

**Ordinary Magic: Resilience in Development**  
*with implications for practice*

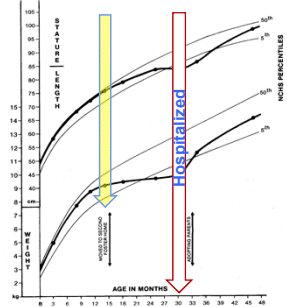


**Ann S. Masten**  
 Minnesota Council on Family Relations  
 New Brighton, MN November 16, 2018

**CEHD**  
 College of Education + Human Development

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**Sara – a case illustrating the power of caregiving**



Masten & O'Connor 1989

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**Overview**

- ❖ What is resilience?
- ❖ What have we learned?
- ❖ How can we promote resilience?

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**Advances in resilience science since the 1970s**

- Methods
- Models
- Levels of analysis
- Cultural studies
- Inclusion of research/researchers from the Global South
- Collaboration of humanitarian agencies with researchers
- Bridging divides to prepare for disaster
- Realization that we need a common language

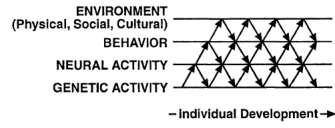
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Capacity of a system to adapt successfully to challenges that threaten system function, viability, or development

**RESILIENCE**

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**Human development**  
 ...emerges from interactions across levels

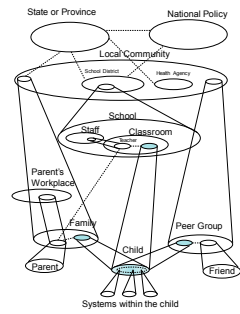


Gottlieb

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## Systems of development

- Embedded
- Interacting
- Interdependent



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## From a developmental perspective...

- Resilience is always changing
- Capacity for adaptation is spread across systems
- Individual & family resilience depends on other systems
- **Diverse pathways of adaptation are expected**

Masten, 2012, 2014, 2016; Masten & Cicchetti 2016

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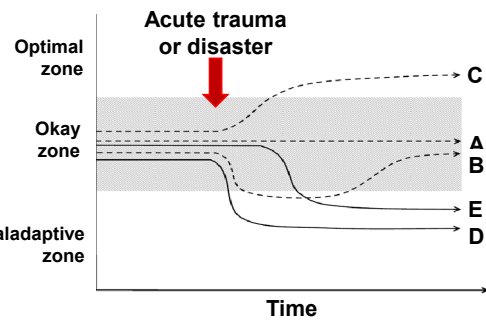
## Pathways

The course of development can be described as a pathway

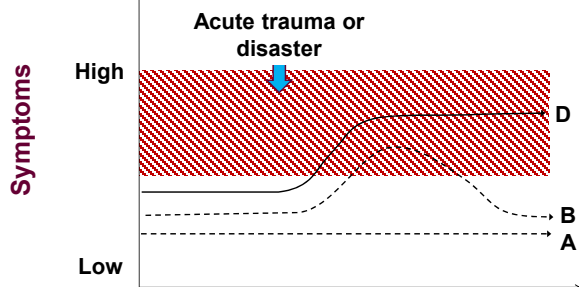


Patterns of adaptive function vary over time in relation to adversity or challenges

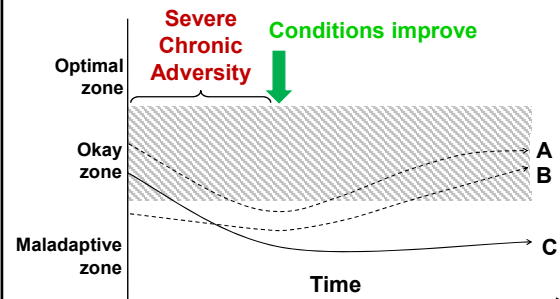
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## Resilience after chronic adversity Examples

- Recovery of
  - Abused children moved to better homes
  - Children adopted from orphanages
  - Child soldiers who are rescued
  - Refugees who find a safe new homeland

What happens when adverse conditions endure?

## 3 defining questions in resilience research (individuals)

1. What are the challenges?	3. What fosters adaptive success?	2. How is the person doing?
Threats	Promoters/Protections	Adaptive success
Trauma	Neurobiological	Developmental tasks
Neglect	Individual	Mental health
Poverty	Family & relational	Physical health
War	Community	Happiness
Natural disaster	Cultural	School or job achievement
ACEs	Societal	Caregiving

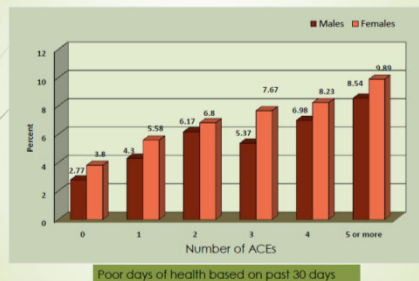
## ACEs

Boynton Health  
2015  
College Student  
Health Survey

17 colleges  
including  
U of M;  
St. Cloud State;  
St. Cloud Technical  
& Community College

12,000 surveys

Adverse Childhood Experiences (ACEs)  
Association Mean Number of Days of Poor Mental Health (undergraduates)



