BUILDING RESILIENCE IN RURAL, LOW-INCOME FAMILIES AND COMMUNITIES AND THE HIDDEN TALENTS FRAMEWORK

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WHO IS THIS GUY?

• Associate Professor and Extension Specialist at Kansas State University’s Department of Applied Human Sciences, in the College of Health and Human Sciences
• Master Trainer for Better Brains for Babies in Kansas
• B.S., Indiana University; M.S. & Ph.D., Virginia Tech
• Focus on rural families’ risk and resilience, especially in the context of access to quality, affordable child care

OVERVIEW

• Personal Statement
• The landscape of risk and resilience for rural families
  • Health
  • Poverty
  • Health Care
  • Child Care
• The Hidden Talents framework in relation to risk and resilience for rural families
• How children’s brains develop under the Hidden Talents framework
• So what?
SPEAKING OF RESILIENCE: A PERSONAL STATEMENT ON THE PANDEMIC

• COVID-19 has been exceptionally hard on my family and me:
  • Lost my father-in-law to cancer, died October 8, 2020 at age 59 devastating my wife, Danielle
  • Remote learning for Hannah (8) and providing child care and education for Hunter (3) while needing to produce for my full-time job
  • Hannah had her major cleft palate surgery (bone graft) in July, 2021
  • Extroversion makes the pandemic even more difficult = mental health struggles
  • Ambiguous loss of (all of) our children’s and families’ milestones during lockdown
• I humbly ask for your compassion and grace, and I freely extend my own to you

LANDSCAPE OF RISK AND RESILIENCE FOR RURAL FAMILIES

• Define rural:
  • Census bureau – ~19% live in rural areas
  • National Survey of Early Care and Education – ~ 10% live in rural areas
• Rurality is not a monolith
THE MONOLITH MYTHS

- Rural America is varied in population (e.g., age, race, education)
- America neglects diverse population in policy discussions

RURAL HEALTH CARE

- Rural residents more likely to not have health insurance
  - More likely to be hospitalized for preventable conditions than urban
  - More likely to be living in poverty than urban peers
- Rural racial and ethnic minorities = greater health disparities
- Medical community in rural areas need
  - Specialists (e.g. cardiologists, neurologists, psychiatrists)
  - Dentists
  - Pharmacists and pharmacies
  - Nurses
  - Hospitals

**FIGURE 5**
People of color are distributed across the rural-urban spectrum
Distribution of racial and ethnic groups across the rural-urban continuum

RURAL HEALTH

- Highest rates of premature death
- Urban counties show improvement, overall rates of premature death are worsening in rural counties.
- 19% of rural counties increased premature death rates over the past decade
- Lowest in overall health outcomes

RURAL POVERTY

- More than just a paycheck
- More persistent than urban
- Affects access to health care
- Affects access to child care
- Food insecurity is pervasive
- Housing options limited

Poverty rates by census region and metro/nonmetro status, 2015-19 average

RURAL CHILD CARE

- Families in rural areas face the greatest challenges in finding licensed child care with 60% of rural communities lacking enough child care.
- Preferences for care are multifaceted
  - Some communities place great value on family care
  - Quality, operating hours, location
- Rural families travel twice as far as urban families for care
- No discernable difference in quality of care between rural and urban areas

RESILIENCE IN RURAL COMMUNITIES

- High community ratings of safety
- Individuals can make a big difference
- Most rural Americans say they have adequate social support
- Generally positive view of quality of life
DEFICIT-BASED APPROACHES TO CHILD DEVELOPMENT

- 25% of adults in U.S. report at least three Adverse Childhood Experiences (ACEs)
- Harsh relationships and environments typically result in building neuropathways responding to danger
- Focus on mitigating risk and/or ameliorating deficits
- Developmental scientists know much more about vulnerabilities of adversity-exposed people than their strengths

ORIGINS OF THE HIDDEN TALENTS FRAMEWORK

- Evolutionary framework of Life History Theory: individual’s development should adjust to environmental stressors adaptive to ancestral environments
  - E.g., People with high ACEs prefer smaller immediate rewards over larger future rewards, such as taking $10 now, not $20 next year
  - Historically seen as dysfunctional
  - May actually be adaptive
- Previous research has shown that adults living in low SES display greater empathic accuracy (social-emotional development skill)
ASSUMPTIONS OF HIDDEN TALENTS

