

Presentation at the 18th ICTCT workshop in Helsinki, Finland 27th and 28th October 2005

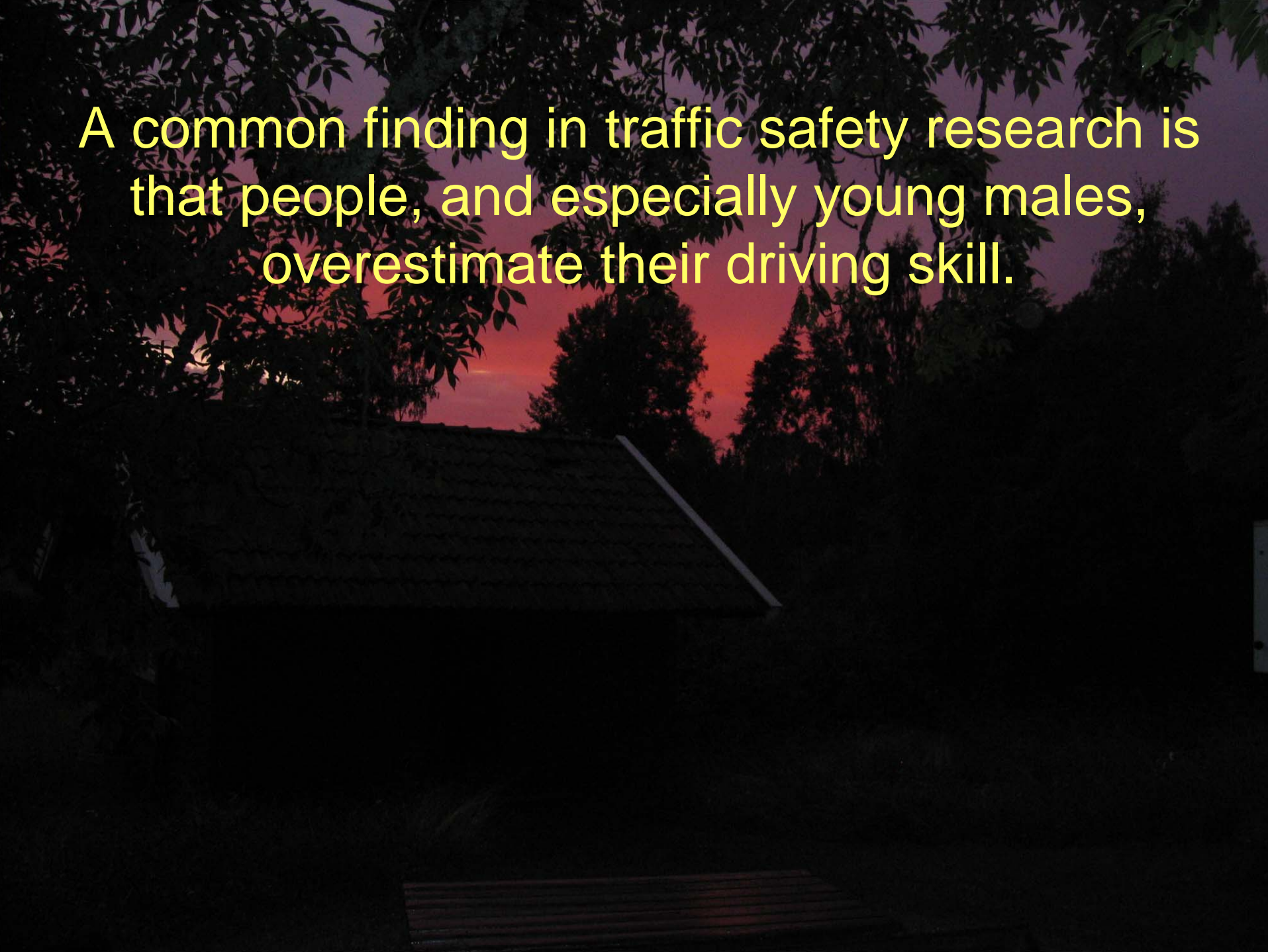


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Perceptions of drivers' errors and violations and easiness of error detection

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A common finding in traffic safety research is that people, and especially young males, overestimate their driving skill.





Another finding can be summarised as:

”It is the others that violate the rules NOT me”.”



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”It is the others that violate the rules NOT me.”

Some of our results:

Field study on 50 km/h roads (Sweden):

N=532

Observed speed

Mean speed on the road **52 km/h**

Percentage faster than 60km/h: **16%**

Interviews

Mean of self reported speed **51 km/h**

Estimated proportion of others faster than 60 km/h **53%**

Estimated mean speed on the road: **61 km/h**

(Åberg, Larsen, Glad & Beilinson, 1997)

Field study on 50 km/h roads (Denmark):

N=409

Observed speed

Mean speed on the road **53 km/h**

Percentage faster than 60km/h: **23%**

Interviews

Mean of self reported speed **53 km/h**

Estimated proportion of others faster than 60 km/h **55%**

Estimated mean speed on the road: **64 km/h**

(Åberg, Larsen, Glad & Beilinson, 1997)

Field study on 90 km/h roads (Sweden):

N=684

Observed speed

Mean speed on the road

91 km/h

Percentage faster than 100km/h:

