

Strategy Awareness and Use Questionnaire: A Validation Study

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Introduction

- Some students are able to access a repertoire of behavioural strategies that aid in managing attention more easily than others, possibly increasing likelihood of academic success (He & Antshel, 2017).
- Behavioural strategies include the use of a daily planner, setting reminders, turning off mobile phone notifications while studying, setting up study space, setting up a reward system, summarizing main points, etc.
- To evaluate the influence of behavioural strategy use on academic studies, a measure is needed to help gauge a student's level of strategy use.

Objective

- Design and evaluate the Strategy Use and Awareness Questionnaire (SAUQ) to estimate students' awareness and use of strategies that optimize control of attention and/or compensate for stress on an executive system due to environmental and/or neurobiological influences.
- This questionnaire may be helpful for students with attention-related concerns to learn more about strategies that might be helpful.
- The SAUQ may also be of use to counsellors and academic coaches interested in improving executive functioning strategy use among students in a university population.

Method

Item Development

- One hundred and thirty-two strategy use questions were adapted from the literature on behavioural interventions for adults experiencing difficulties with attention.
- Questions were edited for clarity by two focus groups including students, teachers, special educators and a school psychologist.

Participants and Materials

- One hundred and forty-eight university students aged 18-35 (M = 22.44, SD = 3.79, 72.30% female) filled out a demographics questionnaire, the SAUQ, Conners Adult ADHD Rating Scale (CAARS) and the Behavioral Rating Inventory of Executive Function for Adults (BRIEF-A).

Procedure and Data Analysis

- After items were reviewed for floor and ceiling effects, skew and kurtosis, 112 items were kept for analysis.
- Exploratory factor analysis, an unrestricted factor model that estimates underlying dimensionality of an observed set of variables (Garrido, Abad & Ponsoda, 2016), was used to assess construct validity. Test items were treated as categorical variables.
- Items were retained that did not double cross load more than .2 and displayed a factor correlation $>.4$.

Results

Dimensionality – Construct Validity

- A seven-factor solution with five items per scale is optimal; Comprehension Monitoring, Planning/Organization, Self-Reward, Self-Regulation, Organization with Mobile Phone Technology, Regulating Technology and Organization of Materials.

Scale Validation

- Concurrent validity was evaluated by correlating scores on the SAUQ with scores the CAARS (Inattention/Memory scale) and the BRIEF-A (Global Executive Composite scale). The correlation obtained between the SAUQ and BRIEF-A revealed a weak negative relationship ($r = -0.29$; $p < 0.01$) and a moderate negative correlation was found between the SAUQ and the CAARS ($r = -0.37$; $p < 0.01$).
- To evaluate discriminant validity, an analysis was conducted to determine whether the SAUQ discriminated groups of students with and without severe inattention/memory symptoms. Significant group differences were found on the SAUQ Global Index scale, and the following SAUQ subscales: Comprehension Monitoring; Planning/Organization; Self-Regulation; and Organization of Materials, with inattentive students scoring lower on strategy use.

Conclusions

- The Comprehension Monitoring, Planning/Organization, Self-Regulation, and Organization of Materials scales in particular show high construct, concurrent and discriminant validity.
- Concurrent analysis show higher levels of global executive dysfunction and inattention are associated with lower levels of strategy use.
- Discriminant analysis suggests the SAUQ adequately discriminates strategy use between students with inattention/memory difficulties from students without these concerns.
- Taken together, these findings suggest that students who may benefit from strategy use the most are the least likely to use behavioural strategies.

References

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