

## COMPARISON OF TWO PARENT-COMPLETED QUESTIONNAIRES FOR THE IDENTIFICATION OF CHILDREN AT RISK FOR AUTISM SPECTRUM DISORDER IN THE PRETERM POPULATION

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**Background:** The Bayley Scales of Development Social-Emotional questionnaire (Bayley-SE, PsychCorp, 2006) and the Quantitative Checklist for Autism in Toddlers (Q-CHAT, Allison et al, 2008) are newly-developed parent-completed questionnaires providing quantitative measures of early childhood social-communication difficulty. They aim to identify children “at-risk” for autism spectrum disorder (ASD).

**Aim:** To compare agreement between Bayley-SE and Q-CHAT in preterm children.

**Methods:** The parents of children born at  $\leq 29^{+6}$  weeks gestation in a study evaluating routinely collected neurodevelopmental data were requested to complete the Bayley-SE and Q-CHAT. Scores were compared with population norms using Student's t-test. Children with scores  $>2SD$  from the mean were considered “at risk” for ASD. Agreement between the questionnaires in identifying these children was measured using Cohen's kappa statistic.

**Results:** Questionnaires have been completed by the parents of 53 children (mean [SD] gestation 26.5 [1.6] weeks, mean corrected age at assessment 24.1 [2.6] months). Scores were lower in the Bayley-SE (mean composite score 93.2 [19.7]) and higher in the Q-CHAT (mean 36.8 [7.9]) compared to reported population means ( $p < 0.01$ ), indicating greater autistic traits. Q-CHAT classified 12 (22.6%) and Bayley-SE classified 5 (9.4%) children as “at-risk” for ASD; only 3 children were identified by both questionnaires (kappa=0.25 [95%CI 0-0.55]).

**Conclusions:** Parents of preterm children report greater early childhood social-communication difficulties than in the general population. There was poor agreement between Bayley-SE and Q-CHAT in classifying children “at risk” for ASD. Reasons may be the different emphasis placed on reciprocal social interaction in the Bayley-SE and on communication and stereotypical behaviour in the Q-CHAT.