

The subjective perception of driving ability of patients with Mild Cognitive Impairment (MCI) and mild Alzheimer's Disease Dementia (AD)

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** This study is part of the PhD project with title " Evaluation of driving behavior of patients with MCI, Dementia or Parkinson's Disease: Diagnostic and Prognostic Markers", funded and supported by Onassis Foundation*



Research Project

1. Driving Profile Questionnaires
2. General Medical and Neurological assessment
3. Neuropsychological tests
4. Driving Simulation

The image displays the branding and funding information for the research project. At the top, the word "distrACT" is written in a stylized font, with "distr" in blue and "ACT" in white on a dark blue background. Below it, "driver BRAIN" is written in a similar style, with "driver" in white on a dark blue background and "BRAIN" in blue. The background of the top section features a faint illustration of a person's head and shoulders, with a brain highlighted in red. Below the main text, there are logos for the Department of Transportation Planning and Engineering, NTUA, and the Department of Neurology, Psychiatry and Social Medicine, UoA, along with the Department of Psychology, UoA. At the bottom, there are logos for the European Union, the Operational Programme Education and Lifelong Learning, and the NSRF 2007-2013. The text "European Union European Social Fund" and "Co-financed by Greece and the European Union" is also present.

Department of Transportation Planning and Engineering, NTUA

Department of Neurology, Psychiatry and Social Medicine, UoA
Department of Psychology, UoA

European Union
European Social Fund

OPERATIONAL PROGRAMME
EDUCATION AND LIFELONG LEARNING
Investing in knowledge society
MINISTRY OF EDUCATION, LIFELONG LEARNING AND RELIGIOUS AFFAIRS
MANAGING AUTHORITY

NSRF
2007-2013
programmes for development
EUROPEAN SOCIAL FUND

Co-financed by Greece and the European Union



Demographics

Demographics	Diagnosis		
	<i>Control Group</i>	<i>MCI</i>	<i>Mild AD</i>
<i>N</i>	35	40	15
<i>Age</i>	60 ±8	67 ±10	73 ±6
<i>Gender F/M</i>	14/21	13/27	0/15
<i>Education years</i>	15 ±3	13 ±4	11 ±5
<i>Driving years</i>	35 ±7	41 ±10	45 ±7



Driving Profile Questionnaires

A) Driving Skills

B) Demanding Driving & C) Avoid Demanding Driving (Vs 5 years ago)

To drive long distances

To quickly realize the hazards on the road

To drive in slippery roads

To change lanes comfortably

To take *4-point scale*

1: weak....4:strong

To remain calm in stressful situations when driving

To control your vehicle

To leave enough distance from the front car

To adjust the speed to suit the road conditions

Overtaking, if necessary

To give priority when needed

To obey speed limits

To park your vehicle in reverse gear

To be mindful of the other vehicles in the road

To drive quickly, if necessary

To drive at night

To be mindful at pedestrians and bicyclists

Low traffic - Quiet road

City with high traffic

Highways

Motorway

3-point scale

1: significantly worse....3: no difference

4-point scale

1: always avoid....4: never avoid

Lane change

Long distances (>2hr)

