

# **The Dutch Glasgow Sensory Questionnaire: Psychometric properties of an autism-specific sensory sensitivity measure**

**Marieke WM Kuiper, Elisabeth WM Verhoeven and Hilde M Geurts**

Sensory sensitivity is common in autistic people, with both hypo-responses (too little sensitivity) and hyper-responses (too much sensitivity) to several sensory modalities (e.g., sounds, sights, touch, taste, smell). To be able to get more insight into these sensory sensitivities of autistic people, reliable and valid questionnaires that measure sensory sensitivity and are able to distinguish between hypo- and hyper-responsiveness are necessary across sensory modalities. We translated the Glasgow Sensory Questionnaire (GSQ; Robertson & Simmons, 2012) into Dutch (GSQ-NL). The aim was to examine whether the GSQ-NL is valid (i.e., Does it measure sensory sensitivity?) and reliable (i.e., Are similar answers been given to similar items within the questionnaire? And does it measure sensory sensitivity precisely, with limited error in the way it is measured?), to see whether it has some value in clinical practice. In the study, 78 autistic and 68 non-autistic (TD) adults (18-45 years), none of whom had an intellectual disability, filled out the GSQ-NL and a series of other questionnaires. Similar to the original GSQ, our results showed that the GSQ-NL is a reliable and valid questionnaire in autistic adults. Clinically relevant, the GSQ-NL had reliable hypo- and hyper-responsiveness subscales, reasonable/good modality subscales, and scores did not change much over time. Moreover, our analyses showed that approximately 2/3 of the autistic adults showed extreme sensory sensitivities compared to the TD group. In both autistic and non-autistic adults, hypo- and hyper-responsiveness co-existed in some, but not all, sensory modalities. In sum, we conclude that the GSQ-NL is suitable to be used in scientific research as well as in clinical practice.