Objective
The male brain hypothesis predicts that individuals with autism spectrum disorder (ASD) are characterized by a low empathizing and high systemizing cognitive style.

Empathizing: “The drive to identify another person’s emotions and thoughts, and to respond to these with an appropriate emotion”.

Systemizing: “The drive to analyze how systems work and behave, and to construct systems”

The internationally developed self-report questionnaires ‘Empathy Quotient’ (EQ) and ‘Systemizing Quotient-Revised’ (SQ-R) were translated to Dutch and their psychometric properties were investigated

Methods
Materials: Dutch translation of 40-item EQ and 75-item SQ-R, and Friendship Questionnaire (FQ)
Samples: Community sample (n=685; males=270; age: 16-84 years); sample of male ASD patients (n=21; age: 18-34 years)

Results
Reliability: Internal consistency (Crohnbach’s α: EQ=.89; SQ=.87) and test-retest reliability (Pearson r: EQ=.74; SQ=.79) was good. Only the EQ subscale Emotional Empathy had low retest reliability (Pearson r=.58).

Convergent validity:
• Typical sex differences on the EQ scales (f>m) and SQ (m>f) with medium effect sizes (Cohen’s d: EQ=.78; SQ=.76)
• Positive correlations between the EQ scales and FQ (Pearson r=.27-.50); small negative correlations of SQ-R with the EQ total (Pearson r=-.11) and EQ subscale Emotional Empathy (r=-.17)

Sensitivity: The EQ scales and brain type (difference: SQ-EQ), but not the SQ-R, differed between males with ASD and males of the community sample with large effect size (Cohen’s D: EQ=.96; brain type=.68).

Conclusions
The Dutch 28-item EQ and the SQ-R are reliable and valid tools to assess a person’s empathizing and systemizing cognitive style. For autism, these tools are helpful in describing the subjectively experienced difficulties and strengths of the patient in processing social and non-social information. Especially the EQ subscales quickly provide additional information on the specific aspects of social information processing that may be impaired.

Emotional empathy should be interpreted merely as a state than as a trait.

Literature