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Psychosocial correlates of traffic and speed transgressions in Italian teens: the results of NoiSicuri Project Research



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The project



and the schools

To promote road safety in urban context

SHARED project

New technologies

Empowerment of local authorities

Traffic Rules for safety

Communication

Culture of safety

Educational and training programs

Citizens

Schools

Need to know specific characteristics of school context and territory

Research in secondary schools



The research in secondary schools

AIMS

The general aim of the study was to investigate **driving behavior, and** some of its **personal and social correlates, in adolescents** attending secondary schools, to obtain essential information to implement prevention programs.

Specific aims of the presentation:

- To describe secondary school students' driving habits: **kind of motor vehicle** driven;
- To describe **risky driving behavior** in secondary school students;
- To describe some personal correlates of risky driving: **risk perception** and **risky driving psychological functions**;
- To investigate the **relationships between risky driving and** some **personal** (risk perception, risky driving functions, locus of control) **and social correlates** (friends' and parents' disapproval of risky driving).

METHOD

PARTICIPANTS

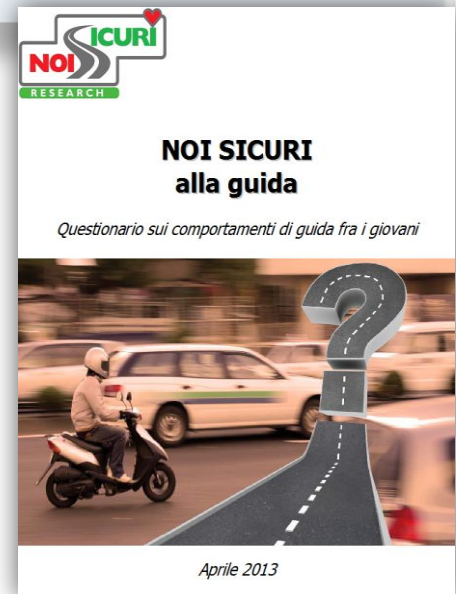
735 students (56% boys), aged 12-20 years (mean age =14.41; *S.D.*=2.01), attending some secondary schools placed in eight Municipalities of Center and Western Italy, participating in NoiSicuri Project.

- 241 students of **second grade secondary schools** (63% boys), aged 14-20 years (*mean age*=16.72; *S.D.*=1.91);
- 512 students attending the **last year of first grade secondary schools** (that is **middle school**) (53% boys), aged 13-16 years (*mean age*=13.31; *S.D.*=0.65).

INSTRUMENT AND PROCEDURE

Self-report questionnaire (“NoiSICURI alla guida” – Bina, 2013), including questions expressly performed for the study and validate **scales concerning risky driving and its correlates**.

Anonimously administered at school by trained psychologist.



METHOD

Investigated variables and measures

Personal correlates

Risk perception of risky behaviours in traffic

(expressly performed for the study)

Locus of control

(italian version of Giannini, Sgalla 2011)

Motivational aspects

- **Risky driving psychological functions** (*RDPF scale* - Bina Graziano, Calandri, Vecchio, Cattelino, 2009)

Social correlates

FRIENDS

Friends' and best friend's **disapproval of risky driving**

PARENTS

- Parents' **disapproval of risky driving**

RISKY DRIVING

(item from: *RD Scale* of Bonino *et al.* 2005, and *Scale of risky driving behaviorurs for bycycle* of Giannini Sgalla, 2011)



