

## Hazard Perception Test is failing to detect unsafe drivers

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Some readers may be aware of the controversy surrounding the Driving Standards Agency's Hazard Perception Test.

According to the DSA, the Hazard Perception Test (HPT) was introduced to reduce the risk of road traffic accidents caused by 'poor scanning and anticipation skills of drivers'.

However, many Road Safety and Driver Training Professionals question the effectiveness of the DSA test and are not at all convinced that it is an appropriate test with which to determine a candidate's skills of scanning and hazard perception nor do they believe that the score obtained by the candidate is, in any meaningful way, a pointer to the 'safety potential' of that driver.

I must admit that I am one of the disbelievers and as such I reject the DSA's response that we are 'anti tests' or in any way doubt the value of improving drivers' scanning and hazard perception skills. However, it is perfectly justified to expect that tests, within reason, measure what they are intended to measure. The following reasons explain why I do not believe that the current DSA HTP test achieves the principal aim for which it was created.

First of all I must stress that I am a firm believer in the value of training drivers to improve their hazard perception ability. In fact in the conclusion to my research (Learning to Drive; anticipated role of advances in information technology in improving training and testing of drivers- M. Nahvi, Imperial College 1982) I wrote:

*"Improving driver's ability to perceive road hazards as soon as possible, and to improve his/her ability to eliminate/reduce the impact of such hazards is one of the most effective means of improving road safety"*

*Current technology is not yet able to provide realistic enough systems to train/test the driver's hazard perception and his/her appropriate response skills. However, with the anticipated rapid improvement in computer technology, it may soon be possible to train and even test the driver hazard perception ability"*

And.....

*"It is important to mention that although useful hazard perception training can be carried out by just using selected road hazard, any computer based system developed to test drivers, needs to replicate a realistic traffic situation and provide candidates with all the clues that a driver on the road receives."*

*Otherwise, the results are unlikely to show a real relationship to the candidates road safety potential”*

Candidates taking the DSA Hazard Perception Test are scored on the basis of how quickly they *react* to ‘developing hazards’. The method used is to ask the candidates to use the mouse to click as soon as they see a developing hazard. The candidates achieve scores from 5 to zero depending on how early they click within an equally divided (5 divisions) ‘scoring windows’. Clicking a fraction of a second before the rigid and predetermined scoring window starts- will result in a zero score! Is the test intended to score the behaviour of a potential safe driver or the reaction of an early 1980’s pre-programmed computer!

In addition to the controversy about the use of ‘scoring windows’ and the claim that- this in fact encourages reactive behaviour as opposed to forward planning, the current DSA Hazard Perception Test does not realistically measure the candidate’s scanning and anticipation skills because:

- Candidates are not presented with a real enough situation to distinguish between ‘developing hazards’ and other hazards. This is due to the following reasons;
  - Test candidates do not have a realistic view of the ‘environment’, which a real driver would have. Such as rear and side views (which are extremely important in deciding when and how to react to developing situations on the road)
  - He/she is not able to have sufficient feel/judgement of the speed of ‘his/her’ car and the speed of other vehicles (In particular, that of vehicle immediately behind and approaching vehicles). Again highly important in deciding when and how to react to developing hazards
  - It is reasonable to assume that the ‘developing Hazards’ (Hazards which are scored in the DSA test) are categorized as such and *marked from that instant* because they are the ones that the driver of the camera car would *react* to at *that time*. However, the candidates do not receive the same level of clues from the environment and therefore are at a considerable disadvantage.
  - ‘Safe drivers’, over a period of time, develop the ability/sense to use all the available clues from the surrounding environment and determine how best to react to a potential hazard. Candidates taking the DSA HPT test are presented with less than a third of the information that a ‘safe’ driver will normally absorb to determine how and when to react. Third of the overall information might be better than none but, the main difference between a safe/good/experienced driver and inexperienced driver is the ability of the safer driver to absorb and use more clues from the surrounding environment to match his driving to the condition in which he is driving. How realistic is it then to

assume that this test scores in any way point to the candidate's ability to be a safe driver?

- Further, contact with candidates who have been penalised for 'clicking too often' indicates that contradictions and ambiguities in advice to the candidates- such " *you should click for all hazards.....*" and " you should click several times for a developing hazard to ensure that it is registered" then penalising them for clicking too often- without better explaining the process, confuses candidates and makes them nervous to click in the subsequent clips of the test or later tests, thus, further moving the results away from indicating the true scores- even for a deficient test.

To summarise, in my opinion, and as far as I am aware, in the opinion of many professionals involved in road safety promotion and driver training, the current DSA Hazard Perception Test:

- Does not realistically measure the candidates skill in scanning and hazard perception
- Encourages reactive behaviour which is in direct contrast to the aim of the exercise to encourage better scanning and anticipation, and;
- More important and worrying than all, scores awarded in this test do not , in any way, help Separate potential 'safe drivers' from those who could turn out to be unsafe drivers.

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