Background and aims The quality of father-infant interaction impacts on infant developmental outcomes and is increasingly targeted for intervention. Review of the literature reveals few measures to assess the quality of parent-infant interaction during a structured task. Studies exploring the quality of fathers’ interactions have to date, only used the costly and time-consuming Nursing Child Teaching Assessment Scale (NCATS) to rate father-infant interaction. This study aims to explore the reliability and validity of the ORSPI as a measure of the quality of father-infant interaction.

Method Videotapes of 152 five-month old and 74 eight-month old father-infant dyads interacting during a structured task were rated using the 8 item ORSPI scale (scores range from 1–15). Total ORSPI scores were correlated with previously rated NCATS scores. Internal consistency and intra-rater reliability of the ORSPI were also assessed.

Results ORSPI scores were significantly positively correlated with NCATS total caregiver scores for five-month dyads (r=0.513, p<0.001) and eight-month dyads (r=0.634, p<0.001) indicating good concurrent validity. The ORSPI had excellent intra-rater reliability (ICC=0.931) and satisfactory internal consistency (five-month old dyads: Cronbach’s alpha=0.522; eight-month old dyads: Cronbach’s alpha=0.590). Father-infant dyads rated at both five and eight months old (N=74) showed that scores decreased significantly over time Wilcoxon signed rank test (ORSPI: Z=−2.277, p=0.023; NCATS Z=−3.059, p=0.002).

Conclusions The ORSPI has good concurrent validity, correlating with the highly regarded NCATS, and was both easy to use and reliable. These findings support its use as a simple measure of the quality of father-infant interaction.

IQ and intrauterine growth restriction in young adults born small-for-gestational-age at term

Background and aims How cognitive function is affected by being born small for gestational age (SGA) is not clear. This may be related to different definitions of SGA and the lack of discrimination between those born with intrauterine growth restriction (IUGR) and those who are constitutionally small. Our aim was to study the effect of being born SGA with IUGR on later cognitive functioning.

Methods Population-based follow-up study at age 19 of 59 term-born SGA (birth weight<10th centile, mean: 2915g) and 81 controls (birth weight>10th centile, mean: 3707g). WAIS III was used to assess IQ. Foetal weight-deviation was calculated based on repeated ultrasound measurements of biparietal and mid-abdominal diameter at week 25, 33 and 37 of gestation for 29 SGA subjects and 75 controls. Weight-deviations were recorded as positive and negative percentages; zero denoted no deviation from individual expected growth. Mean and standard deviation (sd) for estimated foetal growth in the control group was used to dichotomize the SGA group into normal growth and IUGR (growth deviation of more than -2sd from control mean).

Results The total SGA group had significantly lower IQ scores than the control group (p=0.001). In the subgroup with ultrasound measurements, six SGA subjects (21%) were defined as IUGR. In this subgroup, only these six had significantly lower IQ than controls (IQ 87 vs 101, p=0.003) whereas those with normal growth pattern did not differ from controls.

Conclusions Young adults born SGA had reduced cognitive outcome. This decrease may be confined to SGA young adults with IUGR.