Measuring Infant Development. Concordance of survey and observational measures.

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In the last years the German Socio-Economic Panel Study (SOEP) has introduced mother-child questionnaires to learn more about infant development. Nevertheless, the reliability of self-reported scales and the relation to observational measures of infant development are unclear.

This paper uses two strategies to analyze the performance of mothers self-reports about infant development. Firstly, it compares the distributions of these reports in the mother-child questionnaire I and II to that of mothers who participate in a home visiting project called “Pro Kind”. Secondly, the paper examines the congruence of infant development assessed through the temperament scales and the Vineland Adaptive Behavior Scale (VABS) used by the SOEP on the one hand and through the Bayley Scales of Infant Development and the “Sprachentwicklungstest für zweijährige Kinder” (SETK-2) on the other hand. “Pro Kind” only affiliates disadvantaged first time mothers. Therefore, SOEP samples of first time mothers and disadvantaged first time mothers are defined.

Results show that mothers in the SOEP sample rate infants better in the temperament scales and the VABS than “Pro Kind” mothers. However, the differences vanish if we compare “Pro Kind” mothers with the sample of the disadvantaged SOEP mothers. Additionally, we find significant correlations between VABS ratings and the Bayley Scale and SETK-2 scores ($r$ varies between 0.35 and 0.54). Not surprisingly, the temperament scales are just small but still significant correlated with the Bayley Scale scores. We find no evidence that concordance of self-rating is related to the degree of disadvantage.

We conclude that the temperament scales and VABS of the mother-child questionnaires are reliable when using the identical survey questions on different samples. Furthermore, we find that the VABS can be seen as valid proxy for broader infant development.