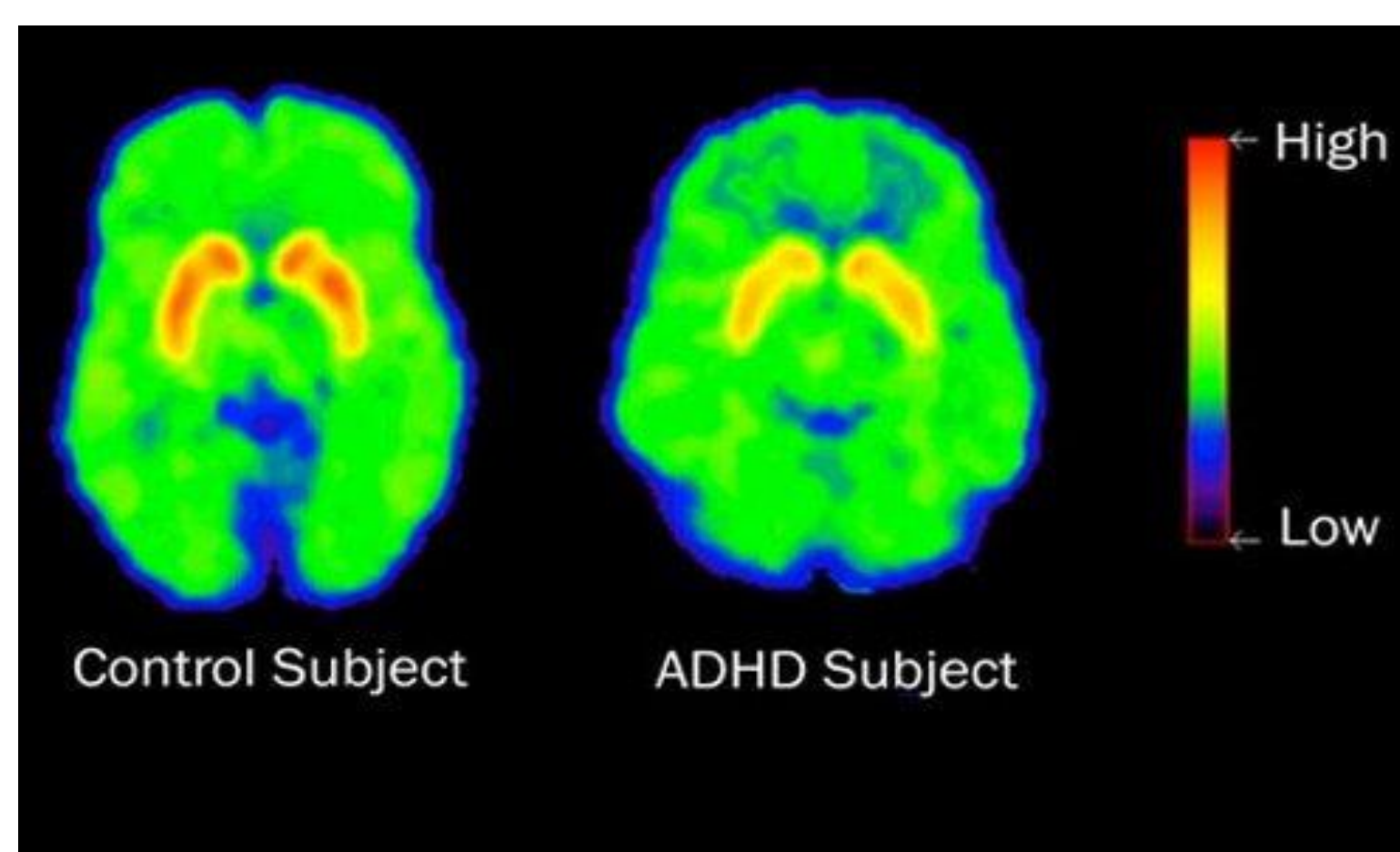


Impact of Attention Deficit Hyperactivity Disorder on Driving among Drivers in Qatar

Wael Alhajyaseen, Chantal Timmermans, Abdrabo Soliman, Tom Brijs, Khaled Bedair, Veerle Ross, Wondwesen Mamo

