Hazard Recognition Training Programs and Their Relationship to Executive Functions in Motorcyclists

Abstract

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Research has shown that motorcyclists with experience scan the roadway and environment better than novice riders, and they recognize important clues much earlier in assessing a hazardous situation. Research in the United States, Europe and Australia confirm that one of the primary contributing factors in motorcyclist crashes is perceptual error. Both the United Kingdom and Australia have added a hazard perception component to their licensing process.

The Motorcycle Safety Foundation (MSF) has developed education and training programs designed specifically to provide training in hazard recognition. These programs are available to training providers, government agencies, and the general public in an effort to positively impact motorcycle crash rates. Dr. Raymond J. Ochs, Vice President of Training Systems, will provide distinguishing characteristics of MSF's hazard recognition programs, particularly the Street Smart – Rider Perception program.

To make early and accurate perception of the riding environment requires more than the ability to recognize a hazard in a controlled setting. The intent of MSF programs, beyond physical skills training, is to not only assist riders in their development of hazard recognition skills and instill the value of having good visual capabilities, but to connect a rider's potential perceptual ability to the executive functions of the brain. Giving riders an awareness of the importance of executive functions like attention, prioritizing and strategizing adds deeper meaning to hazard recognition training and provides transference in making safety a top-of-mind value when riding.

The purpose of this paper is to illustrate how hazard recognition training can transcend perceptual processes by appealing to a rider's executive functions, which refers to mindfulness associated with keeping safety a priority function of the riding task.