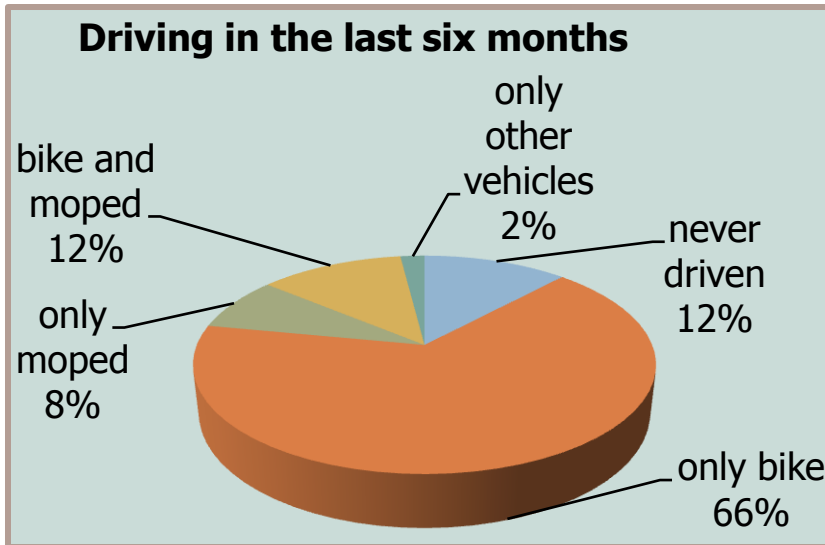
RESULTS

ADOLESCENTS DRIVERS

ADOLESCENTS DRIVERS

middle school

86% of participants had driven bicycle or moped in traffic in the last six months

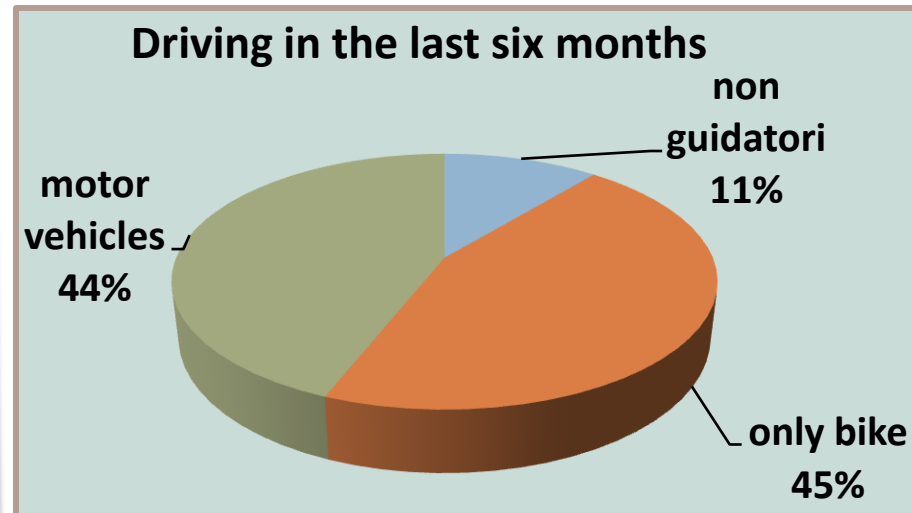


Gender differences

93% of boys were drivers vs 81% of girls ($\chi^2=10.18$; $p=.001$).

2nd grade secondary school

89% of participants had driven motor vehicles or bike in traffic, without gender differences



Age differences

52% of the students attending the last three years of school had driven motor vehicles vs 21% of the students of the first two years ($\chi^2=19.34$; $p<.001$).

