Temperamental Origins of Child and Adolescent Behavior Problems: From Age Three to Age Fifteen


976 New Zealand children participated in a longitudinal study from ages 3 to 15 to examine the relations between early temperament and later behavior problems. Factor analyses revealed three temperament dimensions at each age: Lack of control, approach, and sluggishness. Lack of control was more strongly associated with later externalizing behavior problems than with internalizing problems; approach was associated with fewer internalizing problems among boys; and sluggishness was weakly associated with both anxiety and inattention, especially among girls.

Key Findings:
- Ratings of temperamental characteristics at ages 3 and 5 were significantly correlated with behavior problems and competencies over a 12 year period (at ages 9, 11, 13, and 15).
- Boys and girls characterized by lack of control in early childhood were somewhat more likely to experience internalizing behavior problems a decade later. They were especially likely to experience a variety of externalizing problems in late childhood and adolescence.
- Lack of control was significantly associated with parent and teacher reports of hyperactivity and attention problems, as well as with late childhood antisocial behavior and adolescent conduct disorder.
- Boys characterized by approach tendencies (quick adjustment to new circumstances, confidence) in early childhood were significantly less likely to suffer from anxiety and distress in late childhood and adolescence.

Implications for Programs:
- Programs could offer supportive parenting classes, teaching strategies to support personal control and confidence in youth.
- Programs could collaborate with preschools and public schools to identify youth struggling behaviorally and provide appropriate supports.

Implications for Policies:
- Policies could suggest offering professional development for public school educators on early temperament characteristics and later behavioral problems.
- Policies could allocate funding to develop and evaluate parenting curricula that target some of these early manifestations of child temperament.

Avenues for Future Research:
- Future research could further examine how these early temperamental characteristics may lead to later behavioral problems.
- Additional studies could assess further developmental stages to see how early temperament influences later outcomes.

Prepared by the Military REACH Team.
For additional information, please visit reachmilitaryfamilies.umn.edu
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Background Information

**Methodology:**
- Parents of babies born in Dunedin, New Zealand in 1972-1973 were invited to participate in a longitudinal study containing perinatal assessment and then a battery of medical, psychological, and sociological measures.
- Assessments were conducted every 2 years beginning when the children were 3 years old.
- Behavior ratings were made by an examiner after observing the child in a data collection session. Parents and teachers reported on behavior problems.
- 91% of the eligible children at age 3 participated; 94% of those who participated at age 3 participated at age 15.
- Correlations were run to determine associations between temperament and child behavior. Multiple regressions were used to predict internalizing and externalizing behavior scores and competency scores.

**Participants:**
- 1,037 children participated at age 3. 976 youth participated at age 15.
- Specific demographic information was not presented here, but was reported to be representative of the full range of the general population (family socioeconomic status and child IQ were similar to British and North American samples).

**Limitations:**
- Little demographic data was presented, making generalizations difficult.
- The sample consists of New Zealand children; it is unknown how these results may apply to other youth populations.

### Assessing Research that Works

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<tr>
<th>Research Design and Sample</th>
<th>Quality Rating:</th>
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| The design of the study (e.g., research plan, sample, recruitment) used to address the research question was... | ![Rating Logo] 3
| Research Methods | Quality Rating: |
| The research methods (e.g., measurement, analysis) used to answer the research question were... | ![Rating Logo] 3
| Limitations | Quality Rating: |
| The limitations of this study are... | ![Rating Logo] 2
| Implications | Quality Rating: |
| The implications of this research to programs, policies and the field, stated by the authors, are... | Not applicable because authors do not discuss implications

**Overall Quality Rating**

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Not applicable because authors do not discuss implications