

### **Title**

The relation between linguistic skills and problem behavior in TD preschoolers

## **Authors**

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## **Background**

Language and behavior disorders often co-occur in clinical samples of children. However, whether linguistic problems can directly evoke problem behavior in typically developing (TD) children is unclear.

#### Aims

Therefore, the present study aimed to examine whether linguistic skills are related to problem behavior in TD preschoolers.

# Methods and procedures

We studied the influence of linguistic skills on behavior in 50 monolingual preschoolers (4-6 years) by eliciting 'communication breakdown' at different linguistic levels during an interactive tablet game. The type, amount and intensity of children's behavioral response was coded using a newly developed System for Coding Child Behavior in Interactive Tasks (SCCBIT). We also assessed the children's receptive vocabulary (PPVT-III-NL) to test the validity of the game as a measure of linguistic proficiency.

#### **Results**

The PPVT scores correlated significantly with the total score of the game (number of correct answers), r(50) = .503, p < .001. There was a significant negative correlation between total score of the game and total intensity of coded externalizing behavior (anger/frustration), r(50) = -.329, p = .019. Furthermore, the score on the pragmatic level correlated with both the total amount and intensity of coded externalizing behavior, r(50) = -.368, p = .009, r(50) = -.375, p = .007.

## **Conclusions and implications**

The results indicate that linguistic skills and problem behavior are related in young TD children. Moreover, the PPVT validates the game as a measure of linguistic ability. Thus, this tablet game is a potentially interesting tool for screening language problems as well as for examining how preschoolers deal with them behaviorally.