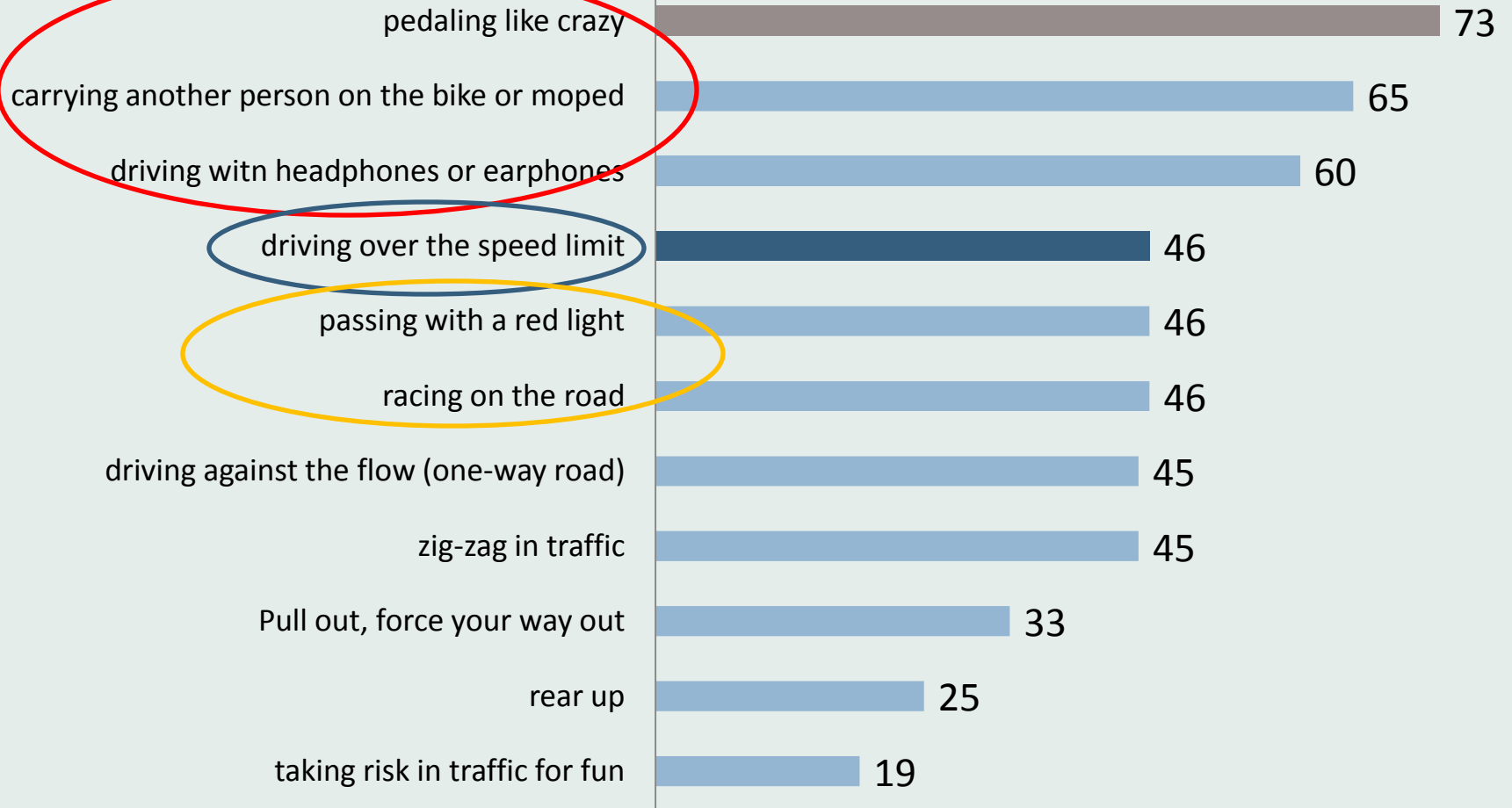


RESULTS

RISKY DRIVING

RISKY DRIVING (%)