Problem statement

- ❖ Attention Deficit Hyperactivity Disorder (ADHD) defined in inattention and hyperactivity-impulsivity,
- ❖ ADHD can affect a day-to-day activities of a person, including driving competency
- ❖ Driving is a complex action that demands on perceptual, cognitive, and motor processes.
- ❖ ADHD involves deficiencies that affect those important aspects in driving performance.



levels of dopamine transporters

Source: https://cpb-us-e1.wpmucdn.com/sites.dartmouth.edu/dist/0/2024/files/2009/11/adhd_cmyk.jp

Conclusions

Male drivers

- ❖ Hyperactivity-impulsivity trait predominantly predicts DDBs
- ❖ Inattention brings a significant but minor effect on ordinary violations, errors & lapses.

Female drivers

- ❖ Inattention has a dominating role in comparison to the hyperactivity-impulsivity trait.
- ❖ Aggressive violations are predicted by the inattention trait
- ❖ Aggressive violations are not predicted by the hyperactivity-impulsivity trait
- ❖ It was observed a significant positive relation between the inattention trait with DDBs.

Male-Female Drivers

- ❖ Relationship between inattention trait and aggressive violations is found for female
- ❖ This relationship is not found for the male
- ❖ Co-morbid to ADHD need to be considered for gender related to aggressive violations

Recommendations

- ❖ Develop driving training and education programs
- ❖ Create an inclusion of drivers with a mental diagnosis in driving school

INTRODUCTION



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Objectives

- ❖ To investigate the influence of the hyperactivity-impulsivity trait on Deviant Driving Behaviors (DDB)
- ❖ To examine the effect of the inattention trait on DDBs
- ❖ To determine whether these effects are similar for male drivers in comparison to female drivers.