23%

Interviews

Mean of self reported speed

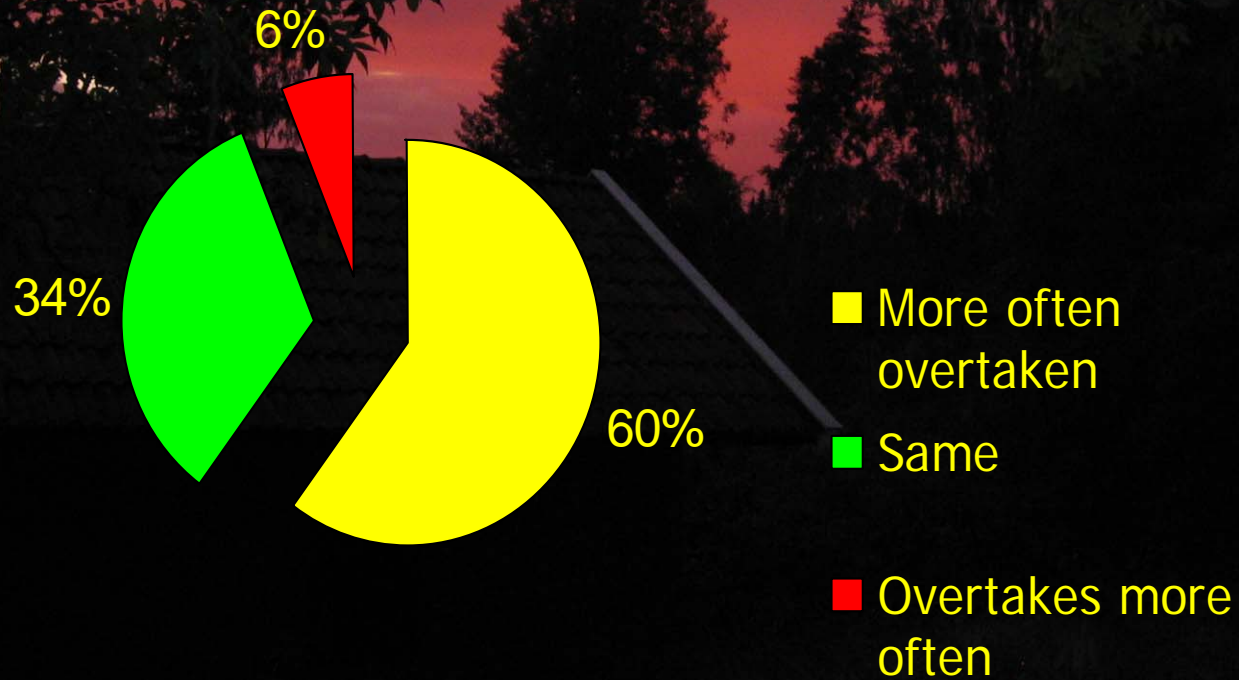
90 km/h

Estimated proportion of others faster than 60 km/h

57%

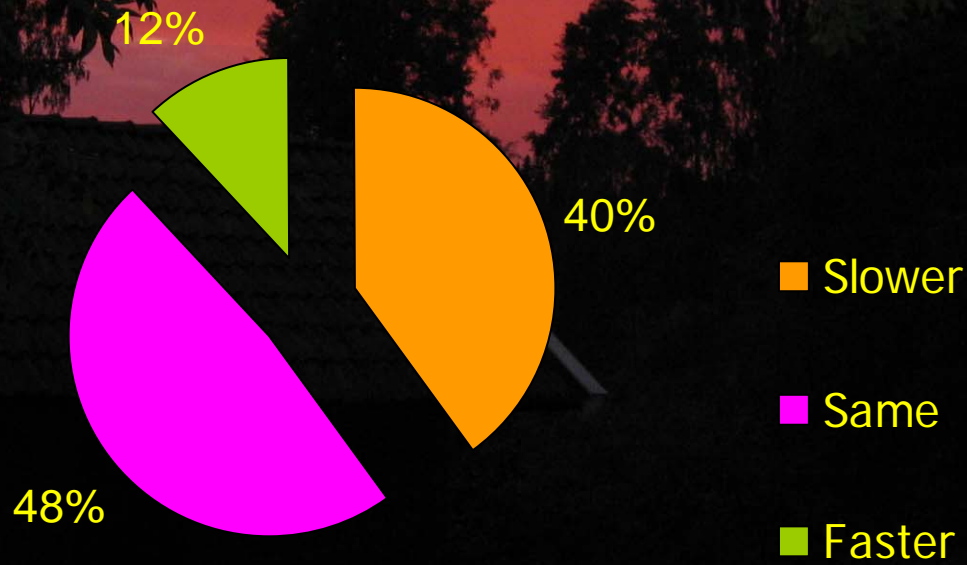
(Haglund & Åberg, 2001)

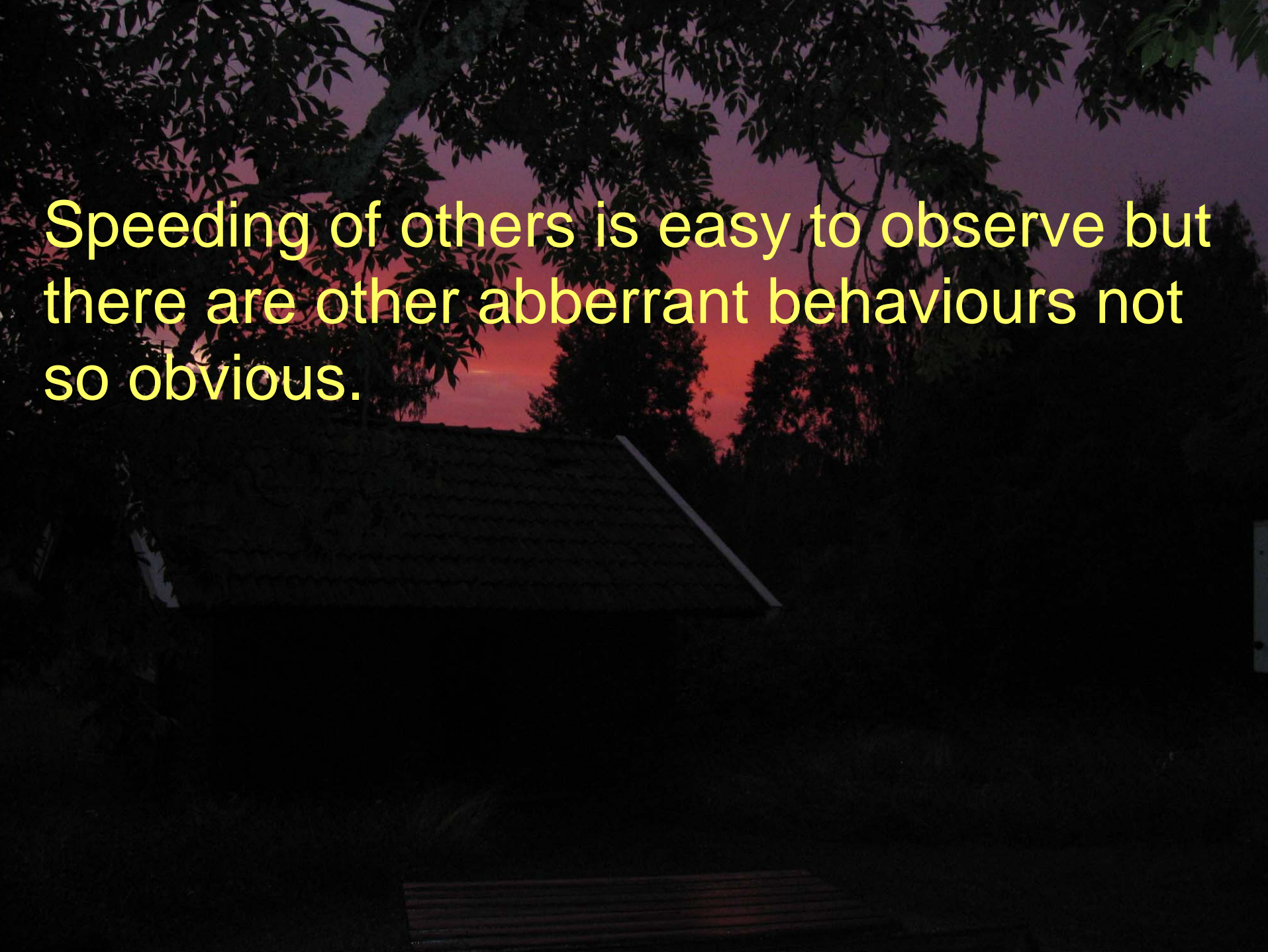
Drivers' views of overtakings (N=530)



(Haglund & Åberg, 2001)

Drivers perception of own speed compared to others (N=680)



A dark, silhouetted scene of a house and trees at sunset or sunrise, with a bright orange and red sky. The text is overlaid in yellow.

Speeding of others is easy to observe but there are other aberrant behaviours not so obvious.

Will visibility decrease biased estimates of others' behaviour?

The background image is a dark, low-visibility scene at dusk or dawn. It features a house with a dark roof and a chimney, surrounded by trees and foliage. The sky is a deep red and purple, suggesting a sunset or sunrise. The overall atmosphere is dim and obscured, which directly relates to the text's question about visibility and its effect on behavior estimation.

Aberrant driver behaviour DBQ-SWE (Åberg & Rimmö, 1998):

