

# Investigating Bidirectional Links Between the Quality of Teacher-Child Relationships and Children's Interest and Pre-Academic Skills in Literacy and Math

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This study investigated bidirectional links between the quality of teacher-child relationships and children's interest and pre-academic skills in literacy and math and gender differences in them. Teacher-perceived conflict predicted lower interest and pre-academic skills in both literacy and math. Results were similar for boys and girls.

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This study investigated bidirectional links between the

quality of teacher-child relationships and children's interest and pre-academic skills in literacy and math and gender differences in them. Participants were 461 Finnish kindergarteners (six-year-olds) and their teachers (n = 48). Teacher-perceived conflict predicted lower interest and pre-academic skills in both literacy and math. Results were similar for boys and girls. Implications for reducing conflictual patterns of relationships together with promoting other factors are discussed.

- Kindergarten represents a crucial context in which children develop school-related skills and patterns of engagement that form the basis for the development of later competencies important for academic success.
- Above and beyond children's skills, previous literature has highlighted the benefits of positive teacher-child relationships for both academic and socio-emotional outcomes.

### **Teacher-child relationships**

- Supportive relationships with teachers are defined by a combination of high levels of closeness and low levels of conflict.
- Close relationships with teachers are characterised by warmth, approachability, and open communication.
- In such relationships, children can use their teacher as a secure base from which to take advantage of the learning opportunities provided.
- Coercive relationships can be characterised as conflictive ones where tension and anger exist within the teacher-child relationship.
- Teacher-perceived conflict with children has been linked to less favourable outcomes, such as lower achievement and higher levels of problem behaviours.

### **Theoretical perspectives on teacher-child relationships and child outcomes**

- Relationship-driven models are based on attachment theory, arguing that warm and supportive relationships between children and caregivers are crucial for favourable developmental outcomes.
- Self-determination theory (SDT) posits that individual propensity to seek challenges and enjoy mastering new learning unfolds when basic psychological needs for competence, autonomy, and relatedness are met in the classroom.
- Child-driven models propose the opposite direction of influence, that is, children's academic skills and interest in learning affect the quality of their relationships with their teachers.
- Bidirectional models are based on transactional theory, assuming that developmental outcomes are the product of a combination of an individual child's characteristics and the experiences and aspects of their environment.



## **The study**

The goal of the present study was to examine possible bidirectionality between teacher-child relationship quality measured by teacher-perceived closeness and conflict with individual children and child outcomes measured by the child's interest and pre-academic skills in literacy and math.

Research questions:

1. Do closeness/conflict predict child outcomes (relationship-driven model), or do child outcomes predict closeness/conflict (child-driven model), or are closeness/conflict and child outcomes reciprocally related (bidirectional model)?

2. Does gender moderate the associations between teacher-child relationship quality and child outcomes?

**The participants** were 461 children (222 boys) enrolled in 48 kindergarten classrooms from 32 centres.

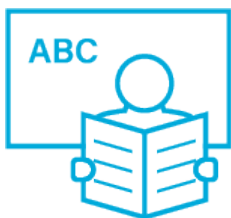


## Findings

- The relationship-driven model, which included stability paths and a predictive path from closeness and conflict to interest and pre-academic skills, best described the data.
- The quality of teacher-child relationships, pre-literacy skills, and interest in literacy were stable across time.
- Teacher-perceived conflict at kindergarten entry predicted lower interest in literacy and pre-literacy skills at the end of kindergarten.
- Regarding the control variables, maternal affection was positively related to pre-literacy skills at the end of kindergarten.
- Behaviour problems and negative emotionality were positively related to conflict, whereas inhibition was negatively associated with teacher-perceived closeness.
- Regarding gender differences, the main results were similar between genders, but there were some gender-related patterns between control variables and relationship quality: behavioural problems were related to teacher-perceived conflict only among boys, and a higher level of inhibition was related to a lower level of conflict in girls.
- Similar with the literacy model, the model comparison

for the math model also indicated that the relationship-driven model, which included stability paths and a predictive path from closeness and conflict to interest and skills in math, best described the data.

- Teacher-perceived conflict at kindergarten entry predicted children's lower interest in math and pre-math skills at the end of kindergarten.
- The results were mainly similar for boys and girls; however, pre-math skills promoted subsequent interest in math, and behaviour problems increased conflict only among boys



## Conclusions

- The relationship-driven model best described the data for interest and pre-academic skills in literacy and math: teacher-perceived conflict predicted lower interest and skills in both literacy and math.
- The results were largely similar for boys and girls.
- It can be suggested that a relationship with one's teacher without conflict and coercive interactions meets children's needs for relatedness and belonging at school and therefore supports the development of their intrinsic motivation and achievement.
- It can also be suggested that teacher-perceived coercive interactions and negative emotions are harmful for children's engagement in learning and diminish their interest in academic tasks.
- Because teachers may be more able to provide support, praise, and constructive feedback than to decrease

conflict, interventions and teacher preparation programs should focus on building and fostering the positive aspects of a relationship with each child.

- Teacher education programs may benefit from educating teachers not only about academic content and pedagogical practices, but also about strategies that build supportive relationships with children.