CONCLUSION

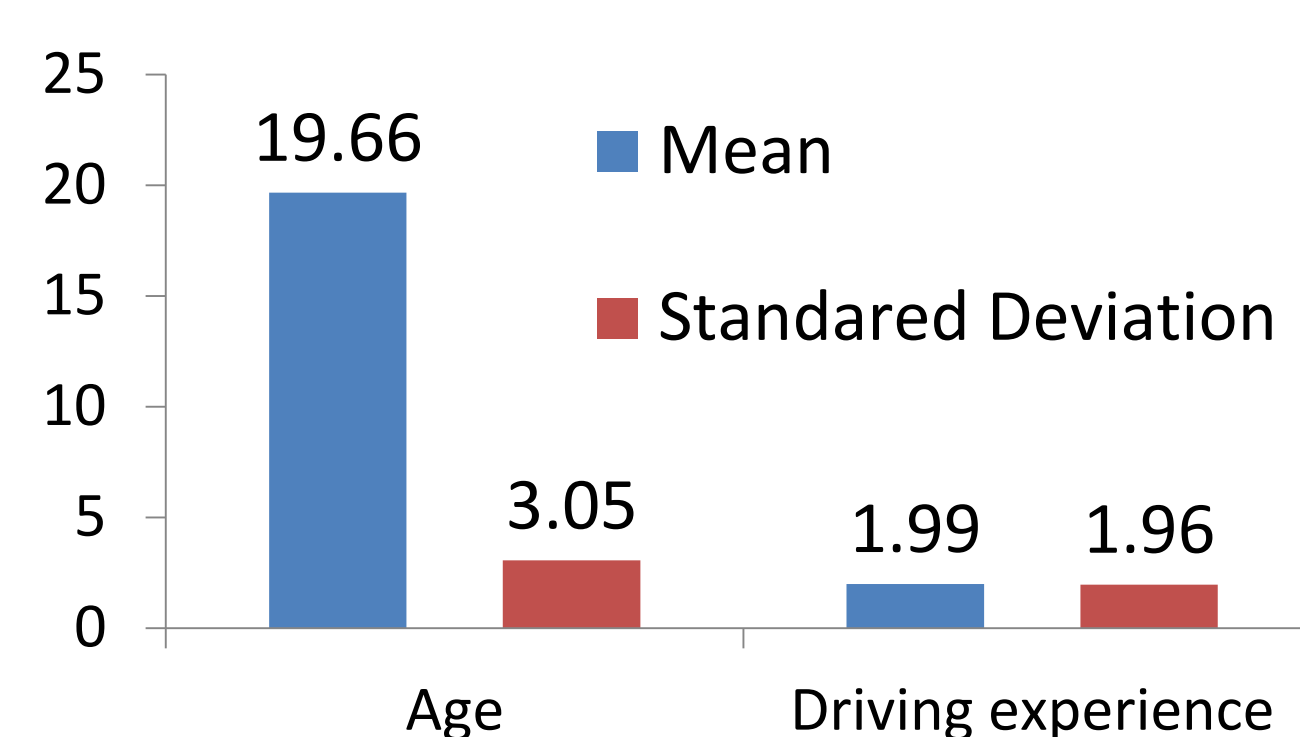
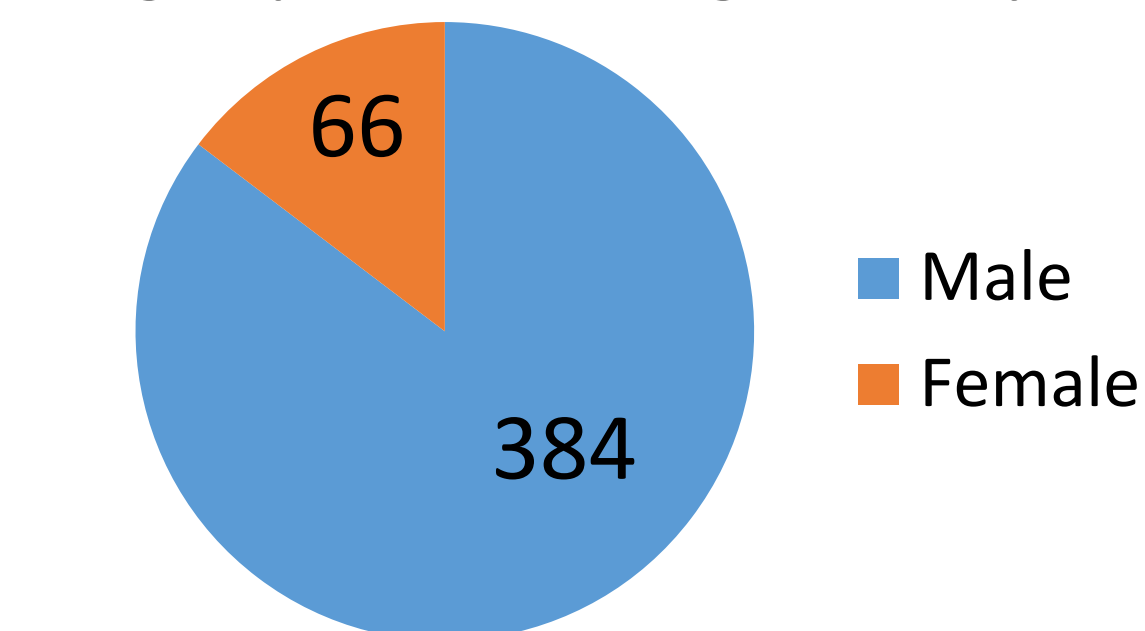
METHODOLOGY

