Parents that Play Lower Stress and Cortisol Levels: A Tale of 4 Resilient Families

Brittany R. Pope, MS * Holli Ritzenthaler, MSSA LISW * Benjamin Kearney, PhD LPCCS * Vincent Schiavone, PhD
OhioGuidestone’s The Institute of Family & Community Impact | Cleveland, OH

Background & Introduction
Toxic Stress is Dangerous:
- Negative Experiences have Profound Impacts on children, Especially During Critical Brain Development
- Chronic Negative Experiences without Adult Support result in Toxic Stress
- Toxic Stress Leads to Harmful Levels of Cortisol (“Stress Hormone”) Activity
- Caring, Supportive Adult-Child Relationships Buffer Impact of Toxic Stress & Cortisol: Balances the Stress Response System and Builds Resilience

Current Intervention Trends:
- Parent Education on Toxic Stress are focused on Explicit Processes and Raise Parent Stress
How Can We Approach Already Stressed Parents, and Ask to Lower Stress in Child’s Life?

Practical Tool to Lower Stress- Joyful Together™
Joyful Together™:
- Research-based model to Build Childhood Resiliency and Lower Stress
- Reduces Toxic Stress by Enhancing Caregiver-Child Relationships with joyful play
- Rooted in Interpersonal Psychology & Neuroscience:
  - Focuses on how the Brain develops in Context of Relationships
  - Implicit Associations
- Easy-to-do activities for to Coach Caregivers on infusing daily routines with joyful activity

Methods
- Randomized Control Trial testing Joyful Together™ with Families receiving Home-Based Services
- Subsample of Families in Intervention Group of Randomized Control Trial run with Families Receiving Home-Based Services
  (Help Me Grow, Early Childhood Mental Health, Psychotherapy)
- Measured Changes:
  Salivary Cortisol, Stress and Protective Factors after 6 sessions of Joyful Together™

Research Questions
Would Families have: Lower Stress? Improved Relationships? Salivary Cortisol Changes?

Results: A Tale of Four Families

Lower Salivary Cortisol: 3 of 4 Parents

Lower Overall Total Stress: All Parents (Average of all Family’s Children)

Family A
- Child A1 (5 years)
  - Asthma
- Child A2 (7 years)
  - ADHD
- Child A3 (8 years)
  - None
- Child A4 (9 years)
  - Anxiety
- Child A5 (10 years)
  - None
- Child A6 (2 years)
  - None

Family B
- Child B1 (11 years)
  - Increased
- Child B2 (7 years)
  - Intellectual Delays
- Child B3 (9 years)
  - None

Family C
- Child C1 (3 years)
  - Increased
- Child C2 (7 years)
  - None
- Child C3 (5 years)
  - Increased

Family D
- Child D1 (3 years)
  - Depression, PTSD, Gestational Diabetes
- Child D2 (3 years)
  - Asthma

Conclusions & Opportunities
Joyful Together™ (a parent-child play based model):
- Lowers Parent Stress
- Impacts Salivary Cortisol (representation of Stress Response System)
- Impacts Parent Relationship with Siblings/Household Family, even if not receiving clinical services
  (Overall Average Parent Stress Reduced)

Based on findings, thus far, can conclude that Joyful Together™ activities dampen effects of toxic stress by improving relationships and building resiliency.
A pilot study of the model showed positive results for parent-child pairs using the model. The model encourages parents to infuse play into as many everyday moments as possible, so we took the model further to examine the effect of coaching parents to play with all of their children on stress and salivary cortisol (not only the child receiving home-based services).

Further examination needed to elucidate connections between child and/or parent health histories and prescriptions with salivary cortisol, stress and protective factors
We observed decreases in parent stress and salivary cortisol (1 mother is an exception)- supporting our hopes that coaching parents to play with all of their children during home based services increases resiliency, and decreases parent stress by moderating the stress response system.

Acknowledgements
We graciously thank all the Families and Staff who have helped with the design and evaluation of Joyful Together! We acknowledge University Hospitals Cleveland Medical Center & Clinical Translational Science Collaborative of Cleveland, 4ULTR000439 for salivary sample processing.