Evaluation of the attentional demand of controls: a computerised tool kit

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Introduction

Ergonomic design of the interior of cars is one out of several factors contributing to traffic safety. This factor seems to become more and more important due to the increasing number of systems which will be implemented in modern cars. Consequently, tools and checklists for the evaluation of cockpits of cars are proposed by several authors (Stevens et al. 1999; Wierwille, this volume).

The current situation of in-car design is characterised by two aspects:

- the layout of dashboards is primarily design-oriented (even if product information praises the ergonomic design)
- decisions between different solutions are based on non transparent criteria and are taken by the top management.

This fact is astonishing with regard to the broad ergonomic literature and knowledge available throughout the world. In other words, there is an obvious discrepancy between the ergonomic knowledge of experts on the one side and the application of this knowledge in the concrete design process on the other. What are the reasons for this discrepancy? To our opinion two main reasons can be identified. First of all car manufacturers try to find a unique identity demonstrating their technological status. Therefore ergonomic principles are sometimes disregarded. Second, even if development engineers try to apply ergonomic principles, they lack test and evaluation procedures that can be performed within a rational amount of time.



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