Middle school

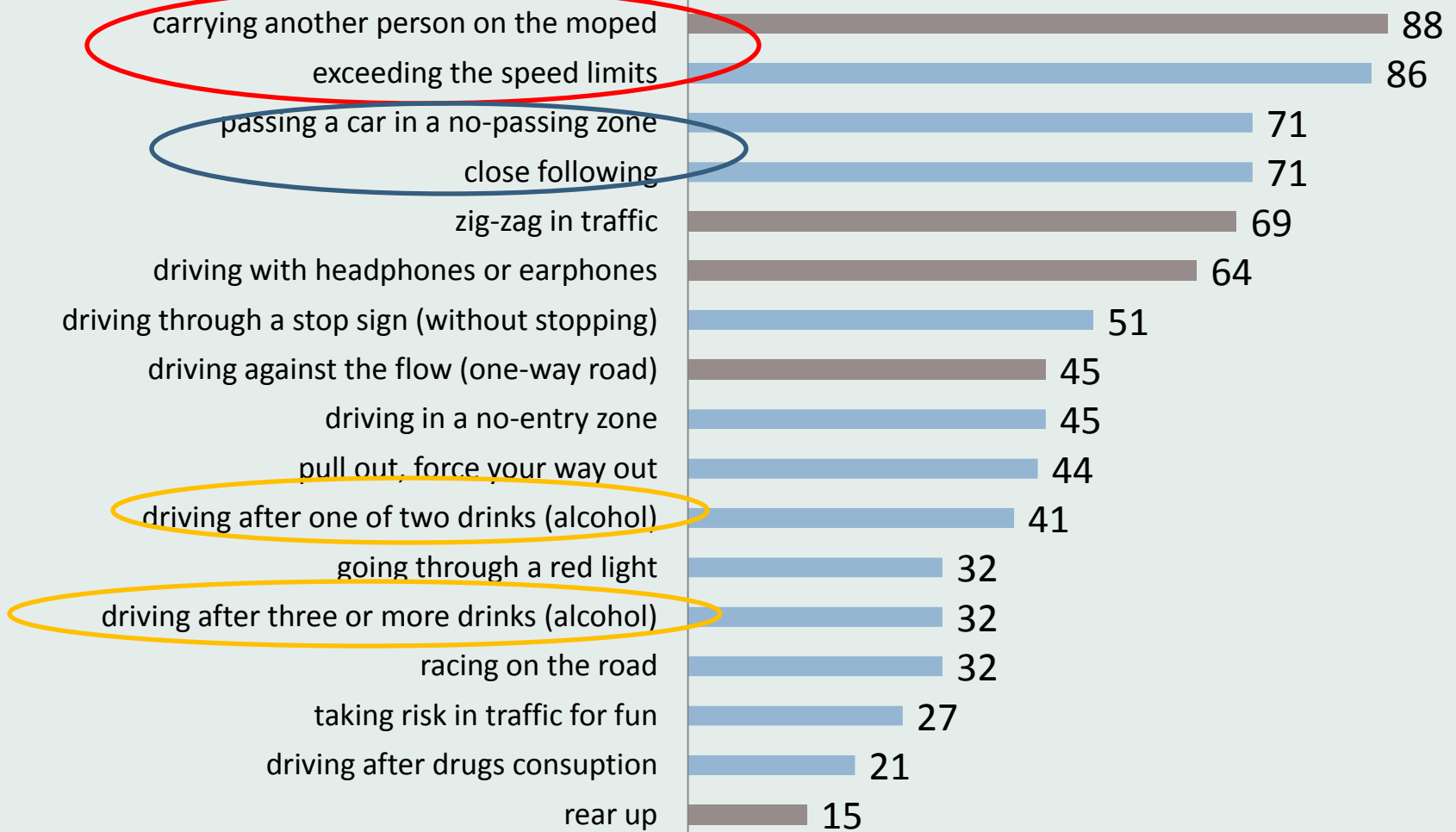


■ % only moped drivers

■ % only cyclists

RISKY DRIVING (%)

