

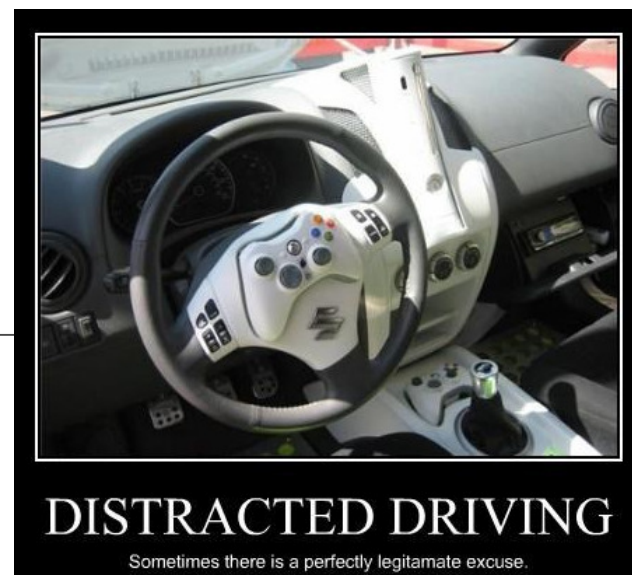
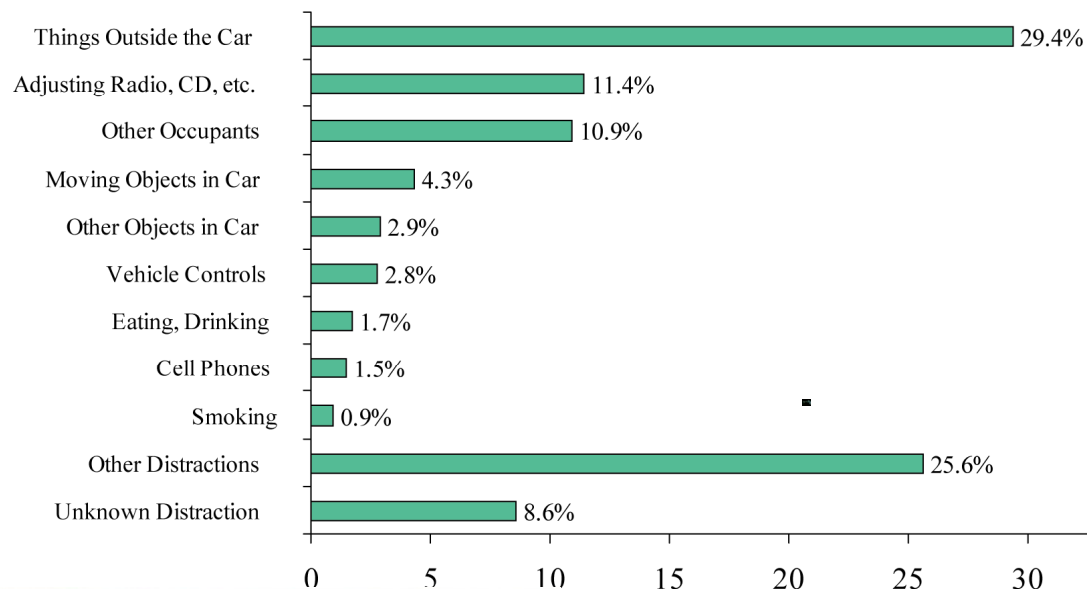
TOWARDS OPERATIONALIZING DRIVER DISTRACTION

**James Foley, Richard Young, Linda Angell, &
Joshua Domeyer**

**Driving Assessment 2013
June 18th**

What is Driver Distraction?

What distracts drivers?



Workshop Participants

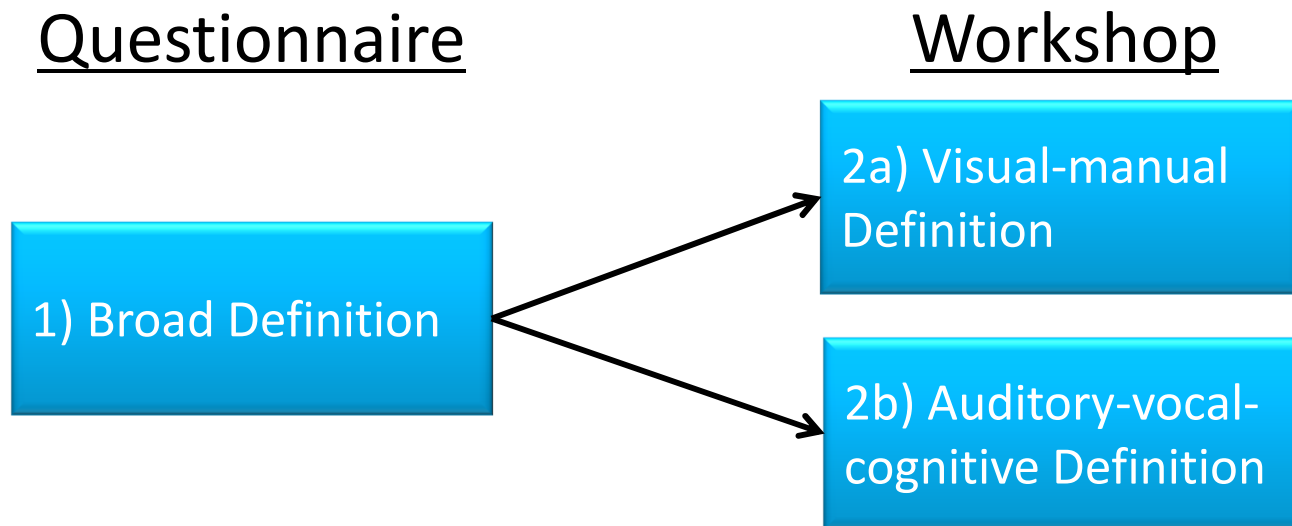
- A consistent definition of driver distraction is needed for scientific advancement in understanding driver distraction and driving assessment in general:



