancement biases? The current study aimed to investigate the effect of non-evaluative performance feedback on drivers' self-evaluations using a computerized hazard perception test. A between-subjects design was used with one group receiving feedback on performance in the hazard perception test while the other group not receiving any feedback. The results indicated that drivers had a robust self-enhancement bias in their self-evaluations regardless of the presence of performance feedback and that they systematically estimated their performance to be higher than they actually achieved in the test. Furthermore, they devalued the credibility of the test instead of adjusting their self-evaluations in order to cope with the negative feelings following the failure feedback. We discuss the theoretical and practical implications of these counterproductive effects of non-evaluative feedback.

1. Introduction

We are motivated to see ourselves in a positive way in order to feel good about ourselves and to maintain a high self-esteem (Steele, 1988). This applies to drivers as well. Drivers very often believe that they drive better than other drivers or that they are more competent than they actually are, showing a self-enhancement bias in their self-evaluations (see Sundström, 2008). Generally, drivers consider themselves to be more skillful than other drivers (Svenson, 1981; DeJoy, 1989; Delhomme, 1991; Gregersen, 1996; McKenna et al., 1991; Groeger and Grande, 1996), indicating that at least some of them overestimate their skills. Different motivational explanations have been offered for the mechanisms underlying the self-enhancement bias in drivers' skill evaluations. McKenna et al. (1991) suggested that drivers inflate their own abilities instead of deflating those of other drivers. Walton (1999), on the other hand, found that truck drivers downgraded other drivers' abilities rather than inflating their own abilities. Whichever motivational mechanism explains self-enhancement biases, such biases seem to be persistent for driving skills. In fact, this self-enhancement bias has been found to be even stronger when measured implicitly (Harré and Sibley, 2007), suggesting that drivers' beliefs about the superiority of their driving competence are deeply rooted. Paradoxically, people also believed that they are less susceptible to judgmental biases than others (Pronin et al., 2004), which makes these biases even more robust.

The overestimation of skills and competence is associated with perceiving less risks, either by perceiving one's self as a less risky driver (Svenson, 1981) or by perceiving one's own crash risk as lower (DeJoy, 1989; Deery, 1999; Harré and Sibley, 2007). Drivers generally take regulatory actions when they perceive that their competence falls short to meet the demands of the situation (Fuller, 2008). When drivers overestimate their competence, they may expect their performance to be better than it really is. Consequently, when drivers overestimate their skills and underestimate the risks involved, they may be more likely to take risks on the road, for instance, by driving faster. This leaves shorter time margins to detect hazardous situations in time, which in turn may hinder one's ability to respond timely to dangers as to avoid negative consequences. It is therefore of great importance that drivers have accurate estimations of their competence and abilities (see Rothengatter, 2002).

* Corresponding author at: Faculty of Behavioral and Social Sciences, Department of Psychology, University of Groningen, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands. Tel.: +31 50 3634722; fax: +31 50 3636304.
E-mail address: e.b.dogan@rug.nl (E. Dogan).
[1] Talib Rothengatter passed away during the course of this work.

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doi:10.1016/j.aap.2011.09.004