32 items; N=2124;
29% females and 71% males;
Mean age 42 years

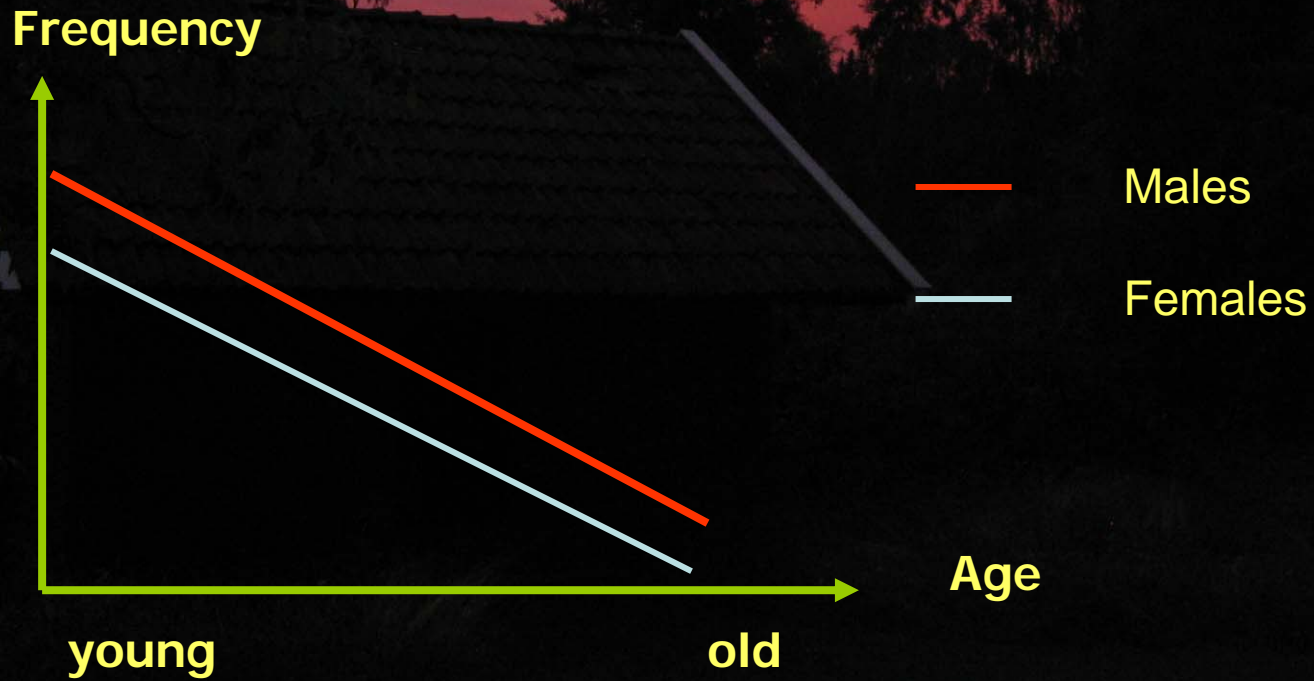
Violations

Mistakes

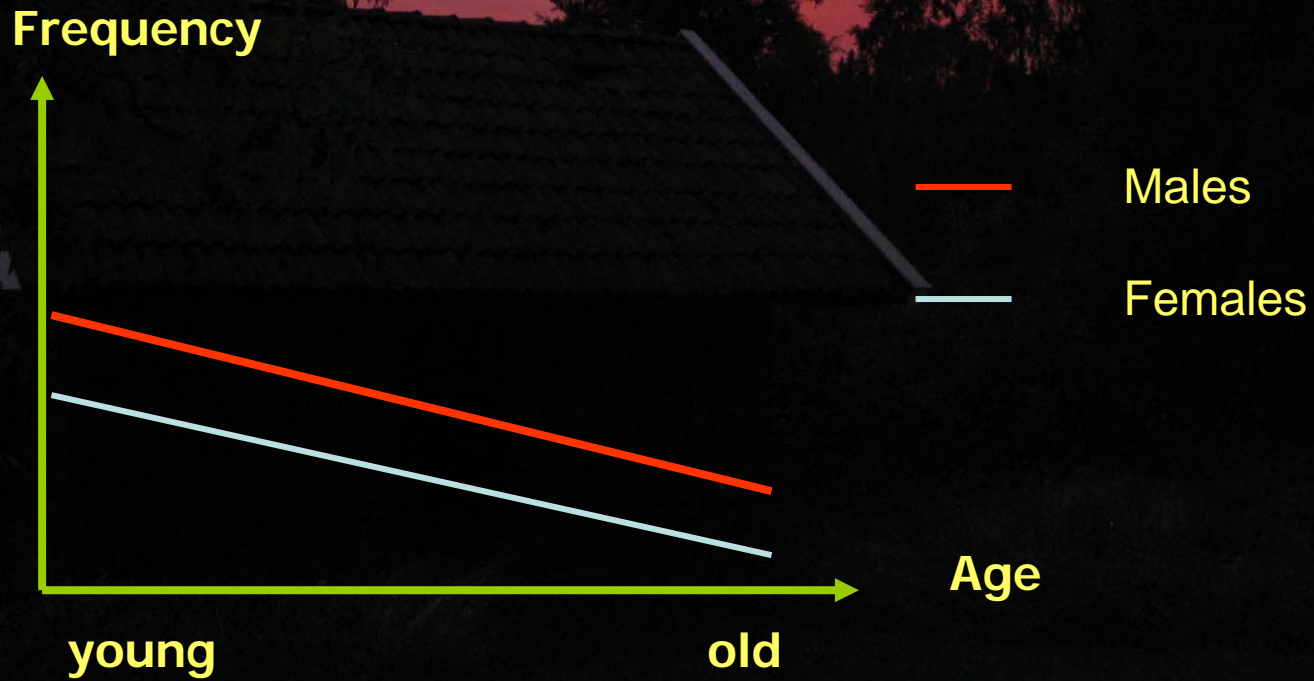
Inattention

Inexperience

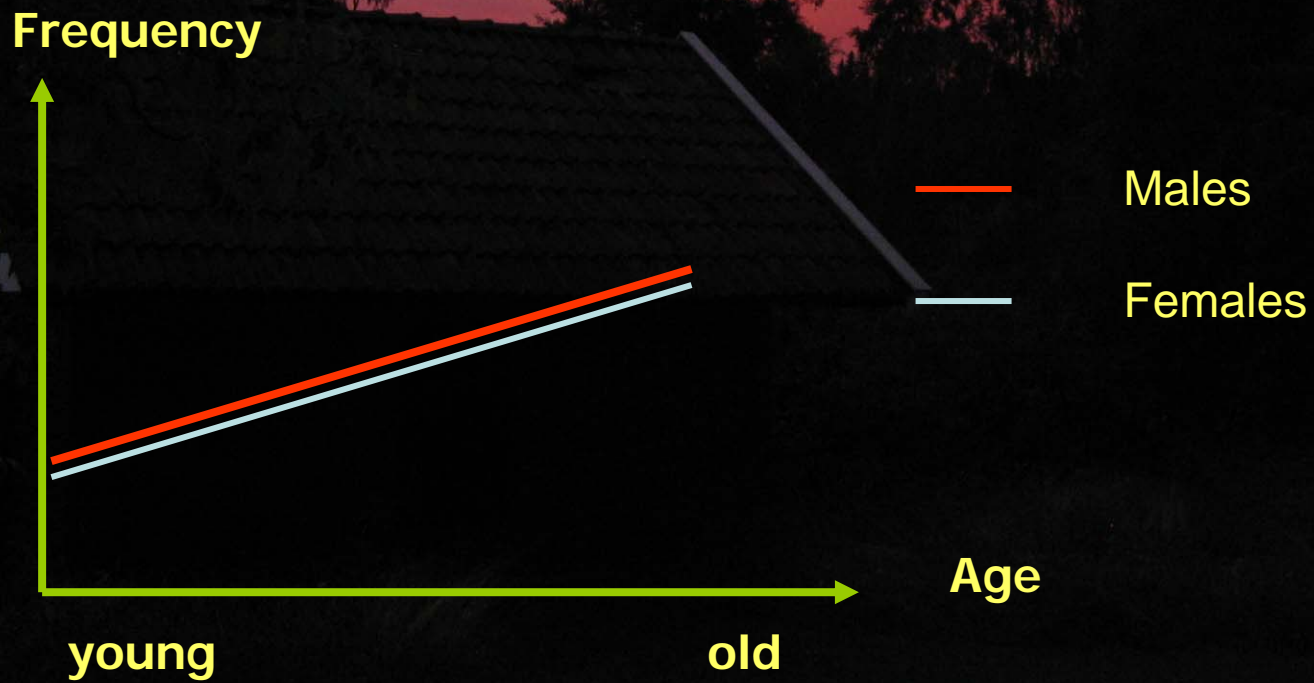
Violations



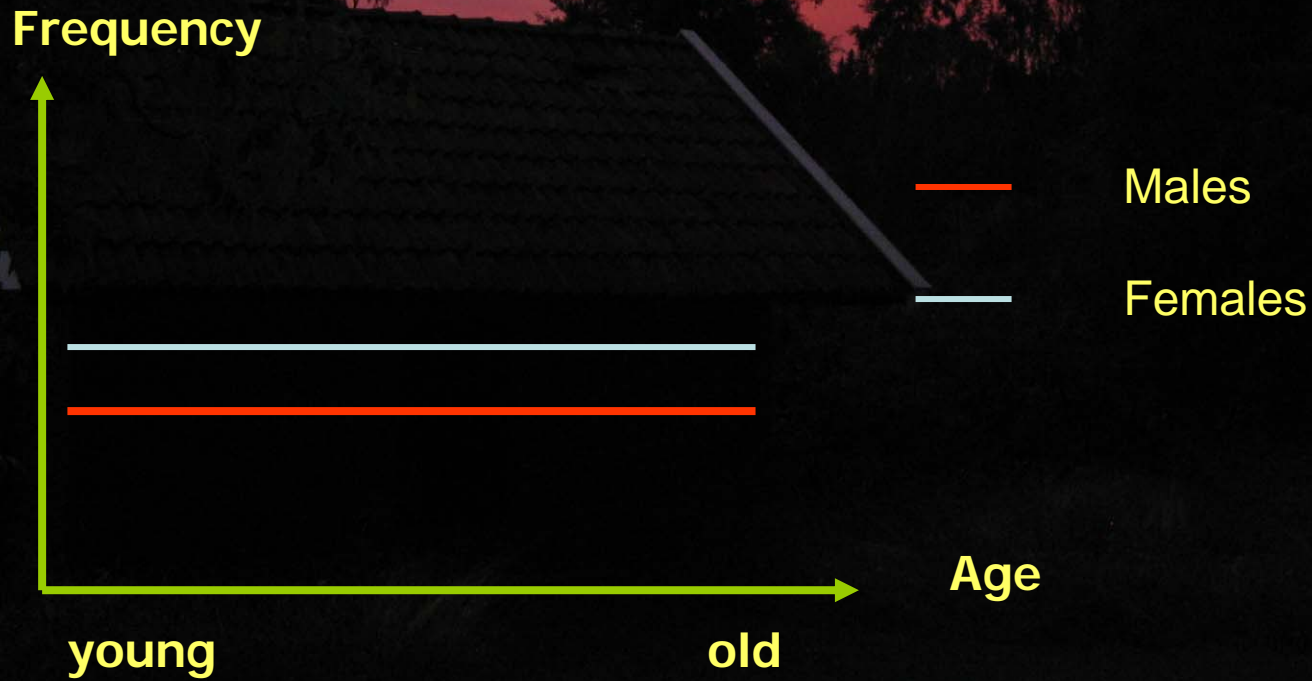
Mistakes



Inattention



Inexperience



In a study in Dalarna, Sweden subjects estimated other drivers behaviour on the DBQ-questions.

