

NAME OF PRESENTING AUTHOR: Emily Pali

EMAIL ADDRESS OF PRESENTING AUTHOR: Emily.pali@siu.edu

## Childhood Externalizing Problems: The Indirect Influence of Parental Negative Talk and Shared Genetic Effects of Child Aggression

Emily C. Pali<sup>1</sup>, M.A., Matthew R. Jamnik<sup>1</sup>, M.A., Riley L. Marshall, M.S.<sup>1</sup>, Rachel L. Weisbecker, B.A.<sup>1</sup>, Cheyenne Vazquez, B.S.<sup>2</sup>, Lisabeth F. DiLalla, Ph.D.<sup>2</sup>

<sup>1</sup>School of Psychological & Behavioral Sciences, Southern Illinois University, Carbondale, IL, USA

<sup>2</sup>Department of Family & Community Medicine, Southern Illinois University School of Medicine, Carbondale, IL, USA

KEYWORDS: aggression, preschool, externalizing, negative talk

### ABSTRACT:

Externalizing behaviors can cause serious, costly, and long-standing problems for children. Parent-child interaction therapy (PCIT) is aimed at combating childhood externalizing problems in children aged 2-7. PCIT aims to reduce disruptive behavior through decreasing negative talk (NTA) and other negative parenting behaviors while increasing positive parenting. In this study, we hypothesized (1) parent NTA and childhood aggression would be associated with children's externalizing behavior, and (2) these would share genetic variance. As part of a longitudinal twin study (DiLalla and Jamnik, 2019) of 328 twins/triplets, 4-year-old children and one parent worked together on a puzzle task. Reliable coders later rated parents for NTA and children for aggressive behaviors. At age 5, parents rated children's externalizing behaviors. Mediation analyses showed that parental NTA impacted child externalizing indirectly via child aggressive behaviors. Multilevel modeling examined within and between twin/family variance to assess causality and shared genetic effects. NTA was causally related to externalizing; the twin who experienced more NTA had higher externalizing behaviors one year later,  $p = .018$ . There was no shared genetic variance between these measures. However, there was significant shared genetic variance between age 4 aggression and age 5 externalizing behaviors,  $p = .005$ . Thus, NTA has an environmental influence on externalizing, whereas aggression's influence is largely genetic. This could have implications for clinical treatment focused on the impact of parental NTA on children's behaviors.

<sup>1</sup>DiLalla LF, Jamnik MR (2019) The Southern Illinois Twins/Triplets and Siblings Study (SITSS): A longitudinal study of early child development. *Twin Research and Human Genetics*, 22(6), 779-782.

GRANT SUPPORT: Funding was provided by a grant from the Central Research Committee of SIU School of Medicine to LFD.