Left turns

Driving while being tired

Driving alone

Conversation with passenger

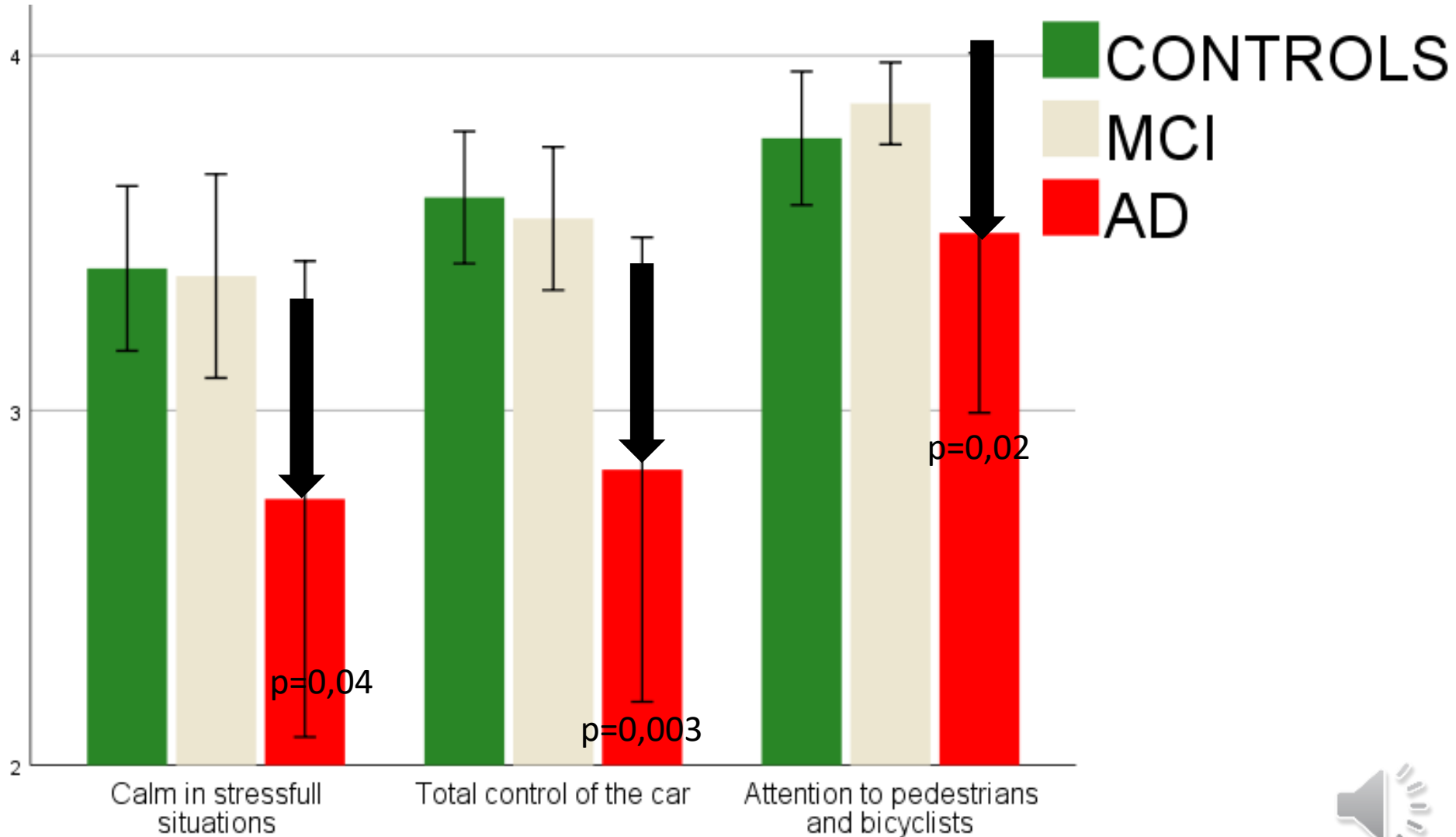
Conversation by mobile phone

Intersections without traffic lights

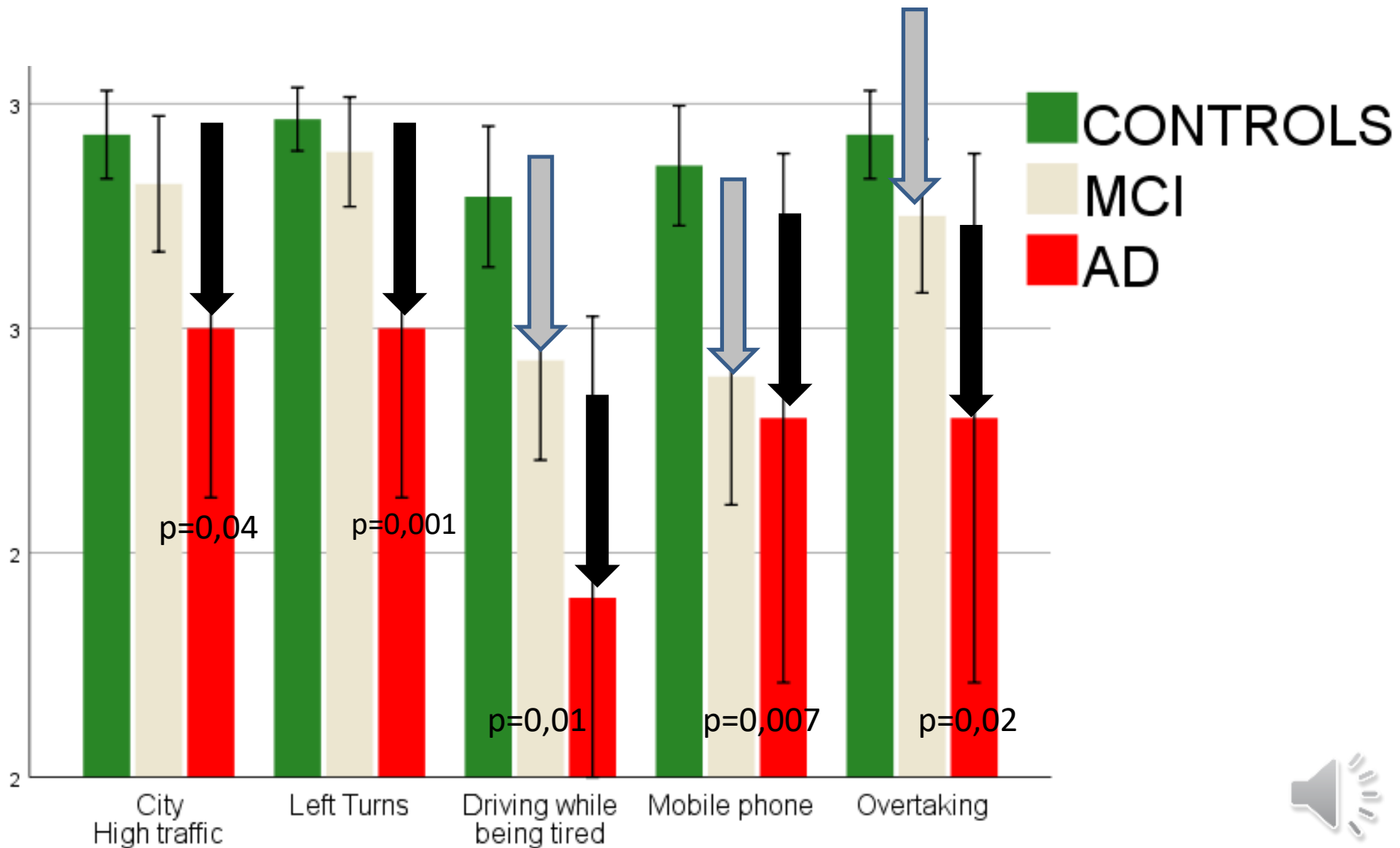
Overtaking on rural roads with two lanes



