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# The New Jersey Families Study

How do families build skills in their young, pre-school children and help them get ready to learn?

## Overview

Families are small schools, and parents are children's first teachers. Every child in America is being home schooled in the sense that children's expectations, aspirations, and early abilities are shaped at home. Their behaviors, learned skills, and knowledge are forged in the crucible of parent-child interactions. Yet we know little about the nature, frequency, or quality of these interactions.

In the New Jersey Families Study, we ask: *How do families support their children's early learning?* Our study features a highly innovative "video ethnography." We use direct observations of parent-child interactions to deepen our understanding of the contextualized strategies that families from a wide variety of backgrounds and in different social and economic circumstances use to build skills in their young children. Video cameras placed strategically in participants' homes and activated continuously throughout the day and evening for two weeks constitute the primary means of data collection.

Interactions that hold particular interest are those that are believed to be linked to cognitive and social-emotional development—the amount of reading and talking parents do with children, children's sleep routines, their diets and nutrition, their exposure to electronic screen time, structure and routines at home, and the way that stress outside the home affects parenting practices. Taking a holistic approach to parent-child interactions and filming families in their natural habitats over an extended period will not only help more children to become school-ready. This unique study will also lead to a better appreciation of the daily struggles facing many families and thereby help schools become more "children-ready."

# Where We Are Today

A recent count shows that we have twice as much data as previously estimated—11,500 hours of in-home video recordings instead of 5,700 hours. With support from the Burke Foundation, we are building a searchable database to house 504,000 individual video clips. Metadata derived from room views, date and time stamps, and household demographic and socioeconomic characteristics are being associated with each video clip. Filters based on these metadata will facilitate easy access to the videos. Preliminary work has also begun in three related areas: (1) identifying participants in the clips; (2) using image detection to identify and blur instances of child nudity; and (3) evaluating automatic speech recognition software as one step toward creating a digital transcript of the audio on all NJFS video clips.

# Where We Are Today (continued)

The New Jersey Families Study promises to revolutionize our understanding of the roles of parent-child interactions, family dynamics, and the home environment in helping young children get off to a strong and healthy start in life. We are seeking additional external support not only to accelerate the curation of this unprecedently rich array of innovative data but also to offer it as an early childhood database to the global research community.

## New Members of the NJFS Team



Ana Delgado is an undergraduate student at Vanderbilt University majoring in Child Studies and Spanish and is pursuing a career in speech-language pathology. She joined the NJFS under Dr. Joanne Golann's direction in 2020. Ana works as a research assistant, creating content logs, narrative summaries, and memos for the video data. Through the project, she is interested in learning how parents use language to build cultural capital in their young children.

**Milind Bangalore** is a first-year undergraduate student at Princeton University, where he plans to study Operations Research and Financial Engineering. His academic interests include using artificial intelligence for social good. Towards this purpose, Milind has worked on software projects involving machine learning, mass spectrometry analysis, natural language processing, and computer vision. As a research assistant for NJFS, Milind will be using computer vision and machine learning to redact sensitive data from the video footage.





**Jiatong Yu** is a junior at Princeton University, majoring in Computer Science and specializing in computer vision and systems design. She hopes to build AI infrastructures that enable data-driven analysis in social studies. Her current work at NJFS involves video processing and search engine design.

# **Contact Information**

Please visit our website: https://njfamilies.princeton.edu

For more information about the project or to make a tax-deductible contribution, please contact:

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