2nd grade secondary school



■ % of all motor vehicles drivers

■ % of only motorcycles drivers



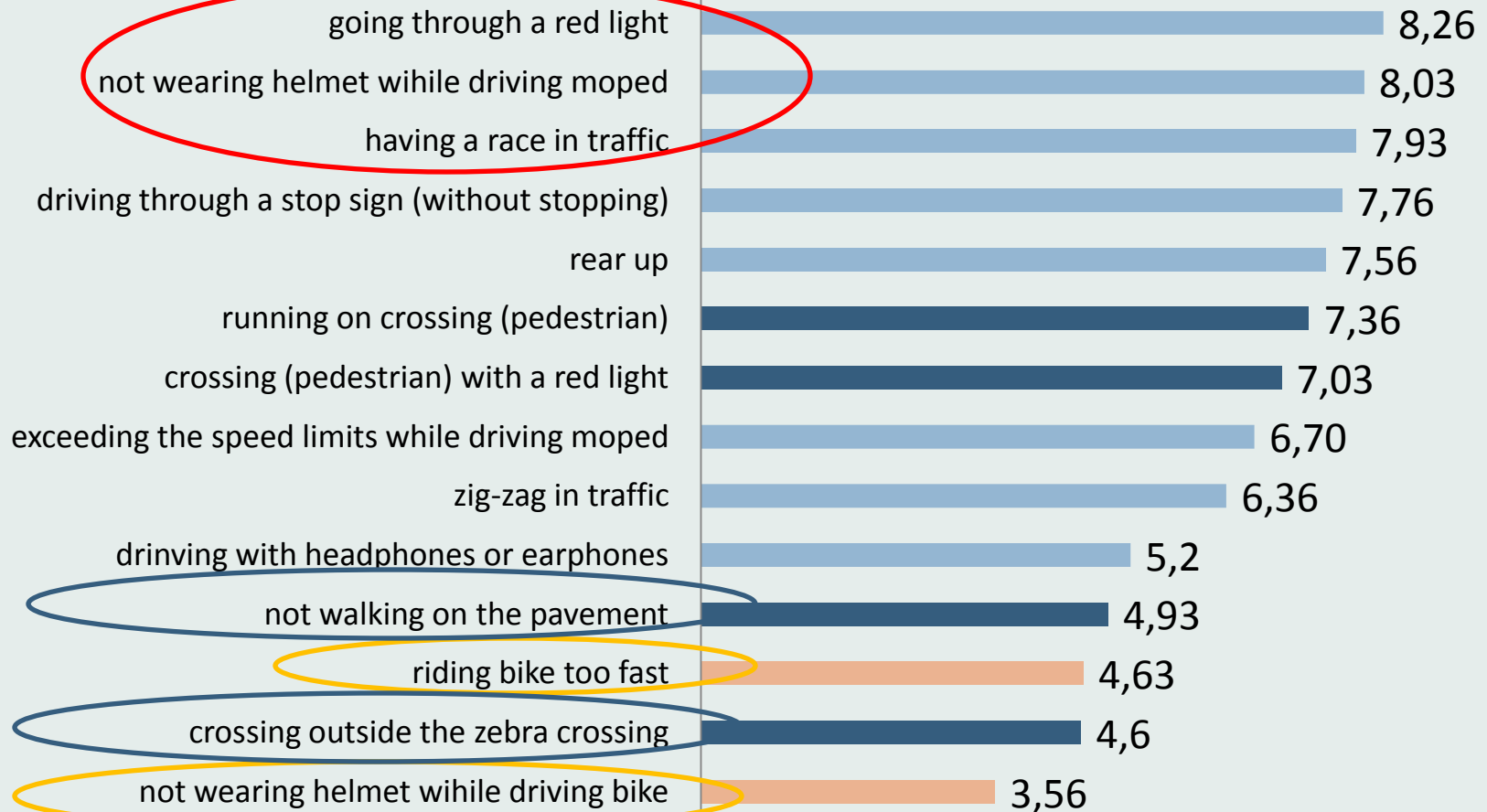
RESULTS

RISK PERCEPTION

RISK PERCEPTION

How much is dangerous (proportional means from 0 to 10)