” How often during the two last years have you perceived other drivers do the following?”

N=127;

61% females and 39% males;

Mean age 36 years

(Afram & Nilsson, 2005)

Results: Other drivers behaviour on
DBQ-SWE questions.

Contrary to Self Reports

- There were no differences in answers between Females and Males
- There were no effects of age

Comparisons on 4 x 8 items between:

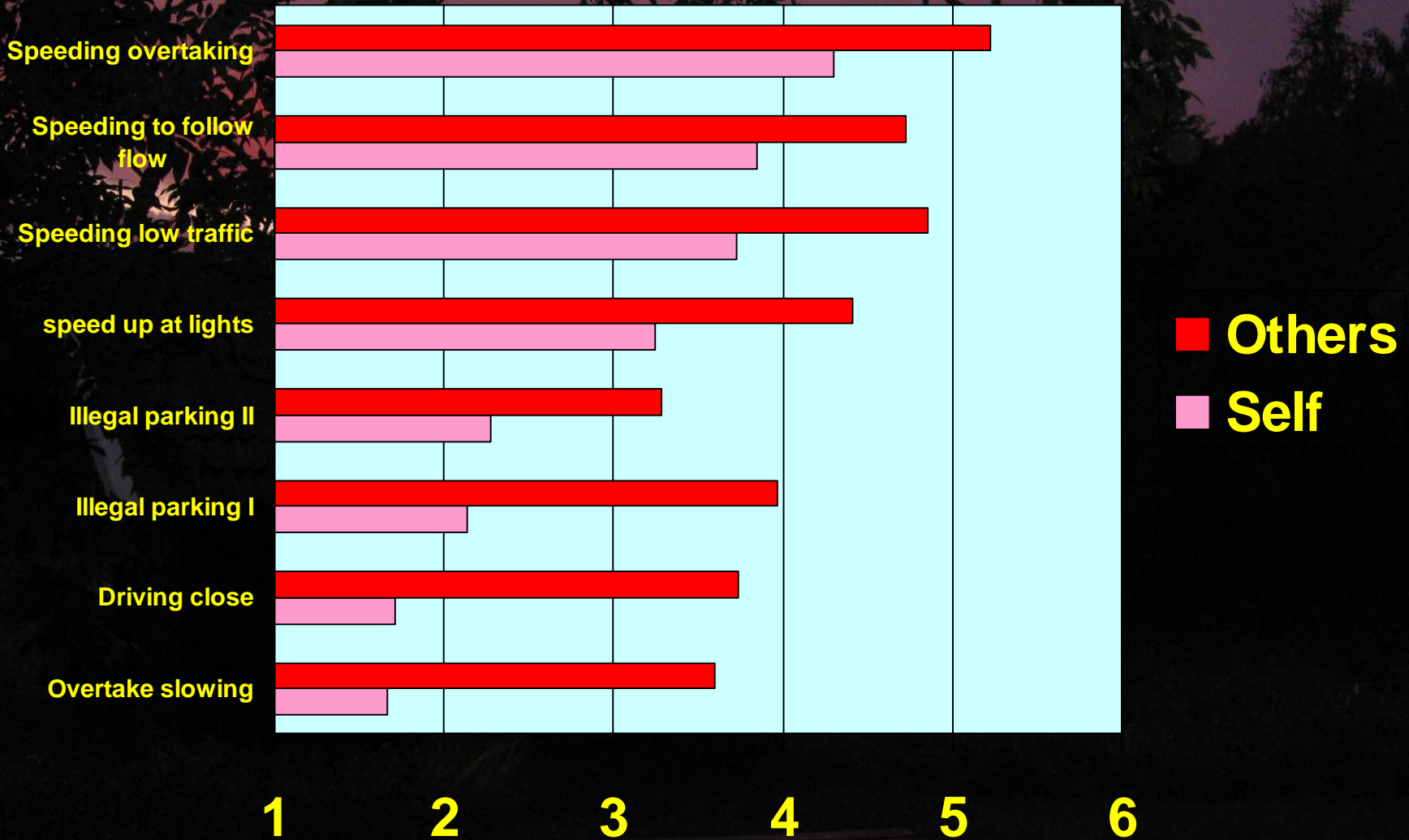
Self reports (N=2124)