Data Collection Tool

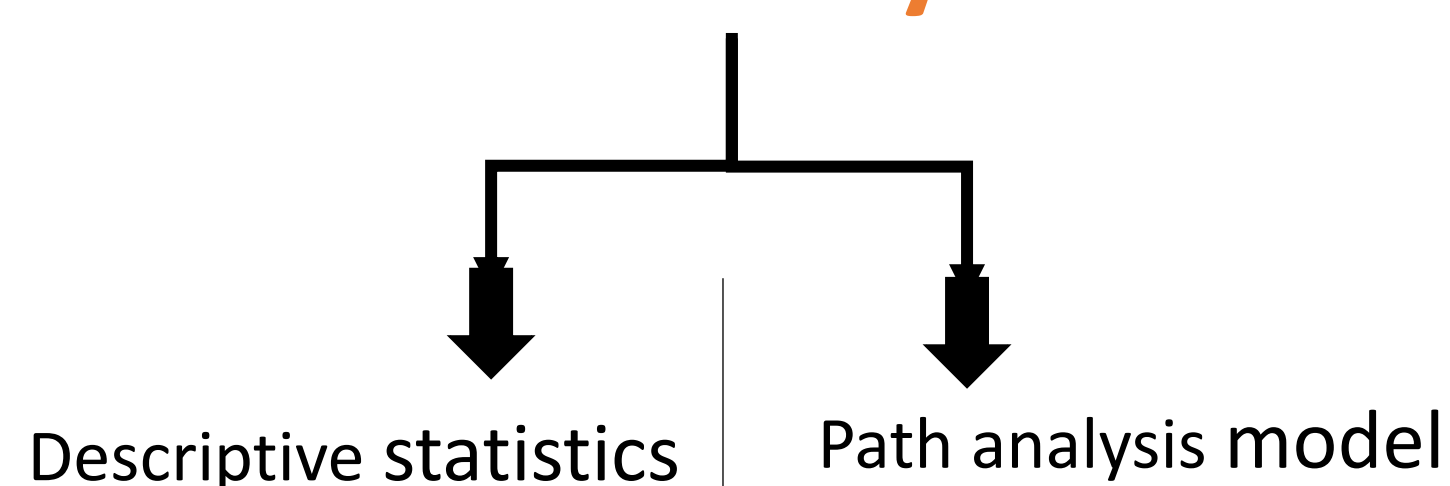
- 1. The adult ADHD self-report scale (ASRS-V1.1)**
 - ❖ 5 point scale: never (0) to very often (4)
 - ❖ 18 self-administered questions
 - ❖ Measure inattention & hyperactivity-impulsivity
- 2. The Driver Behaviour Questionnaire (DBQ)**
 - ❖ 6 points scale: never (1) to nearly all the time (6).
 - ❖ 27 items to measures DDBs
 - ❖ DDBs include errors, ordinary violations, aggressive violations & lapses
 - ❖ 8 items for each of DDBs except aggressive violations
 - ❖ Three items to measure aggressive violations

Participants

- ❖ 450 drivers
- ❖ Age range 18 - 30 years old
- ❖ Driving experience range 1 -13 years

