



Mixed effects of peer passengers on driving

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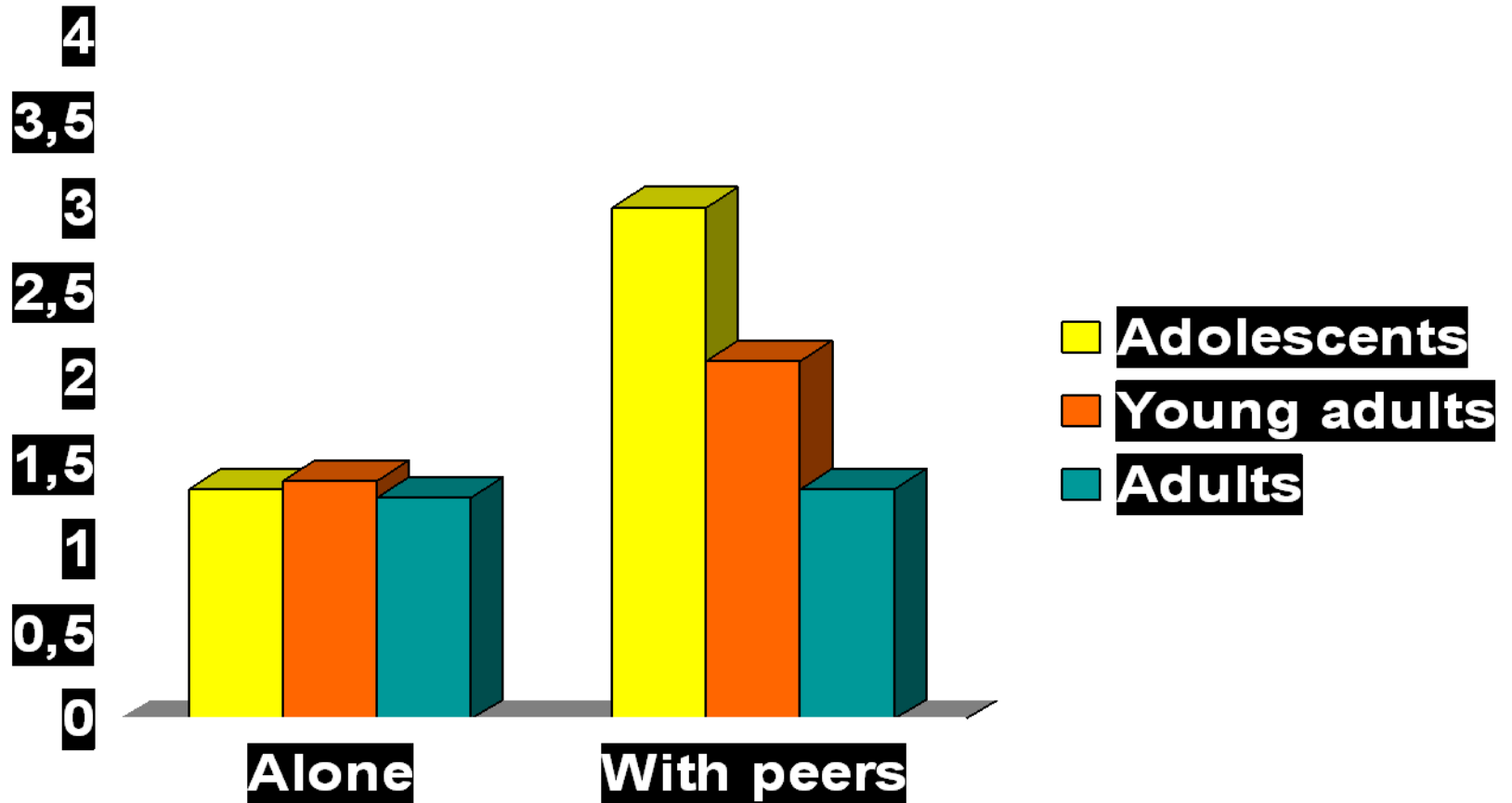
Peer pressure can increase risky driving

For instance, Gardner & Steinberg (2005)