and

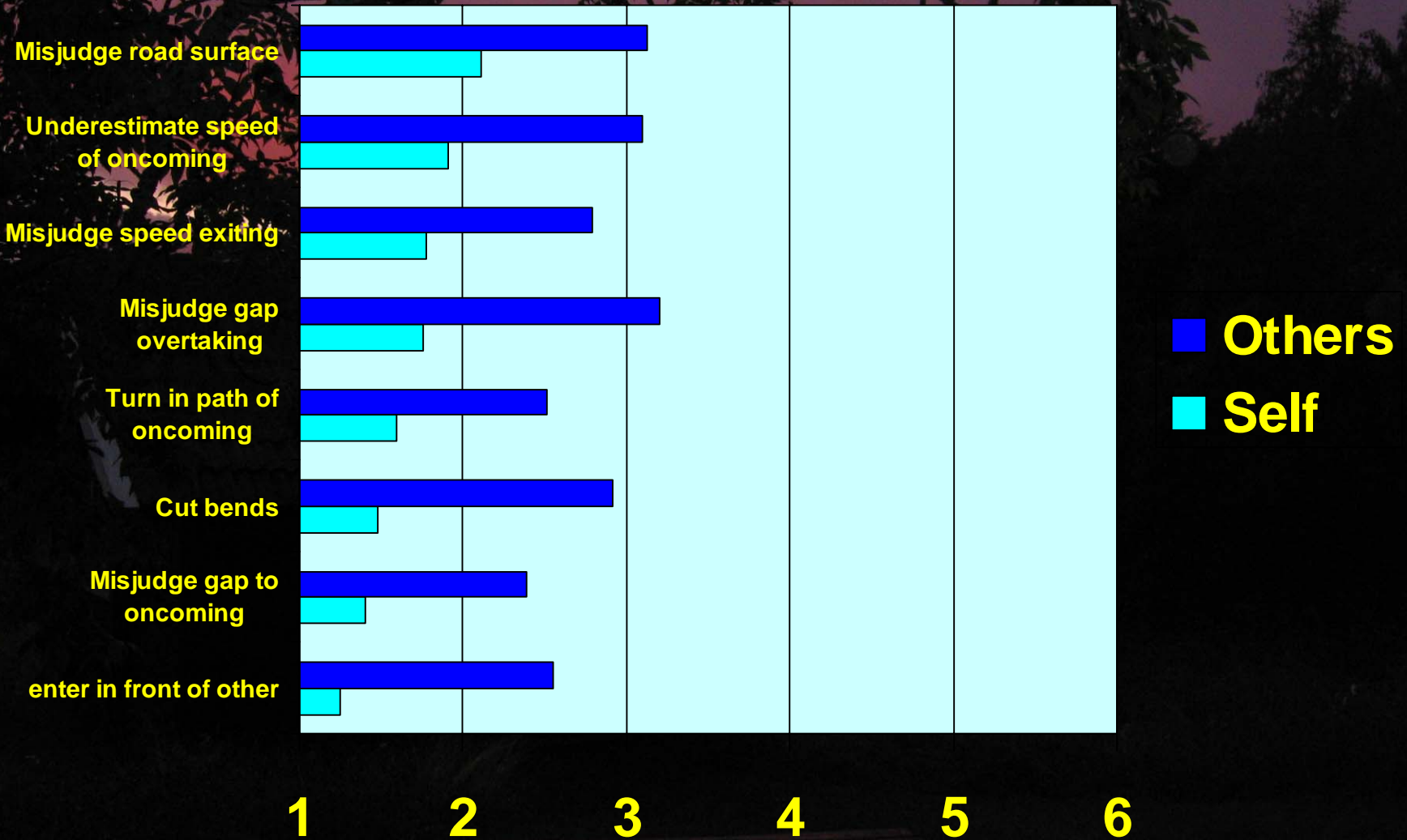
Estimates of others behaviour (N=127)

