



DEVELOPMENT OF A METHOD TO EVALUATE PERIPHERAL VISUAL PERCEPTION

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The problem

- Visual search is needed in everyday human life when:
 - trying to find a free spot at parking lot
 - working at the computer and looking for a file
 - searching for a key word in paper etc.
- Tests using visual search task to evaluate working capacity and ability to concentrate, not looking at peripheral conditions
- Disorders concerning central and peripheral visual field properties that can be improved until certain age

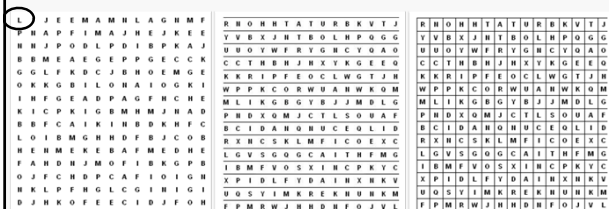
The aim

- To develop a method to evaluate peripheral visual perception

Methods

- A program consisting from several tests
- Central task – a set of 15x15 (33.3°) or 10x10 (24.7°) letters
- Tests demonstrated on a projection screen (93.9° wide) at a distance of 60 cm
- 8 individuals
- Additional central or peripheral conditions

Central task

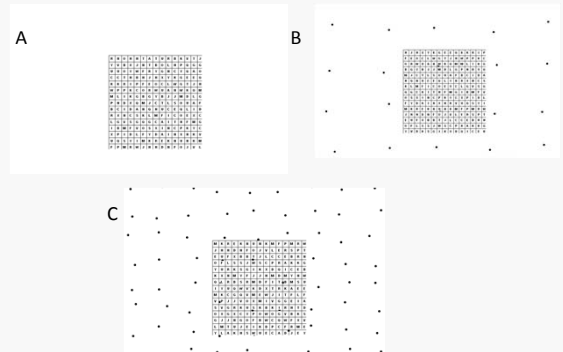


White center

In lines

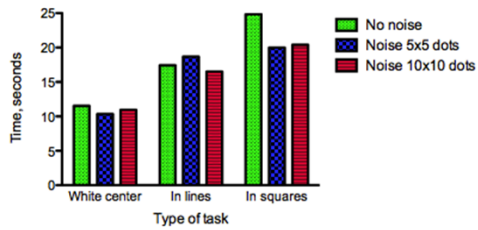
In squares

Peripheral noise



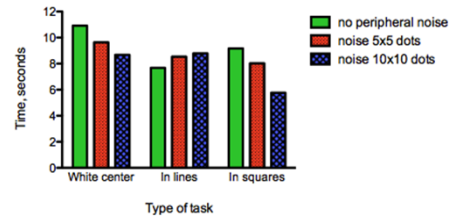
Results

Time to accomplish the task with 15x15 set of letters for individual IT



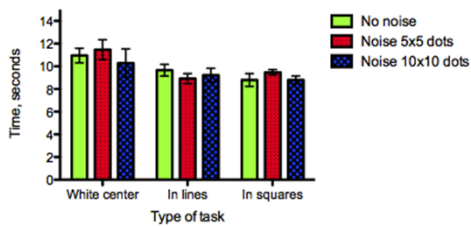
Results

Time needed to accomplish the task with 10x10 set of letters for individual IT

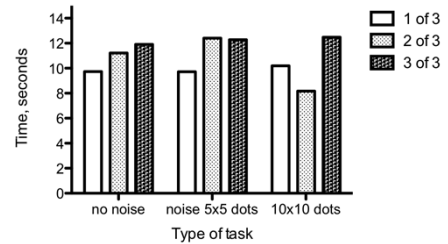


Results

Time needed to accomplish task with a set of 10x10 letters for individual IL



Time needed to accomplish the task for individual IL



Conclusions

- This method can be used to evaluate peripheral perception
- There have to be some improvements so that these tests could be used on computer monitors and for children

Acknowledgement

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