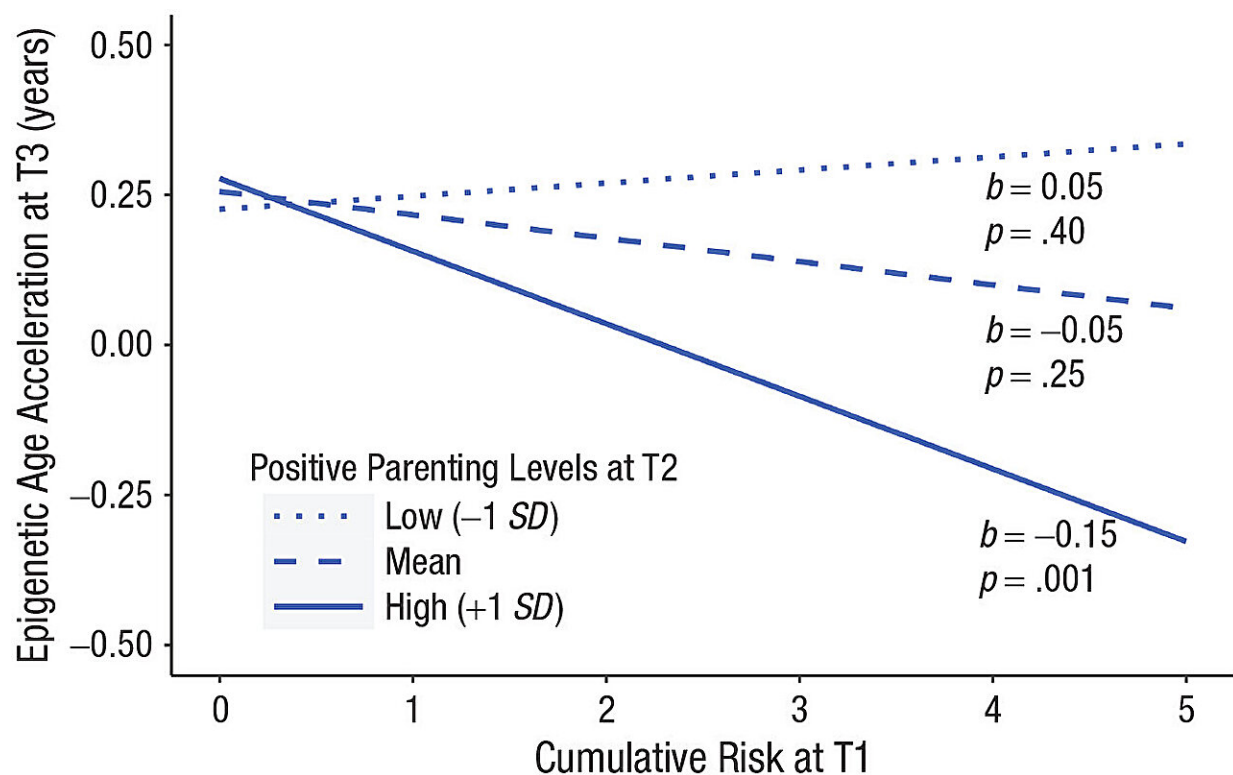


# Adversity accelerates epigenetic aging in children with developmental delays, but positive parenting can reverse course

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Observed positive parenting at Time 2, adjusted for Time 1, moderates the relationship between cumulative risk at Time 1 and epigenetic age acceleration at Time 3. Credit: *Psychological Science* (2023). DOI: 10.1177/09567976231194221

Research has shown that children who experience adversity during their early years may undergo faster biological aging.

Nonetheless, [recently published research](#) in *Psychological Science* reveals that [positive parenting](#) interventions can potentially shield children from this consequence, helping slow the epigenetic aging process.

A new study with research from the lab of Justin Parent, an assistant professor of psychology at the University of Rhode Island, has discovered that enhancing positive parenting through a [family](#)-centered program resulted in lower levels of accelerated biological aging for children who had experienced high levels of [adversity](#). The findings suggest that positive parenting programs can help children exposed to hardships turn back the clock and build biologically based resilience.

"Our [biological age](#) or clock can sometimes tick faster than our chronological age," Parent said. "We know experiences like trauma, maltreatment, [chronic stress](#), living in neighborhoods with high violence—all can cause wear and tear that physically ages you faster than you should. We wanted to see if supporting families who are facing adversities increase positive parenting behaviors has an impact on either reversing or buffering those negative effects."

The study was led by Dr. Alexandra Sullivan and involved researchers at URI as well as Florida International University and Stanford University.

Families with children with delays in development and disruptive behavior were randomized to receive parent-child interaction therapy (PCIT) sessions via telehealth to learn positive parenting skills or to a control group. For the intervention, therapists interact with the families, directly coaching parents in real time on how to increase warmth and support while avoiding negative parenting behaviors like yelling or hitting.

"We know positive parenting programs like this work. They reduce [disruptive behavior](#), increase positive parenting skills, and help families feel less stressed," Parent said. "Now, from this study, we are beginning to learn that increases in positive parenting for children with higher adversity have the potential to slow this biological aging process or potentially reverse it. Children exposed to high levels of adversity displayed lower epigenetic age acceleration when parents increased positive and decreased negative parenting practices."

Parent is continuing to expand the study at URI, and his team will be exploring the epigenetic mechanisms of risk and resilience. His aspirational goal for this research is to develop a saliva-based biomarker for identifying children at risk for mental health struggles and develop biologically informed personalized prevention services for families.

"I hope this provides support for the importance of helping families and increasing access to services for families in need," Parent said.

"Hopefully, policymakers and others will prioritize this."

**More information:** Alexandra D. W. Sullivan et al, Parenting Practices May Buffer the Impact of Adversity on Epigenetic Age Acceleration Among Young Children With Developmental Delays, *Psychological Science* (2023). [DOI: 10.1177/09567976231194221](https://doi.org/10.1177/09567976231194221)

Provided by University of Rhode Island

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