1 = never; 6 = always

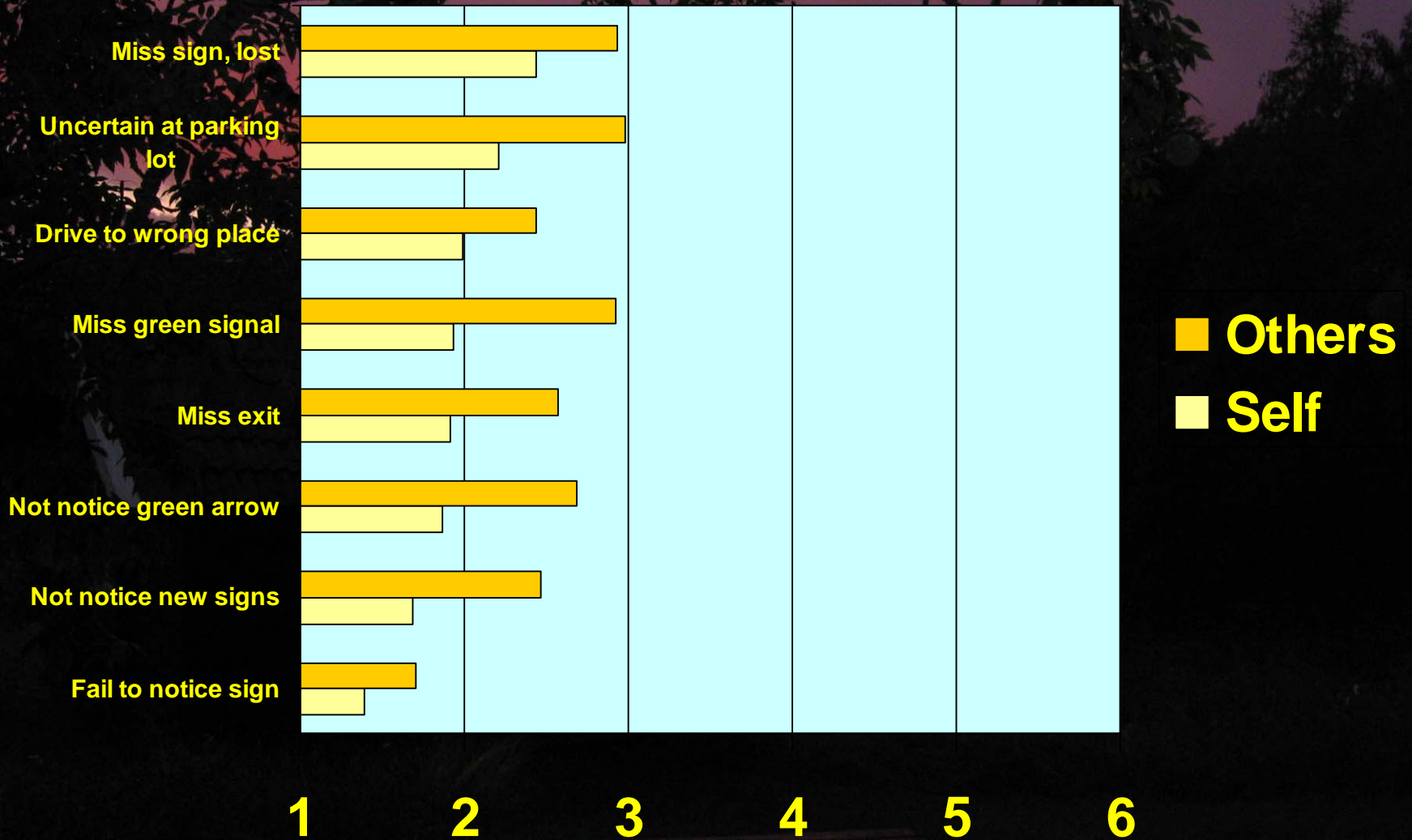
Violations, own and others



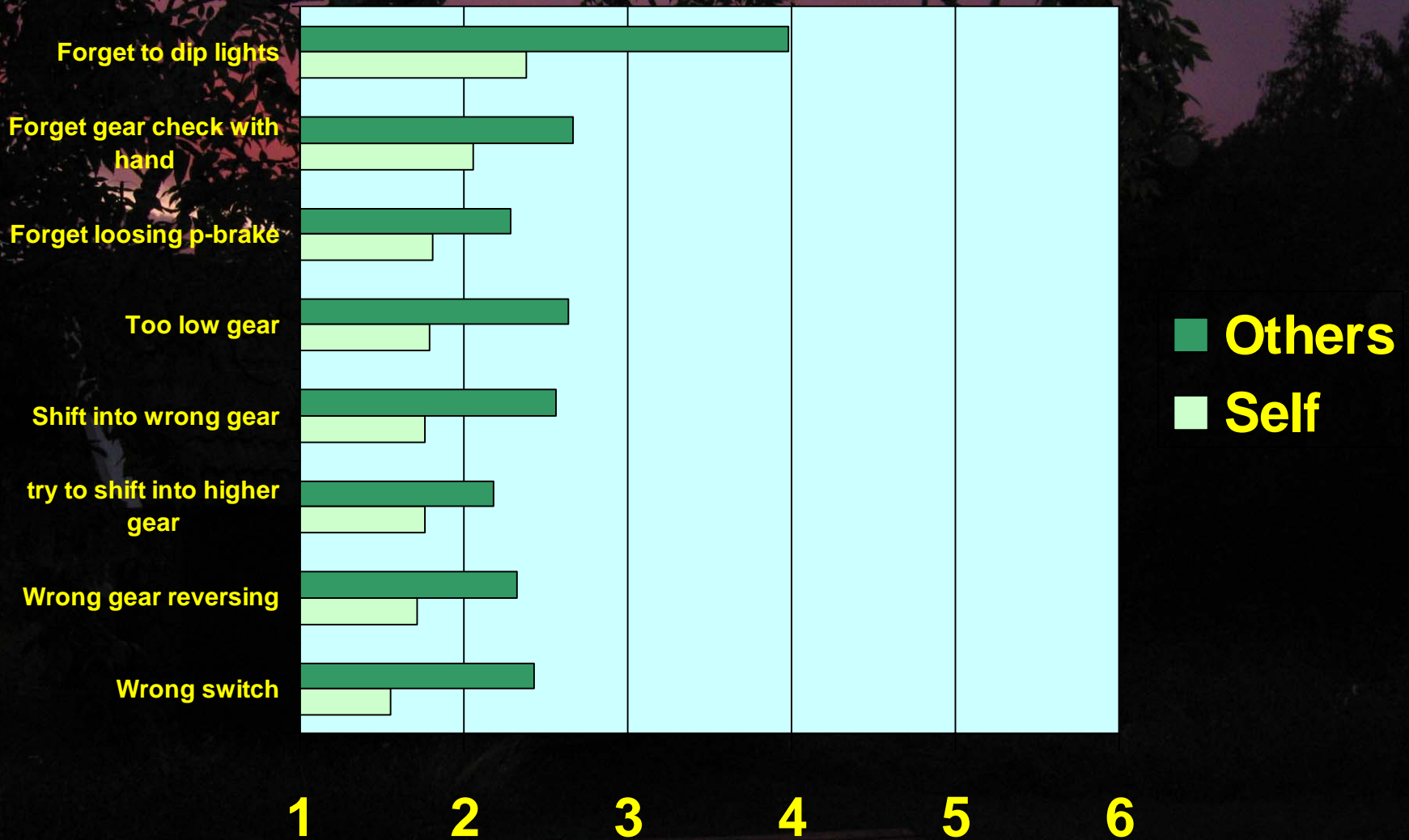
Mistakes, own and others



Inattention, own and others

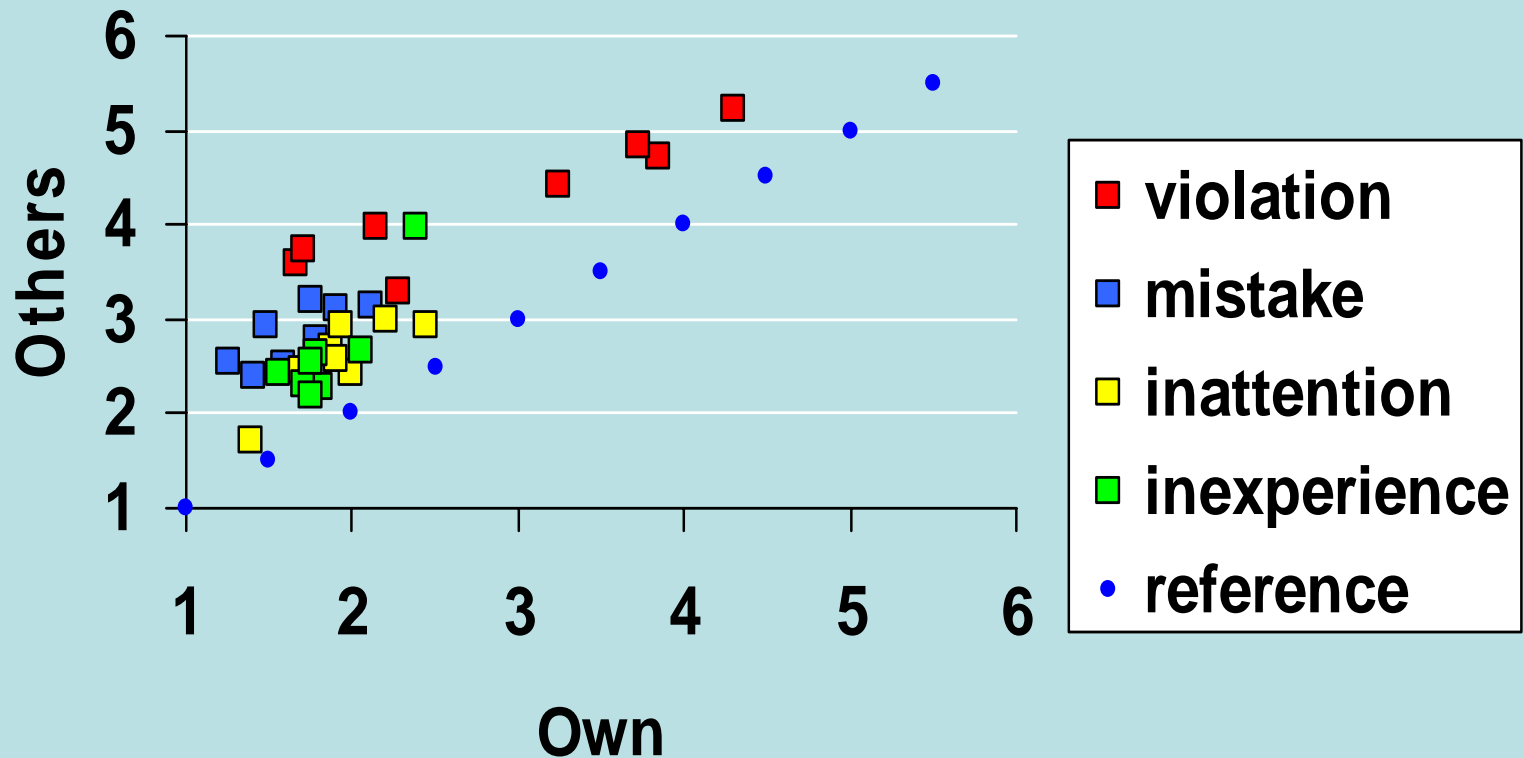


Inexperience, own and others



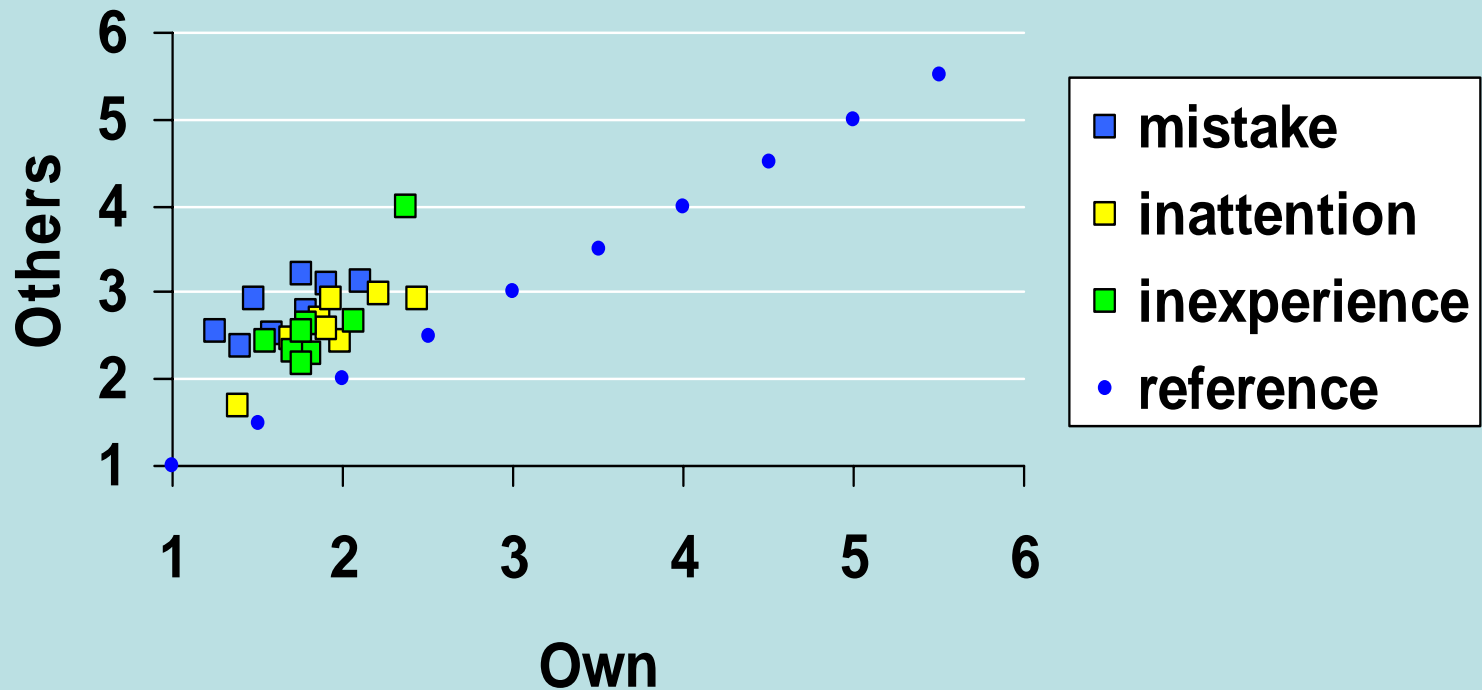
Aberrant driver behaviour, own and others (32 items)

$r(\text{Own} \times \text{Others}) = .86$



Aberrant driver behaviour, own and others (24 items - viol. excl.)