Middle school



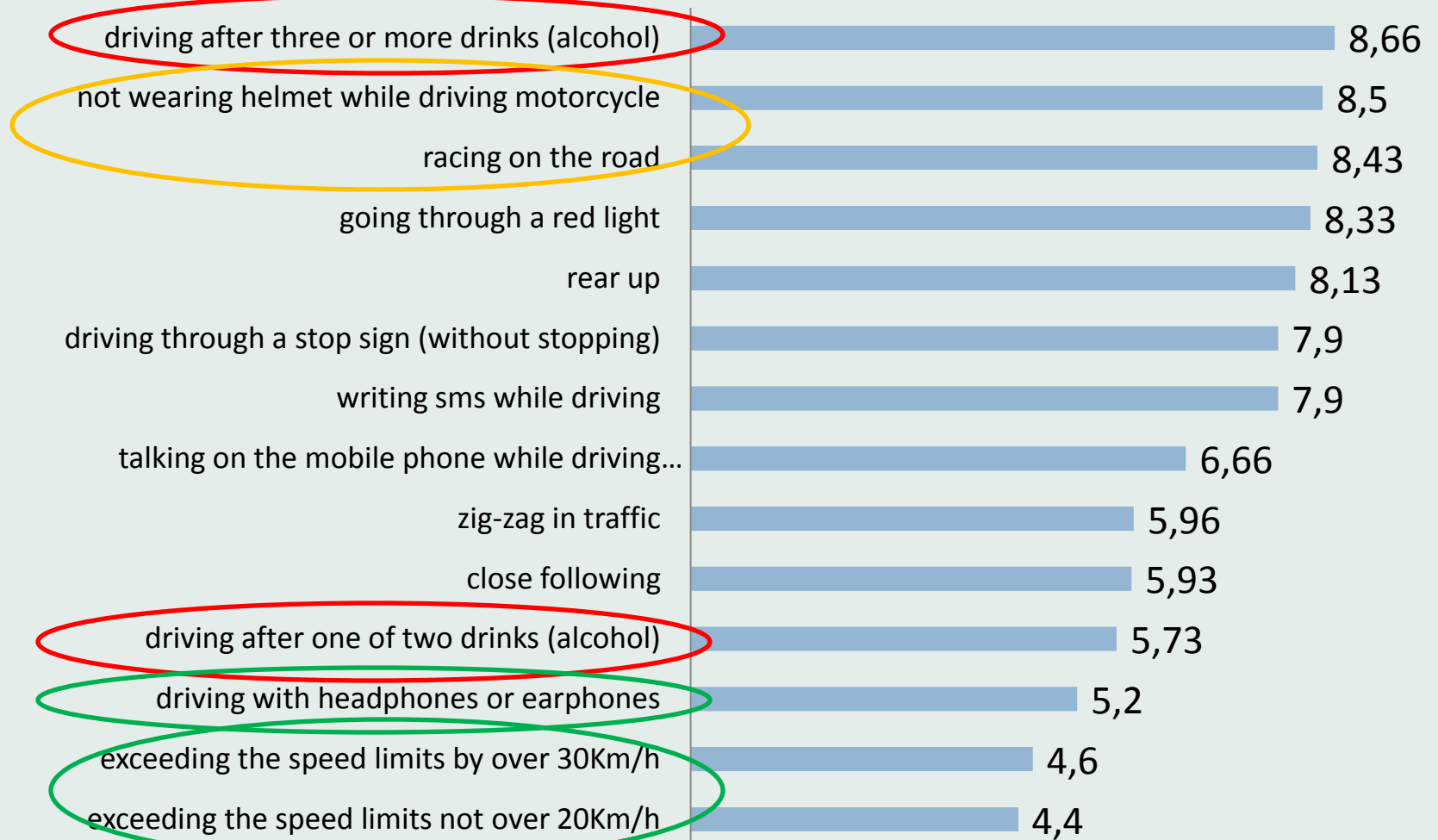
■ Pedestrian behaviours

■ Cyclists behaviours

RISK PERCEPTION

How much is dangerous (proportional means from 0 to 10)

