

1 **Is hazard perception ability culturally specific? A cross-cultural**
2 **comparison between China, Spain and the UK.**

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7 **Abstract**

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9 Hazard perception refers to a driver's ability to spot hazards on the road in time to make a
10 safe manoeuvre to avoid collision. Such a test is now part of the formal licencing procedure
11 in the UK and in parts of Australia. But can such tests be successfully exported to other
12 countries to reduce traffic fatalities?

13 The aim of this project is to study whether hazard perception skill is culturally specific by
14 comparing UK, Spanish and Chinese drivers across clips filmed in all three countries. Data
15 collection was set-up in the respective countries in collaboration with the University of
16 Granada (Spain) and Tsinghua University (China). Participants had to watch 30 video clips
17 filmed from the driver's perspective (10 filmed in each of the three countries). Two variants
18 of the test were created: a typical hazard perception test (with full clips requiring speeded
19 responses to hazards), and a hazard prediction task (or 'What Happens Next?' task), where
20 the film ends immediately prior to the hazard onset. This latter test removes the confound of
21 individual hazard thresholds, as participants could successfully report 'what happens next'
22 without judging whether it posed a hazard to them. All videos contained a variety of
23 hazardous situations (or precursors to hazards) reflecting the particular driving environment
24 of each country.

25 Three hundred participants across the 3 countries were tested, evenly divided between
26 learner and experienced drivers. The differences between the culturally-specific tests in their
27 ability to discriminate between driver groups will be discussed in regards to the potential for
28 employing hazard perception testing in diverse geographical locations and cultures.

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