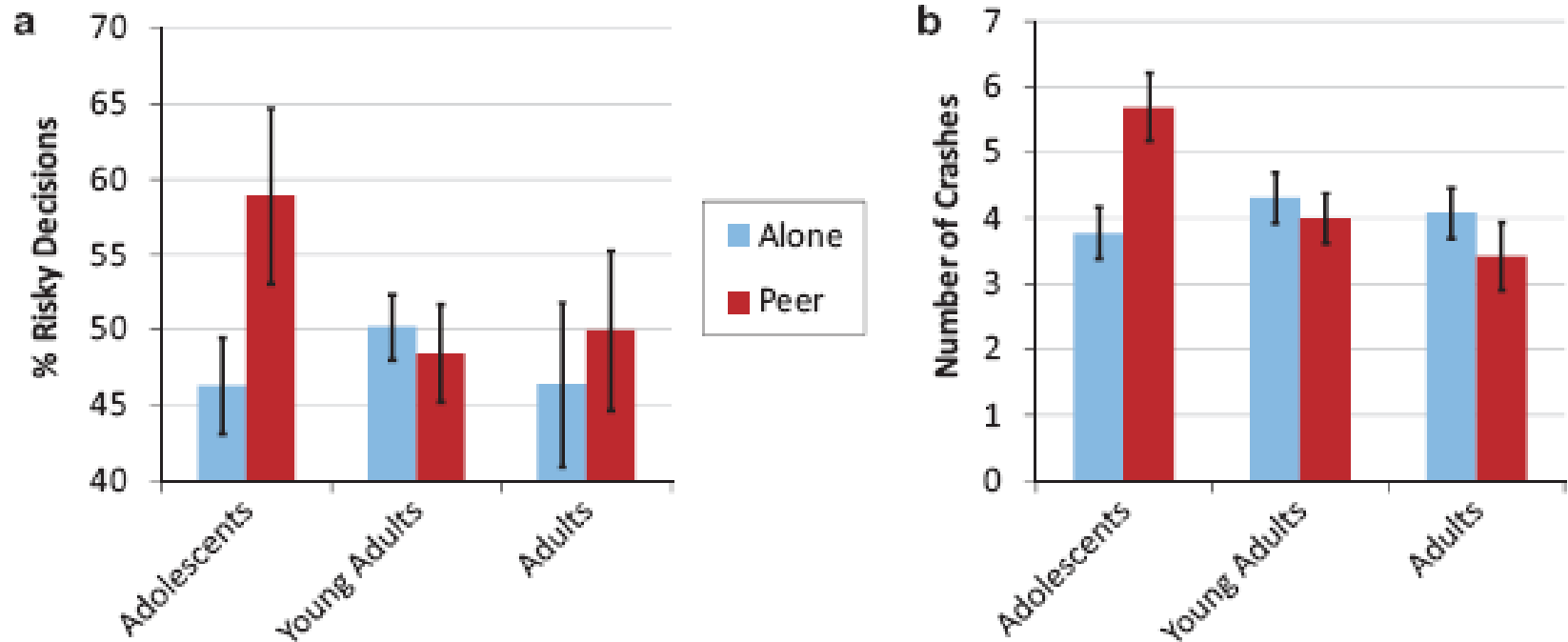
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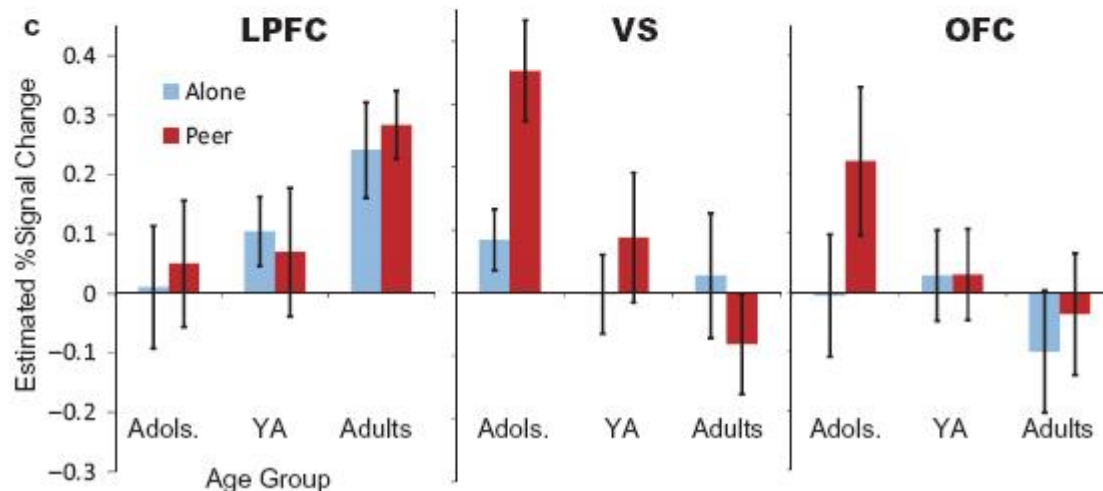
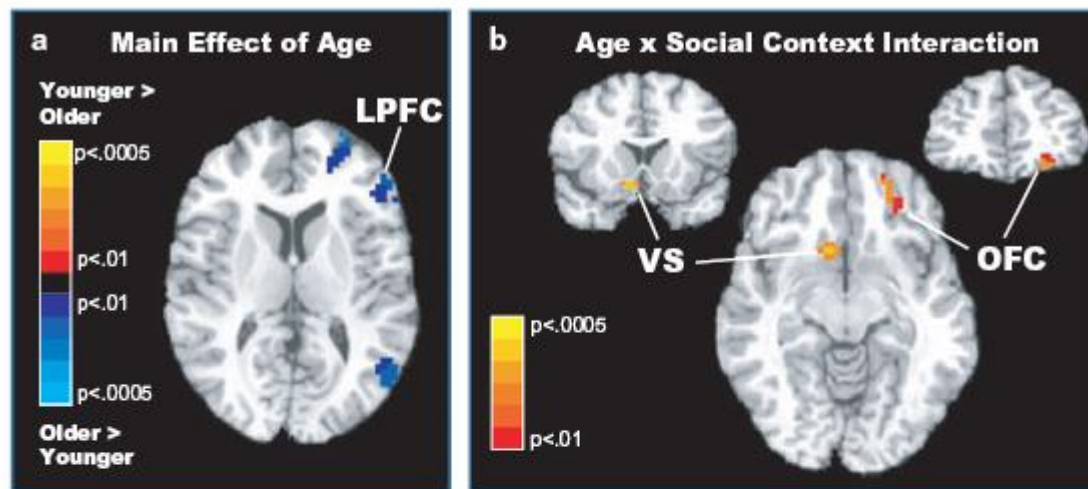
For instance, Chein et al. (2010)



