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Cooperation Under Constraint: How Sibling Number Shapes Prosocial Decisions in Vulnerability Contexts

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Abstract

Drawing on Bronfenbrenner's ecological model (1979), Belsky's parenting process model (1984), and cumulative risk framework (Evans et al., 2013), this study examines whether sibling number predicts generosity in vulnerable children. Children raised with more siblings develop stronger negotiation and sharing skills (Padilla-Walker et al., 2015), promoting prosocial decision-making under scarcity. Fifty school-aged children from low-income migrant families completed a dictator game; generosity was operationalized as net tokens donated to in-group versus out-group recipients. Multiple linear regression with sibling number (1, 2, or 3+ siblings) and family type as a covariate explained 14% of variance ($R^2 = .14$). Sibling position was significant: children with 3+ siblings were more generous than those with two ($b = 1.91$, $SE = 0.86$, $p = .031$, 95% CI [0.21, 3.61]). Findings suggest family structure scaffolds adaptive prosocial responses under cumulative stress, offering insights for developmental models of prosociality. Replication with larger samples is recommended.