Workshop Goals

To reach consensus on 3 definitions:

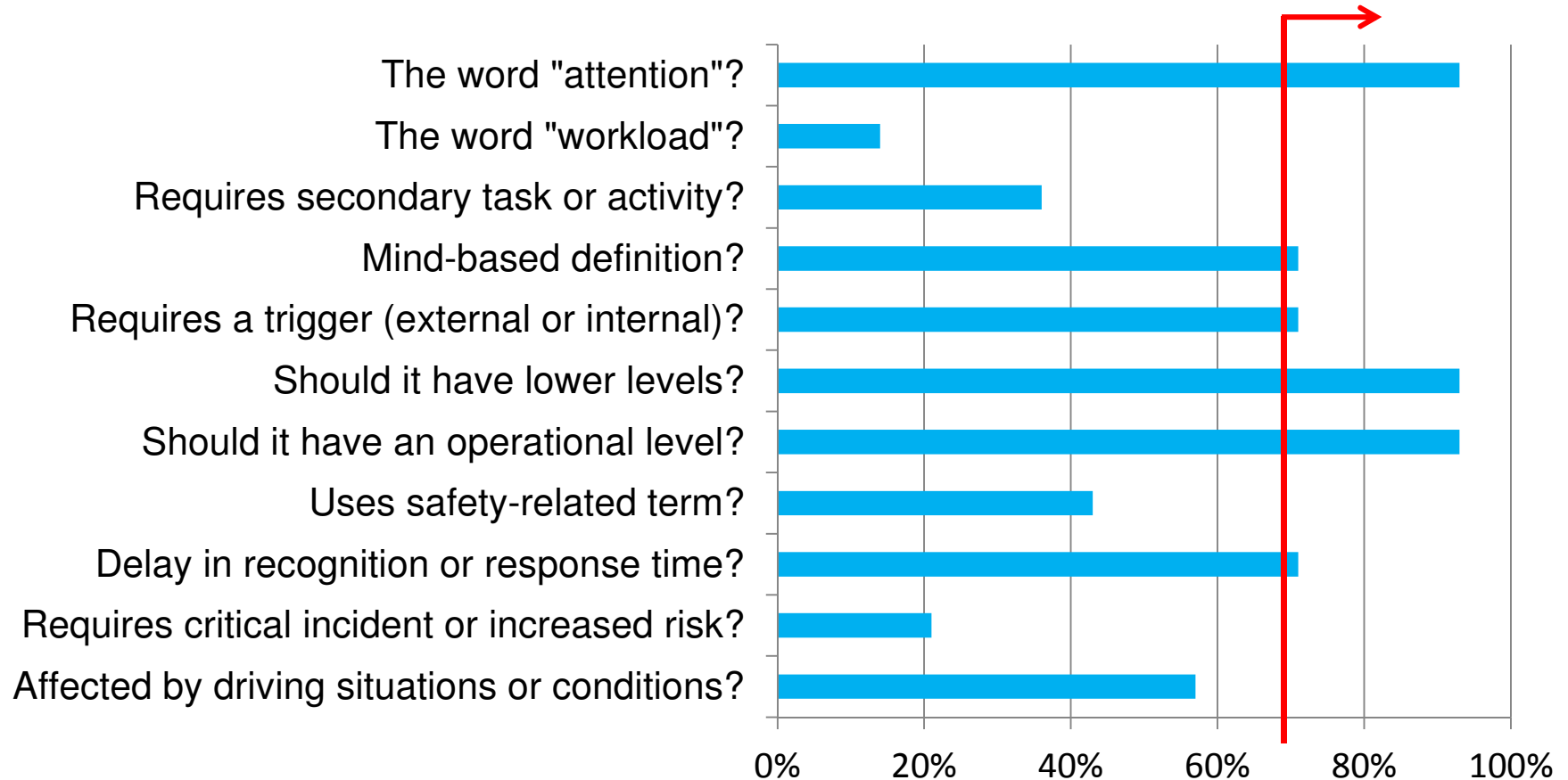
- 1) Top-level definition of driver distraction
- 2a) Definition of visual-manual distraction,
- 2b) Definition of auditory-vocal-cognitive distraction.



