Hazard perception/prediction skill has the potential to reduce novice driver collisions around the world.

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The world has witnessed a considerable advancement in vehicle technology, pre and post pandemic, which has been very beneficial in terms of improving the driving experience, but it has also presented challenges in adapting driver training and testing. Specifically, developing countries can find it challenging to achieve the standards of more developed countries in implementing the required changes. While we need to adapt to the changes and the rapid evolution of technology (e.g., ADAS), novice drivers should still be required to learn essential driving skills to avoid collisions. Hazard perception skill is, perhaps, the only higher order cognitive skill to relate negatively to crash-risk. This skill is measured via the hazard perception test which could be especially beneficial as it offers pragmatic advantages such as objective and quick marking, quick administration and it is time and cost effective.

Since the introduction of the hazard perception test in the UK in 2002, road collisions have ostensibly decreased. This result demonstrates the significant impact that the HP test has had on UK road safety and raises the possibility that this could be of equal use to other countries who are facing even greater road safety challenges. This possibility was also raised by the United Nations Decade of Action on Road Safety (2010-2020), which was instigated to reduce the global burden of road deaths. So why has the hazard perception test not yet been implemented as an official part of the driving test in other countries? Adoption of a test that can be suitable for each cultural driving context whilst retaining its diagnostic validity is not a trivial task. It will be necessary to validate and adapt the methodology (clips that represent the driving environment, design, instructions, format etc.) to ensure that the test will discriminate between experienced and novice drivers. In order to test the effectiveness of the hazard perception methodology to differentiate between safe and less-safe drivers, the test was adapted and compared across three countries (using clips and participants from China, Spain and the UK). Unfortunately, the results did not reveal differences between experience and novice drivers, though cultural differences were evident. To address the lack of validity, a new HP test-variant was developed: a hazard prediction test. This test was taken back to

China, UK and Spain and presented the same driving clips to participants but this time the screen was occluded at the point of hazard onset and participants were asked to predict what would happen next. The results showed that experienced drivers outperformed novices in predicting the hazards, while cultural differences were ameliorated. Following further development of the hazard prediction paradigm, the test was applied to two completely different cultural contexts: Israel and Lithuania. Once again, the hazard prediction test was successful in differentiating between safe and less-safe drivers on the basis of experience. In conclusion, the hazard prediction test appears to be a more robust methodology for international export, ostensibly reducing problems of criterion bias, subjective judgements on scoring windows, and language difficulties in explaining what a hazard is. In consequence, several Governments have explicitly shown interest in implementing the hazard prediction test as part of their official driving test.