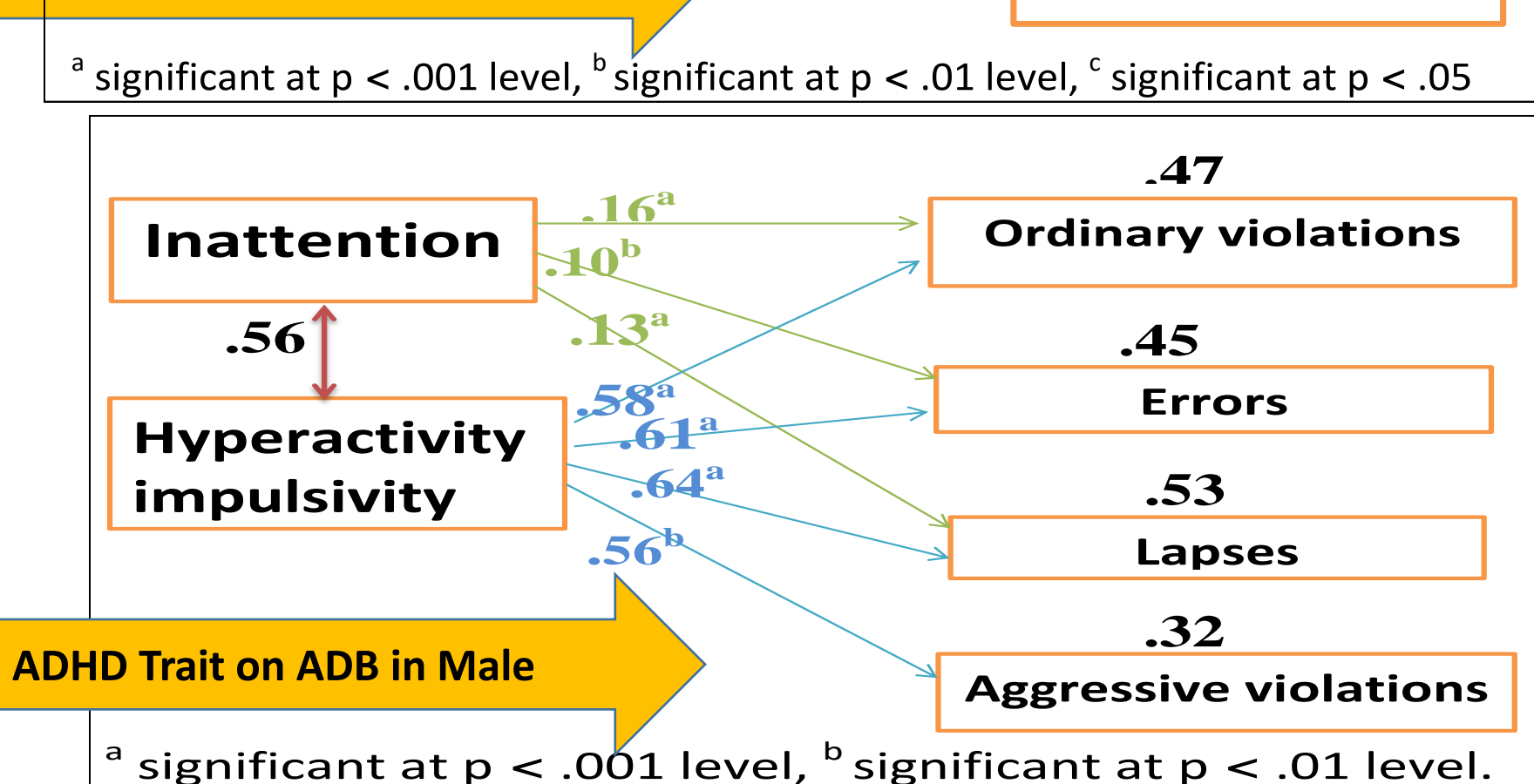
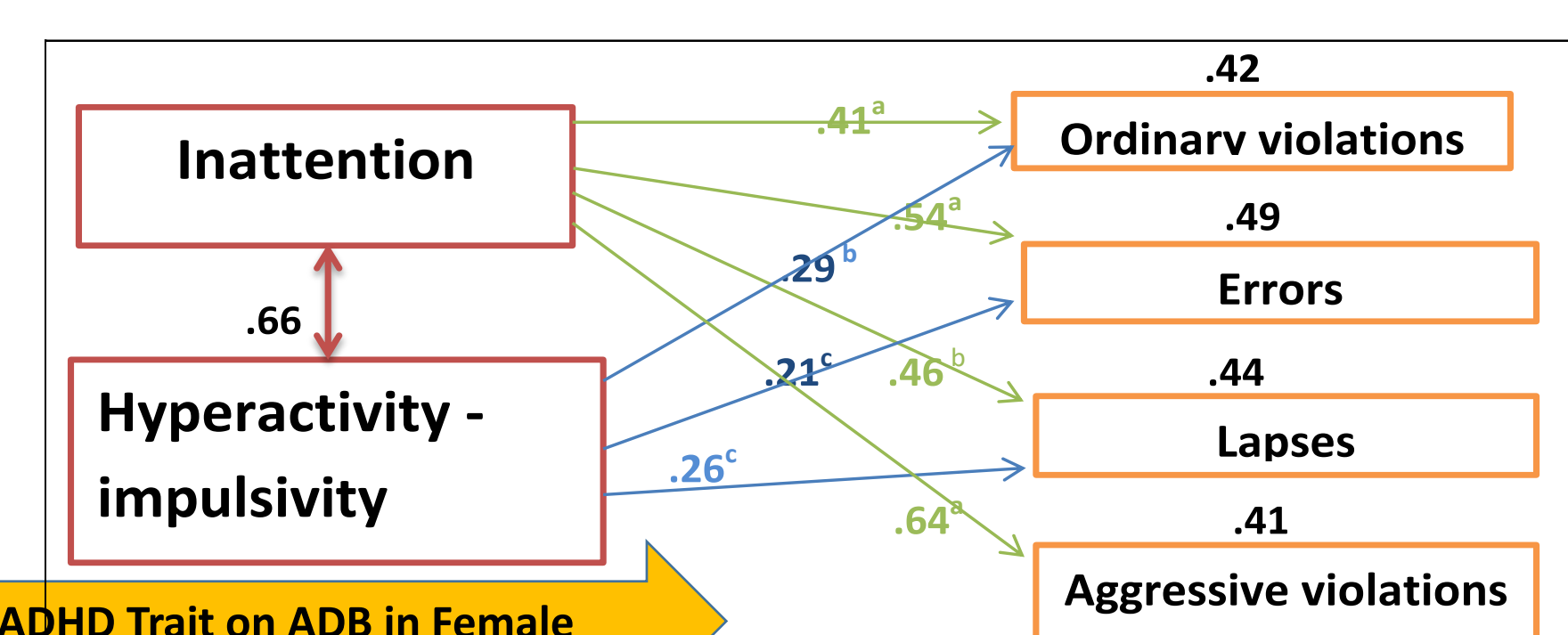