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Higher reward-related activation



However, protective effect on crash statistics



Engström et al. (2008)

3 age groups (18-24, 25-64, >65)
accompanied by 1/2/3

Overall protective effect: crash risk higher
alone, regardless of age

Weakest effect youngest male drivers (18-24
years)

Mixed peer effects

For instance: Jongen et al. (2013)

Peer effect dependent on the specific driving parameter?

E.g., speeding (i.e., risk-increasing) vs. crashes (i.e., protective)

Possible influencing factors:

Cognitive control (e.g., inhibitory control, working memory)

Increased reward/punishment sensitivity (e.g., social evaluations)

Age

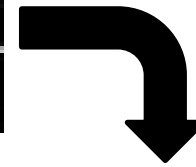
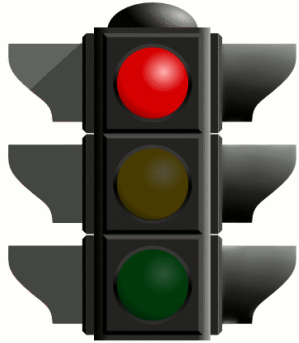
Driving experience

Gender

Mixed effects depending on the parameter

Jongen et al. (2013)

Risk-increasing → violations



Only for those with low inhibitory control

Protective

Peers as additional risk detectors?

AND/OR



Decrease in lateral lane position variability → **distraction**

Conclusions

Research should focus on **three** concepts

Risky, distractive, and protective effects

Ross et al. (2015)

Additional driving measures

Theoretical frameworks: driver-error classification & dual-processes

Education & policy initiatives should address teenage passenger influences, for instance:

Cognitive control training

Peer passenger restrictions

Raising awareness

