## RESEARCH BRIEF

Social Development Research Group



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## Childhood Preventive Intervention Across Generations

Trials of preventive interventions typically focus on the participants of the interventions, but what if a universal social development intervention showed sustained effects across generations? This was the question SDRG researchers and their collaborators asked about the Raising Healthy Children (RHC) preventive intervention implemented in the Seattle Social Development Project (SSDP) in the 1980s. The RHC intervention, delivered during elementary school, showed sustained positive effects on behavioral and health outcomes in participants into adulthood, years after the intervention ended. A recent study asked whether effects of the original intervention could now be seen in the children of SSDP participants.

## The Intergenerational Project

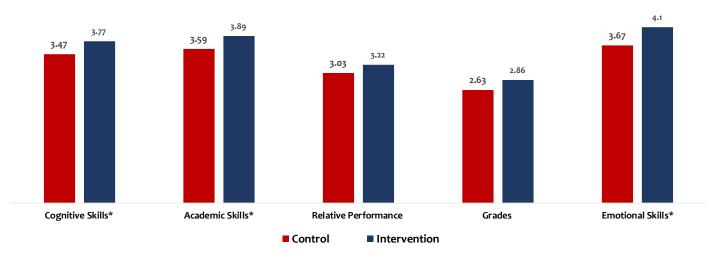
The new study, SSDP-The Intergenerational Project (SSDP-TIP), was designed as a **nonrandomized controlled trial** with follow-up of SSDP subjects' first-born offspring, ages 1–22 (assessed in seven annual waves). Participants in the original SSDP panel were from public elementary schools serving high-crime areas in Seattle, Washington. The generations involved in SSDP and SSDP-TIP are shown in the table below.

Study	Group	Supports Provided Through RHC
SSDP (1980-2014)	Teachers	Training in methods of classroom management and instruction
SSDP (1980-2014)	<b>G1:</b> Parents	Skills training to promote opportunities for children's (G2) active involvement in the classroom and family
SSDP (1980-2014)	<b>G2:</b> Children	Social-emotional and refusal skills training
SSDP-TIP	<b>G3:</b> First-born children of 182 parents from <b>G2</b>	N/A

**G** = Generation



## Teacher-Rated G<sub>3</sub> Academic Skills and Performance, Ages 6-18



\*Significant finding after applying Benjamini-Hochberg False-Discovery Rate (FDR) multiple comparisons adjustment

SSDP-TIP focused on G3 children—the offspring of G2. The study examined G3's self-regulation (emotion, attention, and behavior regulation), cognitive capabilities, and social capabilities. The study also examined G3's risk behaviors from adolescence onwards, including substance use, delinquency, and early-onset sexual activity.

The study controlled for factors that might potentially muddle the results. Significant differences were observed in G3 across four domains: **lower rates of developmental delay** (ages 1–5; significant standardized betas ranged from .45 to .56), **lower teacher-rated behavior problems** (ages 6–18; significant standardized betas ranged from -.39 to -.46), **higher teacher-rated academic skills and performance** (ages 6–18; significant standardized betas ranged from .34 to .49—see the figure above), and **lower child self-reported risk behavior** (ages 6–18; odds ratio for any drug use = 0.27, p. < 0.01).

A number of prevention trials implemented in the 1980s have continued to follow participants over the long term and have reported sustained positive effects into adulthood. To our knowledge, the present study is the first published report of intervention differences in the offspring of participants in a universal preventive intervention provided when G2 parents were children. *These results indicate that positive results from childhood intervention can not only cascade into adulthood, but into the next generation as well.* 

These differences are visible in ratings from multiple people with insight into the functioning of G3 children, including parents, teachers, and the G3 children themselves. G3 raters and participants were fully blind to the parents' original exposure to intervention condition. Cost-benefit analyses have demonstrated the benefits of childhood intervention in one generation. This study suggests the potential of social developmental interventions for promoting positive effects that could endure across generations.

For additional information on this topic, please refer to the original article:

Hill, K. G., Bailey, J. A., Steeger, C. M., Hawkins, J. D., Catalano, R. F., Kosterman, R., Epstein, M., & Abbott, R. D. (2020). Outcomes of childhood preventive intervention across 2 generations: A nonrandomized controlled trial. *JAMA Pediatrics*, *174*, 764-771. <a href="https://doi.org/10.1001/jamapediatrics.2020.1310">https://doi.org/10.1001/jamapediatrics.2020.1310</a>

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