The Development of the Screening of Visual Complaints Questionnaire for Patients with Neurodegenerative Disorders: Evaluation of Psychometric Properties

F. Huizinga\textsuperscript{a}, J. Heutink\textsuperscript{a,b}, G. A. de Haan\textsuperscript{a,b}, I. van der Lijn\textsuperscript{a,b}, F. E. van der Feen\textsuperscript{a,b}, A. C. L. Vrijling\textsuperscript{b}, B. J. M. Melis-Dankers\textsuperscript{b}, S. M. de Vries\textsuperscript{a,b}, O. Tucha\textsuperscript{a}, J. Koerts\textsuperscript{a}

**Background**

Approximately 75% of patients with Parkinson's disease (PD), 33% of patients with multiple sclerosis (MS) and 50% of early dementia patients tend to suffer from visual problems\textsuperscript{1-3}. Nevertheless, visual complaints are little recognized in clinical practice and there is a lack of clinical instruments that can be used to assess visual complaints. A 21-item Screening of Visual Complaints (SVC) questionnaire was developed to assess visual complaints in patients with PD, MS or early dementia.

**Results**

- Exploratory and confirmatory factor analyses resulted in a three-factor structure (Figure 1):
  - Altered visual perception (R\textsuperscript{2}=28.6%)
  - Reduced visual perception (R\textsuperscript{2}=7.7%)
  - Ocular discomfort (R\textsuperscript{2}=6.8%)
- Sufficient convergent and divergent validity (Figure 2)
- High internal consistency (Cronbach's alpha = 0.85) and test-retest reliability (ICC=0.82)

**Figure 1. Factor structure of the SVC**

**Methods**

1,461 healthy Dutch participants (18-95 years) were assessed with:
- Screening of Visual Complaints questionnaire (SVC)
- Cerebral Visual Disorders questionnaire (CVS)
- Behavior Rating Inventory of Executive Function–A (BRIEF–A)
- Depression Anxiety Stress Scale–21 (DASS–21)
- Questionnaire for Experiences of Attention Deficits (FEDA)
- Structured Inventory for Malingered Symptomatology (SIMS)

**Analyses:**
- Exploratory (subsample 1; n=730) and confirmatory factor analyses (subsample 2; n=731) to evaluate the factor structure of the SVC
- Correlation analyses to assess convergent and divergent validity
- Reliability analyses to evaluate internal consistency and test-retest reliability

**Conclusion**

The SVC is a valid and reliable tool for the assessment of subjective visual complaints in a community-sample and appears promising for use in clinical practice of patients with PD, MS or early dementia.

**Contact:**

Famke Huizinga
f.huizinga@rug.nl

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