2nd grade **secondary school**

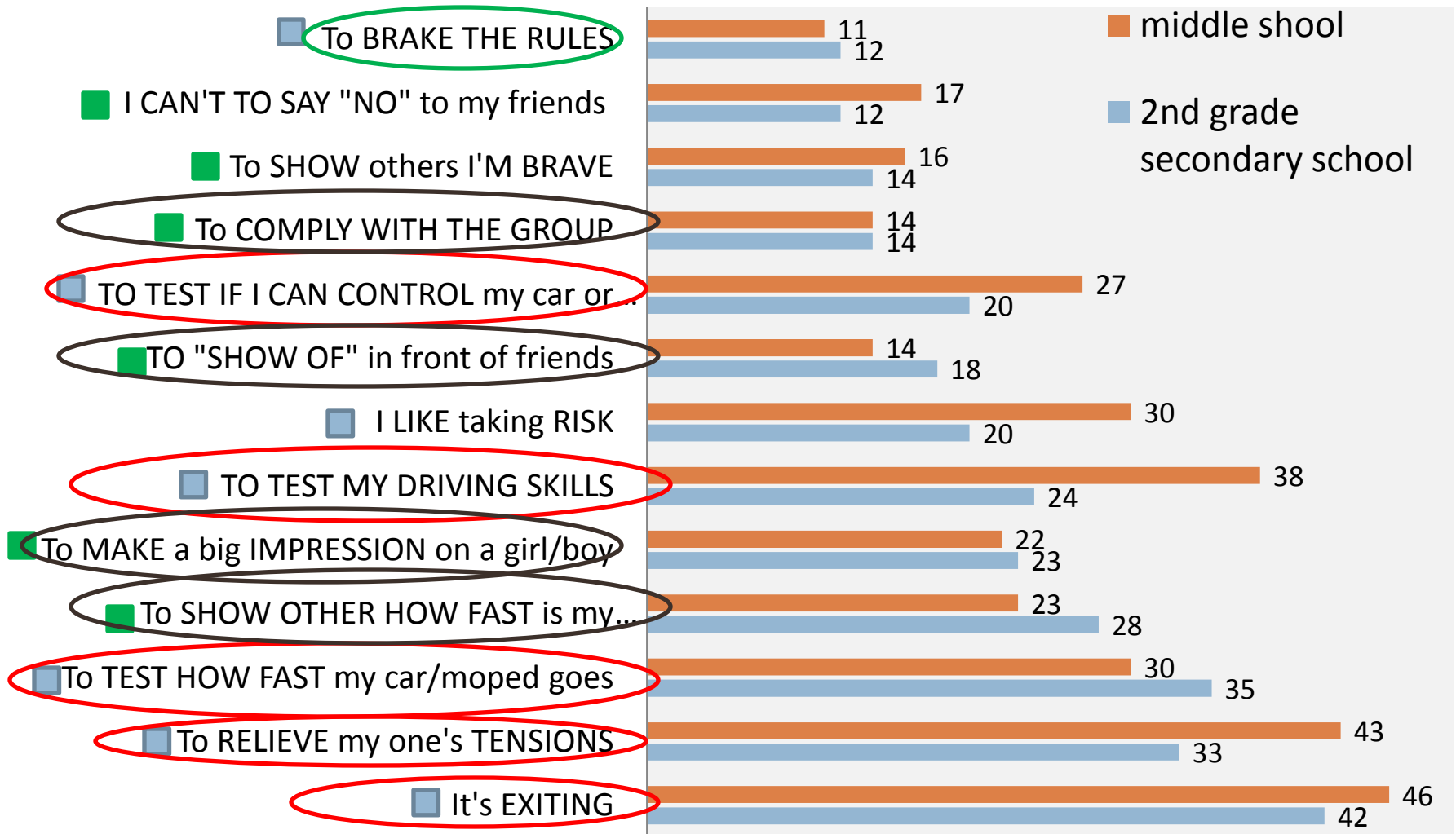




RESULTS

MOTIVES OF RISKY DRIVING

RISKY DRIVING FUNCTIONS *(reasons of risky driving)*



% of agreement (sum of "fairly agree" e "very agree")