$r(\text{Own} \times \text{Others}) = .62$



"Rough" estimates of visibility

	Visibility		
	High	Medium	Low
Violations	8	-	-
Mistakes	4	3	1
Inattention	-	4	4
Inexperience	1	-	7



Examples:

High visibility:

Deliberately speed.....

Illegal parking

Forget lights on full beam

Medium visibility:

Fail to notice green light

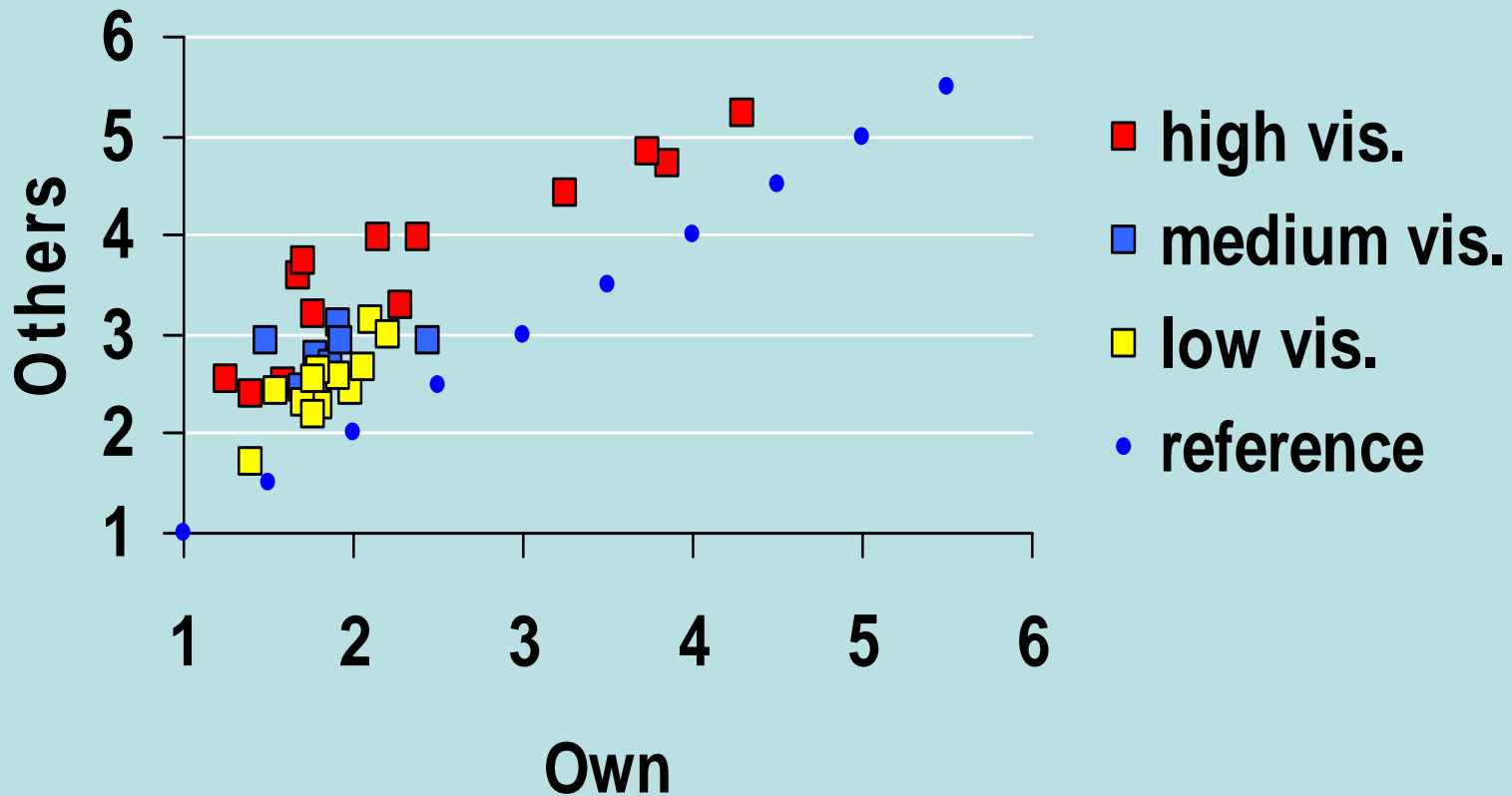
Misjudge speed at exit

Low visibility:

Forget parking brake...

Miss exit on motorway..

