

## *The Early Catastrophe: The 30 Million Word Gap by Age 3*

Betty Hart and Todd R. Risley  
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Full text available at:

[www.aft.org/pubs-reports/american\\_educator/spring2003/catastrophe.html](http://www.aft.org/pubs-reports/american_educator/spring2003/catastrophe.html)

### **The Study:**

#### *Purpose:*

The goal in this longitudinal study was to discover what was happening in children's early experience that could account for the intractable difference in rates of vocabulary growth Hart and Risley observed among 4-year-olds:

- to understand the different developmental trajectories in vocabulary growth between two groups of children- those of University professors and those from the Turner House Preschool in Kansas City, Ks. (children from poverty situations) in previous study done by Hart and Risley
- to understand how and when differences in developmental trajectories began; to see what was happening to children at home at the very beginning of their vocabulary growth

#### *Who:*

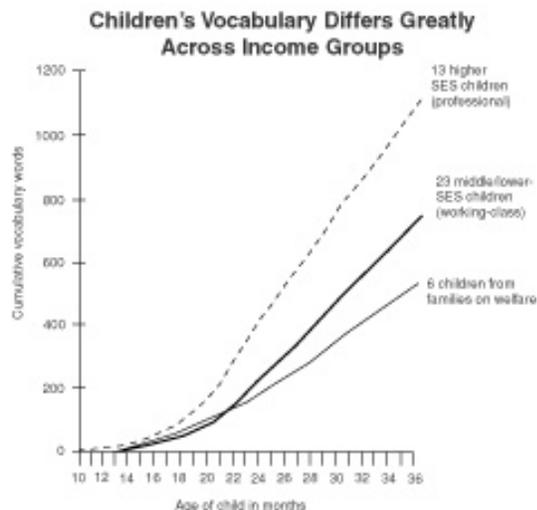
Children from 42 families were observed for one hour each month for a period of 2 ½ years, from ages 7-8 months (before they started talking) to age three. Families were from diverse backgrounds- including gender balance and the representation of socioeconomic strata.

#### *What they found:*

The 42 children turn out to be like their parents; they had not fully realized, however, the implications of those similarities for the children's futures:

- in stature and activity levels
- in vocabulary resources
- in language and interaction styles
- 86 percent to 98 percent of the words recorded in each child's vocabulary consisted of words also recorded in their parents' vocabularies
- by the age of 34-36 months, the children were also talking and using numbers of different words very similar to the averages of their parents

Researchers also looked at 29 of the original participants when they were age 9-10. They were "awestruck" at how well their measures of accomplishments at age 3 predicted measures of language skill at age 9-10.



**Encouragement and Positive Feedback:**

In the first four years of life,

- the average child in a professional family would have accumulated 560,000 more instances of encouraging feedback than discouraging feedback
- an average child in a working-class family would have accumulated 100,000 more encouragements than discouragements
- but an average child in a welfare family would have accumulated 125,000 more instances of prohibitions than encouragements

**Impact of Experience:**

"Behaviorally, infancy is a unique time of helplessness when nearly all of children's experience is mediated by adults in one-to-one interactions permeated with affect. Once children become independent and can speak for themselves, they gain access to more opportunities for experience. But the amount and diversity of children's past experience influences which new opportunities for experience they notice and choose."

"Estimating the hours of intervention needed to equalize children's early experience makes clear the enormity of the effort that would be required to change children's lives."

"Because the goal of an intervention would be to equalize children's early experience, we need to estimate the amount of experience children of different SES groups might bring to an intervention that began in preschool at age 4."

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*Summary by Kim Larson*

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