

My final project investigates the developmental trajectory of visual statistical learning in children between the ages of 3 and 9 years. Specifically, it examines the "Learning Rate," which I defined as the speed at which children increase the performance gap between predictable and unpredictable stimuli as they progress through an experimental task. By calculating the slope of reaction time differences across four blocks of trials, I analyzed whether a child's age or sex predicts their ability to capitalize on environmental regularities. My science communication goal is to demonstrate that while individual learning variability is high, this specific cognitive mechanism appears to be a stable trait that is already well-established by early childhood, showing no significant linear improvement or gender-based differences during this developmental window.