Features of the Caregiver-Child Interaction of 18, 30, 42-month-olds and Strengths and Difficulties of 42-month-olds

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Objective: The purpose of this study is to examine the relationship between features of the caregiver-child interaction of 18, 30, 42-month-olds, which are considered aspects of social competence and strengths and difficulties of 42-month-old children.

Methods: The participants in the study, which was conducted as part of a Japan Science and Technology Agency (JST) project, were 123 dyads of children and their caregivers. The participants completed two scales—the Interaction Rating Scale (IRS) and the Strengths and Difficulties Questionnaire (SDQ). Spearman’s correlation coefficient was calculated to assess the relationship between the IRS and SDQ.

Results and Discussion: There were significant correlations between the ‘Child’s total score’ (r = -0.21, p < .05), and ‘Child smiles or laughs during the teaching episode’ (r = -0.20, p < .05) of IRS at 18-months-old and ‘Peer problems’ of SDQ. Similarly, in the features of the caregiver-child interaction of 18-months-olds and strengths and difficulties of 42-month-old children, there are correlation between ‘Child’s total score’ (r = -0.19, p < .05), ‘Child vocalizes or babbles within five seconds after caregiver’s gestures, touching or changing his/her facial expression’ (r = 0.19, p < .05), and ‘Child adjusts his/her behavior within five seconds in accord with caregiver’s gestures, touching or changing his/her facial expression’ (r = 0.25, p < .01) of IRS and ‘Prosocial behavior’ of SDQ. In addition, ‘Child displays potent reaction during the teaching interaction’ (r = -0.18, p < .05), and ‘Child gazes at caregiver’s face or task materials after caregiver has shown non-verbal behavior’ (r = -0.19, p < .05) of IRS at 18-months-old and ‘Total Difficulties’ of SDQ. On the other hand, in the features of the caregiver-child interaction of 30-months-olds and strengths and difficulties of 42-month-old children, there are correlation between ‘Child stops displaying distress cues within 15 seconds after caregiver’s soothing attempts’ (r = -0.19, p < .05) of IRS and ‘Total Difficulties’ of SDQ. With regard to the features of the caregiver-child interaction of 42-month-olds and strengths and difficulties of 42-month-old children, there are correlation between ‘Child adjusts his/her behavior within five seconds in accord with caregiver’s gestures, touching or changing his/her facial expression’ (r = 0.20, p < .05) of IRS and ‘Emotional symptoms’ of SDQ, and between ‘Child stops displaying distress cues without caregiver’s response’ (r = -0.18, p < .05) of IRS and ‘Conduct problems’ of SDQ. Additionally, there are correlation between ‘Child attempts to elicit caregiver’s response’ (r = -0.18, p < .05), ‘Child vocalizes or babbles within five seconds after caregiver’s gestures, touching or changing his/her facial expression’ (r = -0.18, p < .05), and ‘Child is not restless or overactive’ (r = -0.20, p < .05) of IRS and ‘Hyperactivity-inattention’ of SDQ.

Conclusions: There were significant correlations between the IRS which measured features of the caregiver-child interaction with independent valuation within around 5 minutes and SDQ which measured child’s behavior problems and prosocial behavior by their caregiver who take care of them daily. These results showed that IRS has been established as a valid screening instrument. In Addition, the study suggests that features of the caregiver-child interaction predict later child’s behavior problems and prosocial behavior.

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