Questionnaire Results

Terms Identified in Literature

Include



Workshop Definition

Broad Definition:

*Driver distraction is the diversion of **attention** away from activities critical for **safe driving** toward a competing activity, which may result in insufficient or no attention to activities critical for safe driving. – Regan et al. (2011)*

Workshop Definition

Accompanying Definitions:

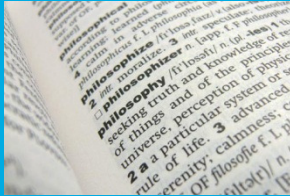
Attention (Posner & Fan, 2008):

- Orienting – Selection of sensory information.
- Executive – Resolving conflict among responses.
- Alerting – Achieving and maintaining an alert state.

Safe driving is operating a motor vehicle in a reasonable and expected manner.

Workshop Method

Regan et al. (2011)



Hurts et al. (2011)



Group Consensus



Next Step: Second
Level Definitions

Visual-manual



Auditory-vocal-
cognitive



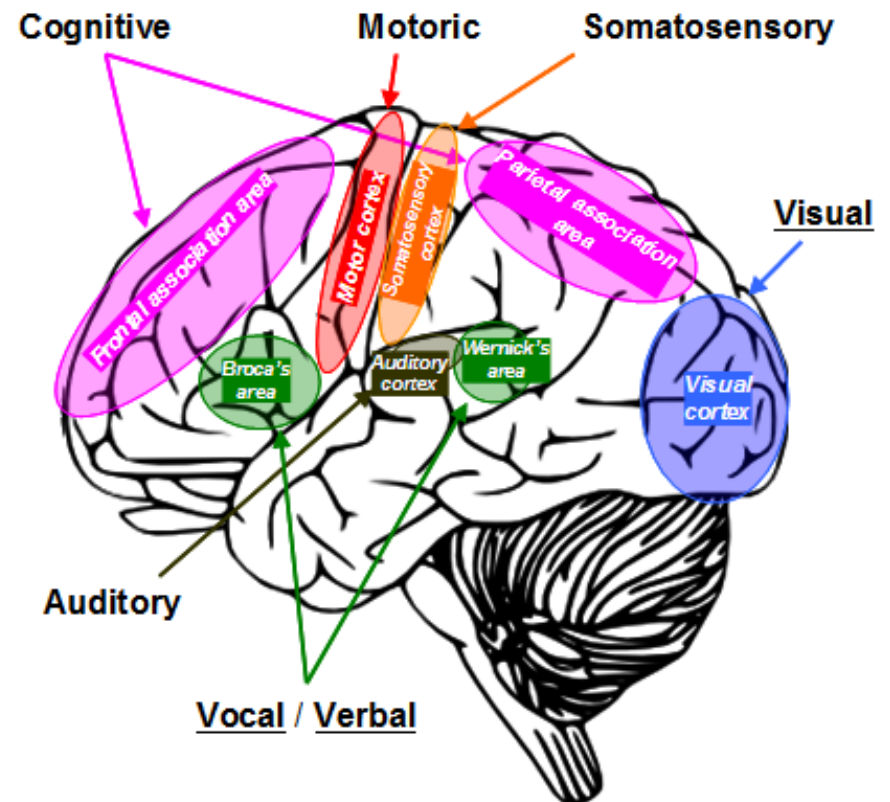
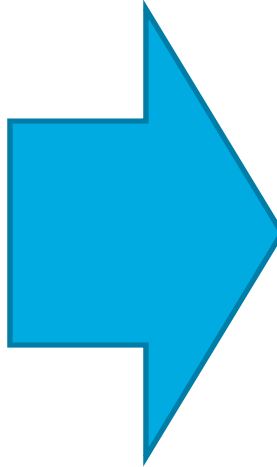
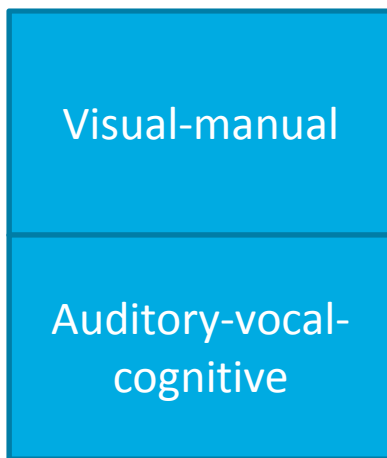
Workshop Definitions

This traditional dichotomy was judged insufficient to address such a multidimensional issue.

Driver distraction can arise from competing activities which place demands upon Cognitive, Auditory, Vocal/Verbal, Visual, Motoric, and Other resources, separately or in any combination.

Workshop Outcome

More inclusive and scientifically-driven categories:



Special Thanks



Workshop Collaborators: Birsen Donmez, Jon Hankey, Li Hsieh, Charlie Klauer, Dan McGehee, Bruce Mehler, Justin Owens, Bryan Reimer, Ashish Tawari, Chuck Gulash, Tina Sayer, Hiroto Hamada, Kazu Ebe, Pujitha Gunaratne, Deborah Bruce



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