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Explaining the mathematical creativity of a young boy: an interdisciplinary venture between mathematics education and psychoanalysis.

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Summary: First results of the project Mathematical Creativity of Children at Risk (MaKreKi) will be presented. The project is conducted in the interdisciplinary research center Individual Development and Adaptive Education of Children at Risk (IDeA (<http://www.idea-frankfurt.eu/>)). Combining a socio-constructivist approach of mathematics education with a psychoanalytic theory of attachment, two foci of analysis are examined: the interactional reconstruction of working processes of creative children while they are confronted with mathematical problems in a cooperative learning situation and a psychoanalytically oriented reconstruction of the psychodynamic background of a mathematically creative child in its family. In this article, one case study is presented. Theoretical considerations that combine the psychoanalytic findings with the results of the socio-constructivist analyses are presented. This combination offers an innovative and unique perspective on the mathematical creativity of young children in preschool, kindergarten and primary school age.

Classification: C31 C41 C81

Keywords: mathematical creativity; early childhood; attachment theory

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