

Are young drivers as safe as they think they are?

<http://amonline.trb.org/2vcIU9/2v>

Gila Albert

Faculty of Management of Technology

H.I.T – Holon Institute of Technology

52 Golomb St., Holon, 58102, Israel

Tel/Fax: 972-3-5026746

E-mail: gilaa@hit.ac.il

(Corresponding author)

Tsippy Lotan

Or Yarok

22 Hanagar St., Hod Hasharon, 45240, Israel

Tel: 972 -9-777-6184

Fax: 972 -9-777-6160

E-mail: tsippy@oryarok.org.il

Tomer Toledo

Faculty of Civil and Environmental Engineering

Technion- Israel Institute of Technology, Haifa, 32000 Israel

Tel: 972 -4-8293080

Fax: +972 -4-8295708

Email: toledo@technion.ac.il.

Einat Grimberg

Or Yarok

22 Hanagar St., Hod Hasharon, 45240, Israel

Tel: 972-9-777-6181

Fax: 972 -9-777-6160

E-mail: einatg@oryarok.org.il

Mariano Lasebnik

Faculty of Management of Technology

H.I.T – Holon Institute of Technology

52 Golomb St., Holon, 58102, Israel

Tel: 972 -3-5026744

Fax: 972 -3-5026746

E-mail: mariano@shahal. co.il

Word count: 4,969

Table: 1×250=250

Figure: 4×250=1,000

Total: 6,219

## ABSTRACT

1

This paper evaluates the driving behavior of young drivers few years after licensure. The evaluation is based on two data collection approaches, which were compiled for the same trips: The first, In Vehicle Data Recorders (IVDR), which were installed in the young drivers' vehicles for a study period of 8 months. The second, Self-Reports (SR), which were provided by the young drivers at random times throughout the study period. These data have been compared and used in a complementary manner in order to provide an understanding of participants' driving behavior. The results show that young drivers clearly perceived themselves as being safer drivers than they are, according to IVDR findings. The results also suggest, based on the two approaches, that young drivers significantly improved their driving behavior during the study period. The analysis obtained should be considered as exemplifying the potential of what may be accomplished and understood using these evaluation approaches.

## INTRODUCTION

14

Young drivers in Israel, similar to other places across the globe, are involved in car crashes more than any other age group, as is shown in FIGURE 1. A "young driver" is often defined with a relatively wide age group, e.g., the ages of 17 to 24 years. But the main focus in the safety literature is on novice young drivers up to 19 years of age.

Young drivers up to the age of 19 are more affected by risk factors, such as nighttime and weekend driving, the presence of other passengers - especially teens in the car, and by negative interaction of these attributes. However, these factors have a lesser effect on young drivers between the ages of 19 and 24 years ([1], [2], [3], [4]). Furthermore, the impact of the presence of passengers in the car on the 19-24 year-olds, for example, can be considered ambiguous and depends on socio-economic characteristics and social interactions between the driver and the passengers ([1], [5]). Despite their over-representation in crashes, young drivers are often confident in their driving abilities, tend to overestimate their own driving skills, and perceive their own chances of involvement in a crash to be significantly lower than those of their peers ([6], [7], [8]).

This paper is based on a study carried out in Israel as part of the European Community PROLOGUE project ([9]). The study aims to evaluate the driving behavior of young drivers in the 19-24 age group drive, 3-4 years after licensure. The evaluation was done using two tools: In Vehicle Data Recorders (IVDR) technology and Self Reported data (SR). More specifically, we focused on the relation between these two approaches and on the ability to use them in a complementary manner in order to improve the evaluation of driving behavior. Recent literature suggests the potential strength of combining both technology-based and traditional approaches (e.g., [10], [11]).