• Adaptive developmental processes improve the fit between individuals and their environments
• Specific forms of adversity (e.g., abuse versus neglect) may shape mental abilities in different ways
• People perform best when tested in contexts and with materials matching their lived experiences
• Some skills that enable people to function in harsh, unpredictable environments can be leveraged to promote success in mainstream contexts
HIDDEN TALENTS - HARSHNESS, AND UNPREDICTABILITY

- Two dimensions of environmental stress
  - Harshness: age-specific rates of morbidity—mortality in the local environment (SES)
  - Unpredictability: fluctuations in the harshness of environmental conditions across space and time (e.g., people in/out of the house, frequent family moves, changes in parents’ job/work status)
- Harsh and unpredictable environments motivate people to devalue the future
- Promote short-term opportunism to take advantage of immediate benefits

HIDDEN TALENTS AND EXECUTIVE FUNCTION

- Executive Function: management of cognitive processes that guide complex behavior
  - People who experienced unpredictable childhoods perform worse at inhibition (inhibitory control)
  - Perform better at efficiently switching between different tasks (task-switching)
  - Threshold of unpredictability determines the emergence of these executive function skills
EXAMINING THE DEVELOPMENTAL QUESTION OF WHY?

- Inhibition can be costly in unpredictable environments
  - Prevents people from taking advantage of important and fleeting short-term opportunities
  - Long-term opportunities are less likely to pay off in unpredictable environments
- Task-switching can be beneficial in unpredictable environments
  - Shifting between tasks flexibly, rapidly, and efficiently is essential
  - Ability to rapidly identify new patterns / associations can take advantage of new opportunities before they disappear
  - Can switch tasks with no decrease in accuracy

THE HIDDEN TALENTS FRAMEWORK AND BRAIN DEVELOPMENT

- Harsh environments can produce adequate or even enhanced problem-solving skills
- Stress-adapted skills represent a form of adaptive intelligence
- Identify the social and cognitive skills that develop in response to adversity
- Translate these skills to leverage educational, career, and intervention opportunities tailored to them
THEORETICAL MODEL OF TIMING EFFECTS

Highlights differential effects of early and current adversity

LIMITATIONS OF HIDDEN TALENTS

• Determining the effects of neglect versus threats to understand which ACEs are more important for which skills
• Determining how we compare performance
• Crossover of impairment and adaptation (happening simultaneously)
  • Hidden talent may be reduced due to impairments resulting from same harsh environment
  • Need for within-person and between person measures
ADVERSE EXPERIENCES AND BRAIN DEVELOPMENT

• Not all ACEs are equal, nor are their effects on neural pathway development

• Threats:
  • Children exposed to threats have reduced amygdala, medial prefrontal cortex, and hippocampal volume and heightened amygdala activation to threat (not neglect)

• Neglect:
  • Reduced volume and altered function in frontoparietal regions were observed consistently in children exposed to deprivation (not threat)

SO WHAT? RECOMMENDATIONS FOR THE FUTURE: PRACTITIONERS

• Acknowledge and internalize that there may be hidden talents in children in your orbit
  • Identify and promote adaptive behaviors for children from harsh environments to build self-efficacy
  • Understand and explain to stakeholders why long-term planning v. short-term reward might not be adaptive for children from harsh environments
  • Amplify the message of Hidden Talents – in adversity there can be resilience and sometimes outperformance (under the right conditions)
  • Incorporate a strengths-based view of early care and education, particularly for families facing increased adversities
  • Remember that rurality can serve as both risk and protective factors
SO WHAT? REMEMBER RURALITY AS BOTH CUMULATIVE RISK AND RESILIENCE FACTORS

• Internalize that a single individual can make a big difference in a rural community
• Build rural families formal and informal support networks (most rural Americans say they have adequate social support)
• Rural community safety can encourage support of vulnerable families as an application of being “one of us”
• Recognize that health, health care, child care, and poverty are inextricably linked in rural communities and seek to make changes in policies, systems, and environments

THANK YOU
QUESTIONS, COMMENTS, SHOUT OUTS!