Identity functions

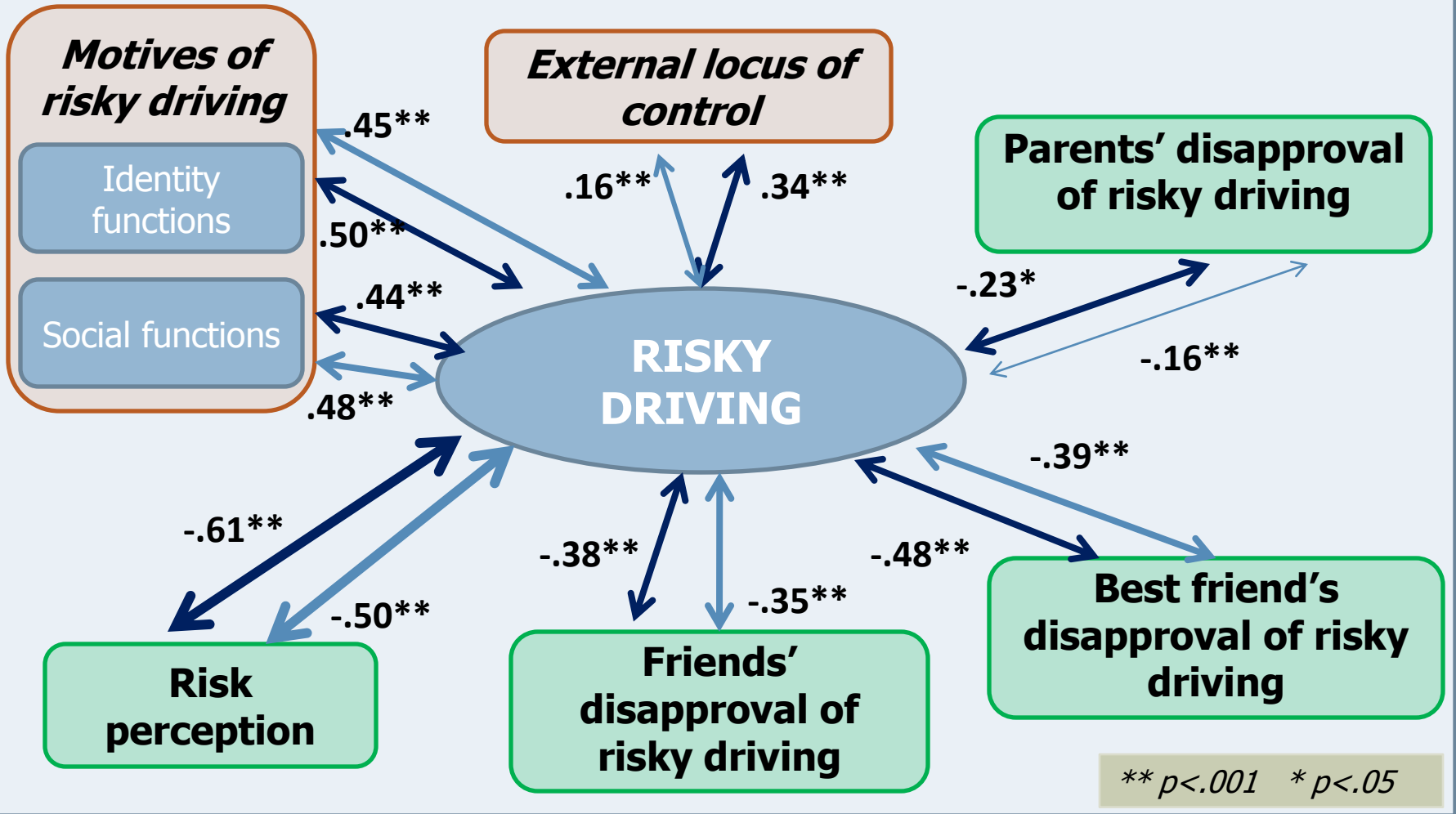
Social functions



RESULTS

**PERSONAL AND SOCIAL
CORRELATES OF RISKY
DRIVING**

CORRELATIONS



Middle school ↔

2nd grade secondary school ↔

PERSONAL AND SOCIAL CORRELATES OF RISKY DRIVING

In summary ...

Adolescents more engaged in traffic offences:

- perceived risky driving behaviours as less dangerous;

- **attributed** with more likelihood **road accidents to external causes** (overall the students of 2nd grade secondary school);

- perceived **risky driving as functional to the achievement of developmental objectives**, concerning **identity construction** (*exploration of new sensations, to go beyond the limits, to cope with negative emotions, need of control, identity affirmation*) and **peer relationships** (*visibility and friends' approval*);

- had **parents and friends** who showed **less disapproval of risky driving behaviours**



CONCLUSIONS

PRACTICAL IMPLICATIONS

MAIN PRACTICAL IMPLICATION OF THE RESULTS (1)

In order to plan **action to promote road safety in the schools** of the territories where NoiSicuri Project has been carrying out, **the results suggested ...**

Middle school

DRIVING BEHAVIOR

2nd grade secondary school

Focus on:

- safe **use of bicycle**
- pedestrian safe behaviours.
- **Moped driving** have to be considered **in the last year** of school attendance.

Focus on:

- **moped driving**
- safe **use of bicycle** (first two years of school attendance).

RISK PERCEPTION

- **To improve the risk perception** concerning the behaviours perceived as less dangerous

- Driving using **earphones/ headphones**
- **bike riding** and **walking** in traffic

- **Speed** and **close following**
- Driving using **headphones** and **zig-zag in traffic**
- alcohol and driving

MAIN PRACTICAL IMPLICATION OF THE RESULTS (2)

Middle school

2nd grade secondary school

MOTIVES of RISKY DRIVING



- **To take into consideration risky driving functions, typical of adolescence** (interventions should allow adolescents to find more safe strategies to reach the same goals achieved through risky driving)
- **social functions** of risky driving suggested a **peer group based intervention**

FRIENDS' and PARENTS' ATTITUDE towards risky driving



- **Peer group based intervention**

- To promote **parents' engagement**: to make parents more conscious of their educational role about safe behaviour in traffic.

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**THANK YOU FOR YOUR
ATTENTION**

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