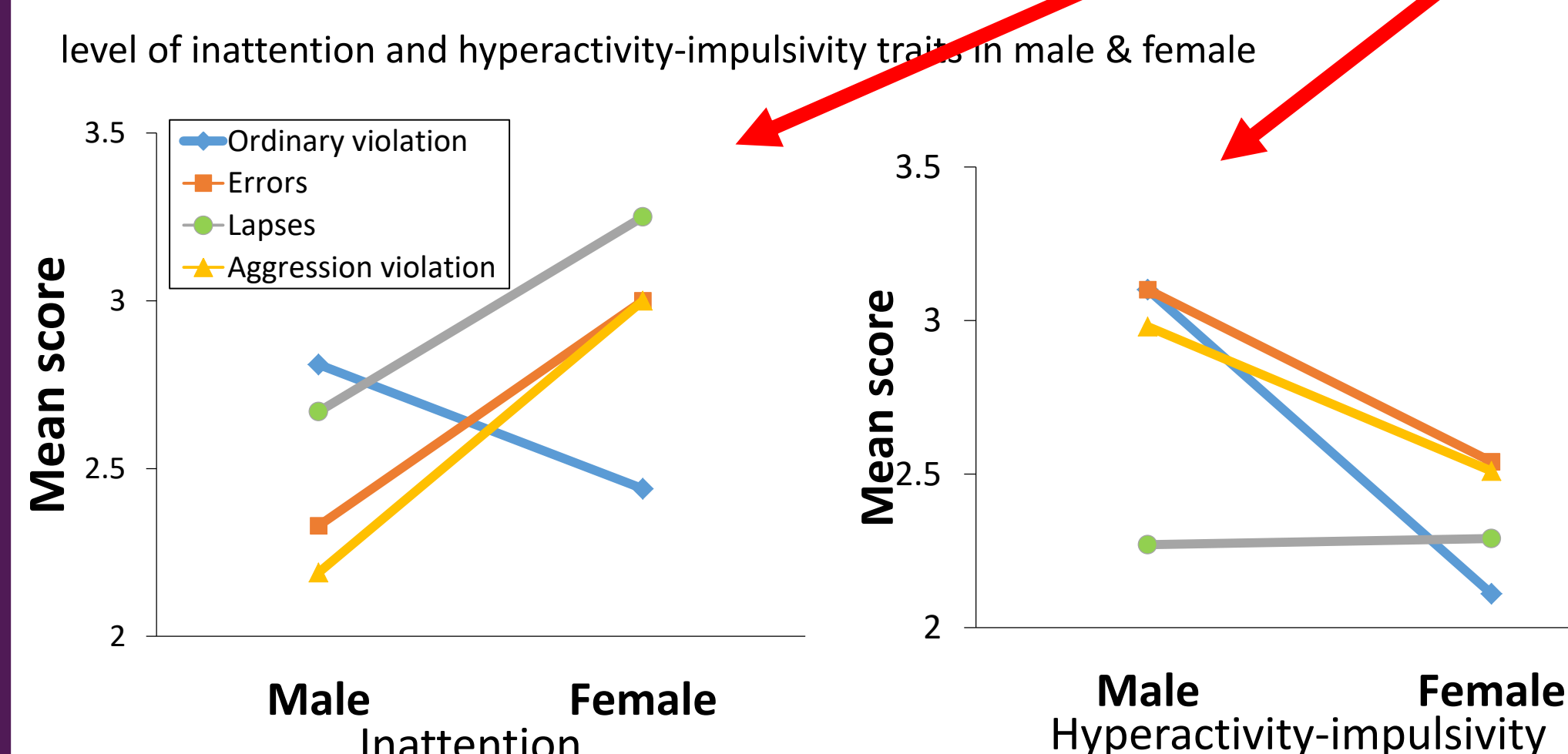
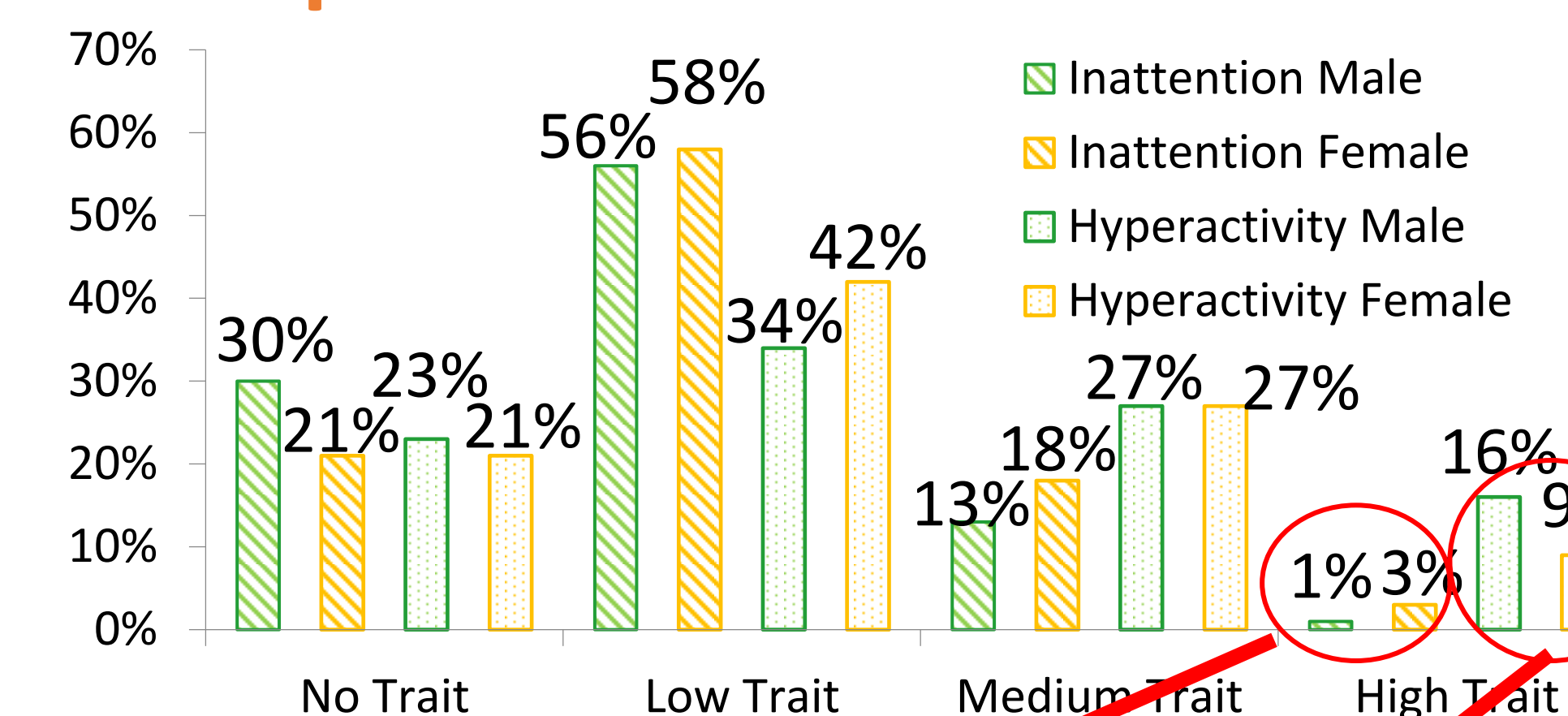


Statistical analysis



Mean & Standard Deviation scores for age & driving experience of participants

Descriptive results



RESULTS