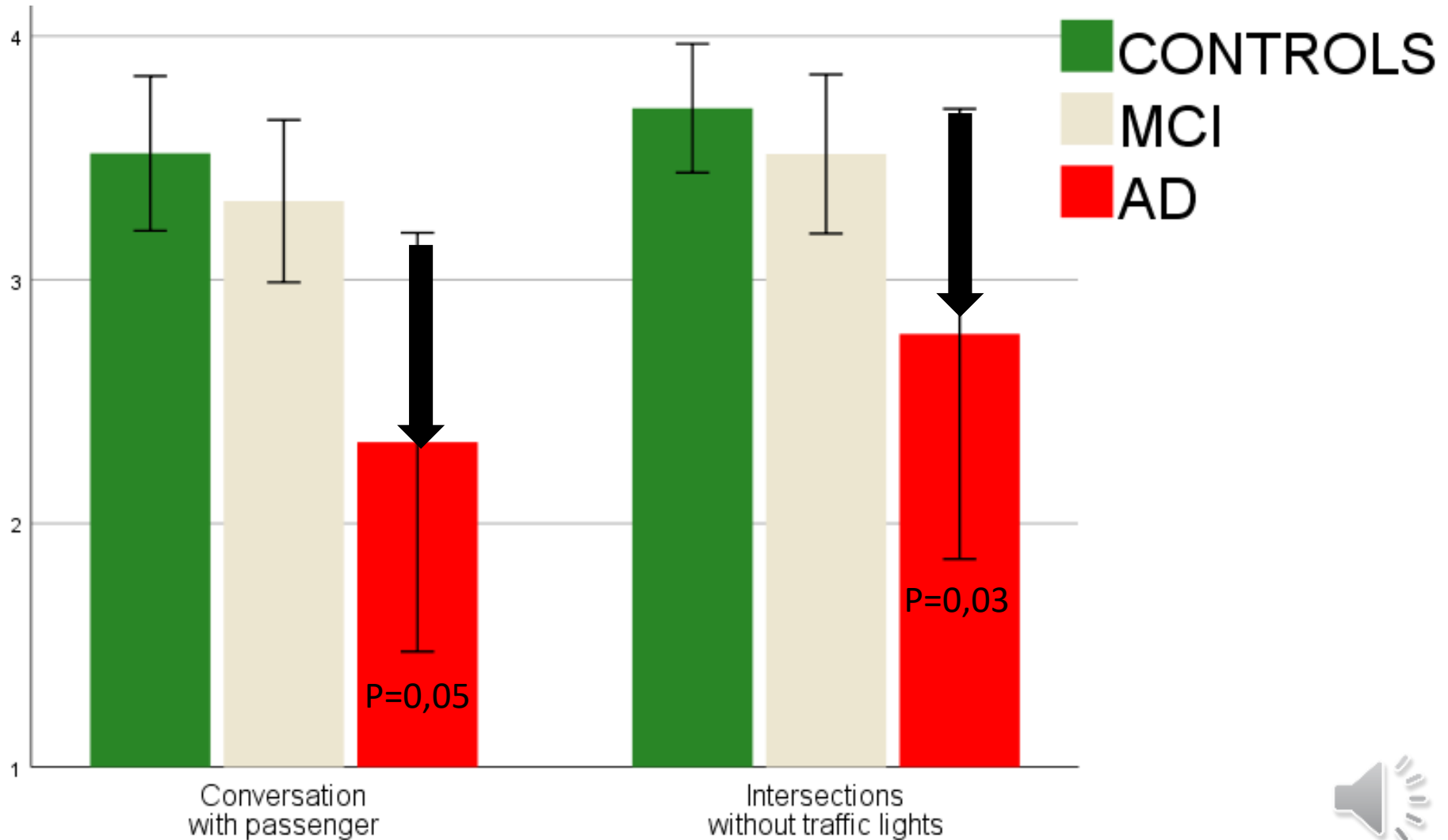
A) Driving Skills



B) Demanding Driving (Vs 5 years ago)



C) Avoid Demanding Driving (Vs 5 years ago)



Conclusions

- Both **MCI and AD** patients recognize difficulties **under demanding situations**

BUT

- Only **AD** patients acknowledge modifying their driving habits to **avoid demanding situations**
- Utility of targeted questionnaires to assess fitness to drive