Aberrant driver behaviour, own and others - visibility of behaviour





Conclusions

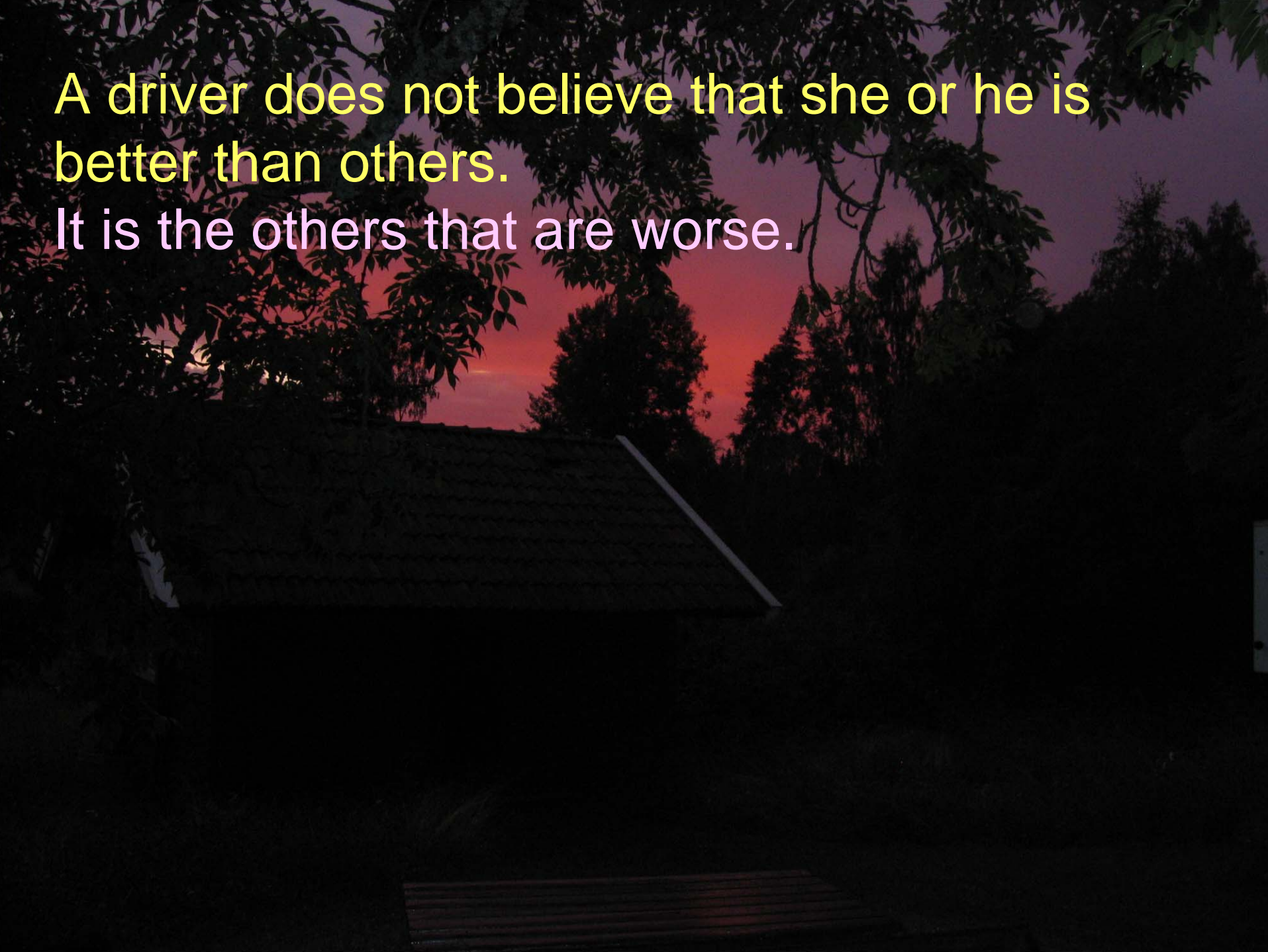
- Drivers perceptions of others aberrant behaviour are biased
- Visibility of behaviours might have some effects on perceived behaviour, but seems to increase bias

A photograph of a sunset scene. The sky is a mix of purple, pink, and orange. In the foreground, there are dark silhouettes of trees and branches. In the background, a building with a dark roof is visible. The overall lighting is dim, with the primary light source being the setting sun.

So, according to our results:

Drivers seem to think that they themselves are normal while others commit Violations, makes Mistakes, are Inattentive, and act Inexperienced more often



A photograph of a sunset or sunrise. The sky is a mix of deep purple and bright orange. In the foreground, the dark silhouette of a house's roof and surrounding trees is visible. The text is overlaid on the upper left portion of the image.

A driver does not believe that she or he is better than others.
It is the others that are worse.



A driver does not believe that she or he is better than others.

It is the others that are worse.

From experience one learns that behaviour is safe.

Unsafe behaviours must be problems of others



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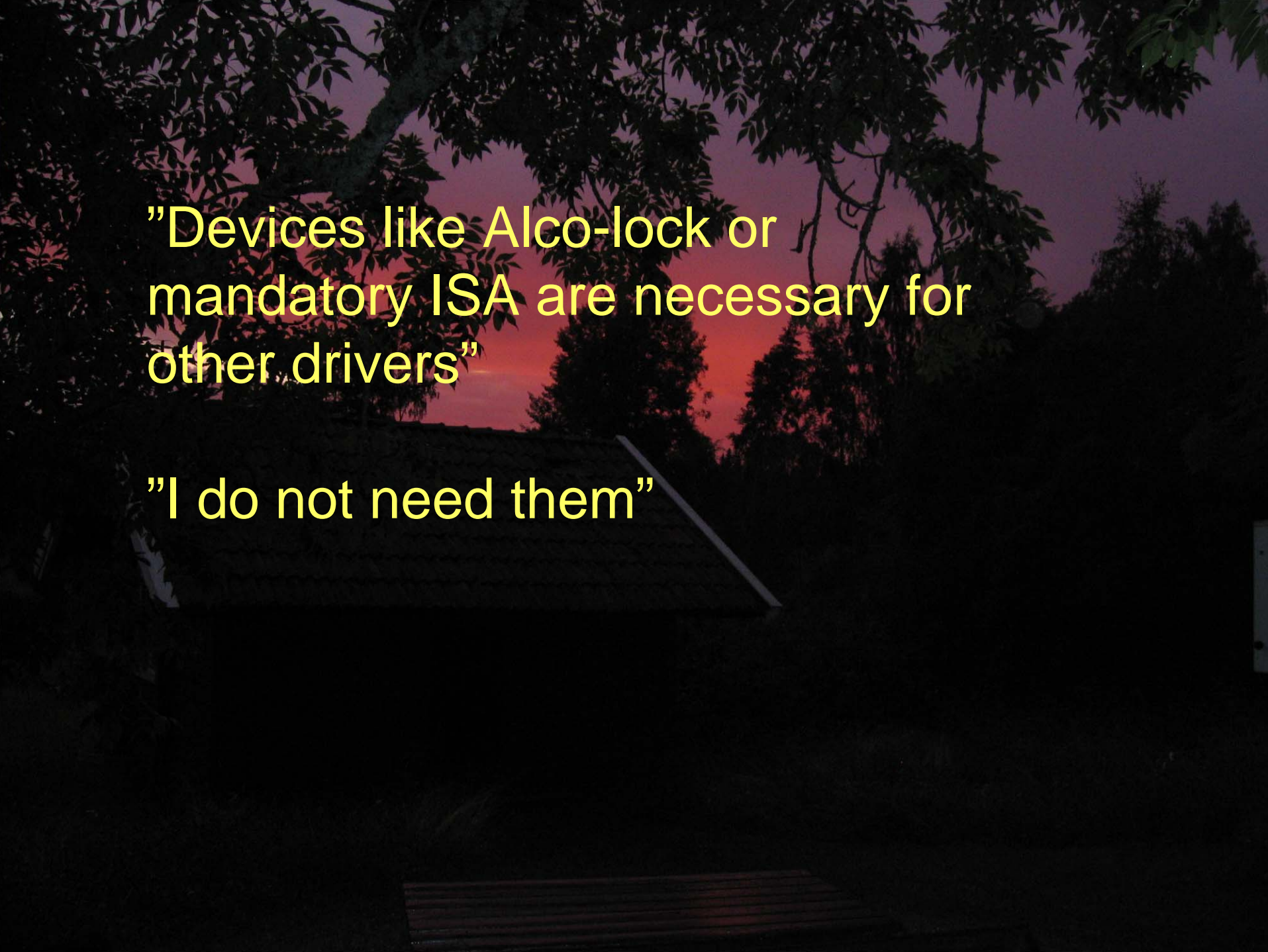
It is the others that are worse.

From experience one learns that behaviour is safe.

Unsafe behaviours must be problems of others

Information about irresponsibility and risky behaviours is of no concern to an ordinary driver.

This information is for the others.



"Devices like Alco-lock or mandatory ISA are necessary for other drivers"

"I do not need them"

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Thank you for listening