## ACE scores in homeless parents compared with national data

Total ACEs	ACEs in Homeless Sample	ACEs in National Sample
0	15.0%	36.1%
1	17.8%	26.0%
2	12.1%	15.9%
3	7.5%	9.5%
4 or more	43.0%	12.5%

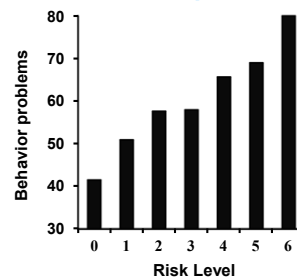
National data retrieved from  
<http://www.cdc.gov/ace/prevalence.htm>

## Frequency of specific ACEs in homeless parents vs MN adults

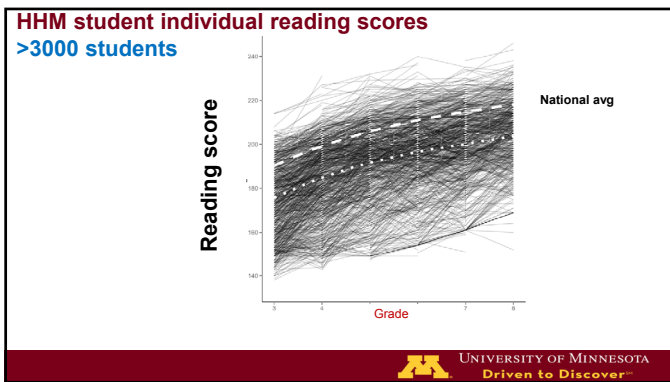
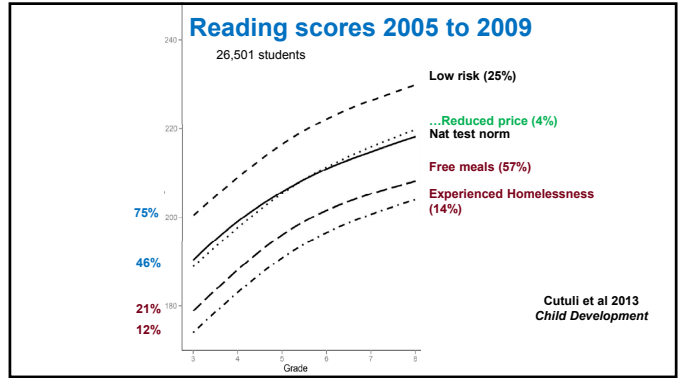
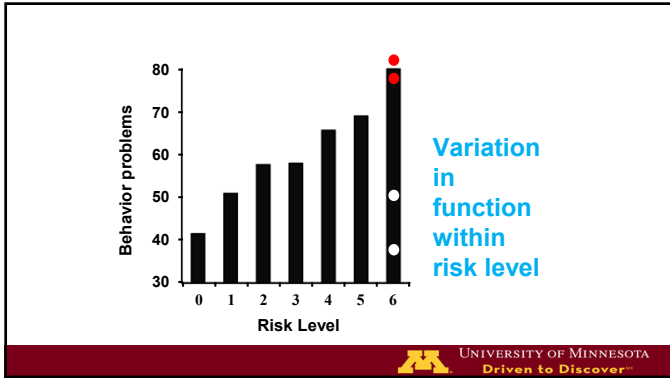
Abuse and Neglect	Homeless Parents	MN Adults
Physical Abuse/Neglect	39%	16%
Sexual Abuse	31%	10%
Emotional Neglect/Verbal Abuse	58%	28%
Household Dysfunction		
Mental Illness	22%	17%
Divorce/Separation	50%	21%
Domestic Violence	29%	14%
Parental Incarceration	17%	7%

MN data from Minnesota Department of Health (2011)

## Risk gradient in a sample of homeless children



- Risk Factors**
- Low education
  - Single parent
  - Parent died
  - Parents divorced
  - Foster care
  - Maltreatment
  - Saw violence



**The short list**

- Capable caregiving
- Other close relationships
- Problem-solving skills
- Self-regulation skills
- Self-efficacy
- Motivation to succeed
- Faith, hope, optimism
- Purpose/belief life has meaning
- Effective schools
- Well-functioning communities

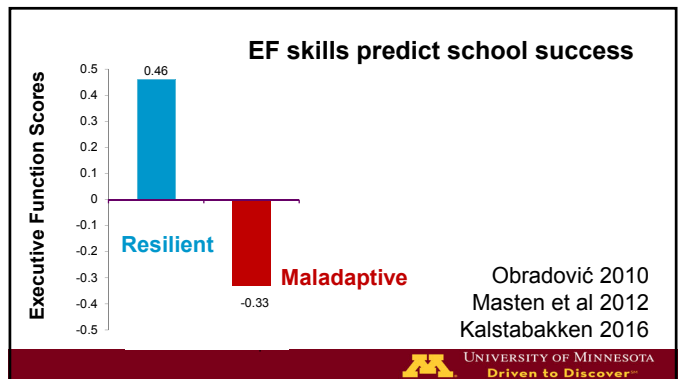
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**Child skills matter**

- **EXAMPLE Executive function skills (EF)**
  - Neurocognitive processes that we use to direct attention, thoughts, or actions to achieve goals
  - Self-control
- **Important for school success**
  - pay attention, listen to teacher
  - control emotions and impulses
  - wait turn, sit on the circle
  - follow instructions
  - switch activities

Photo by Dawn Vilella

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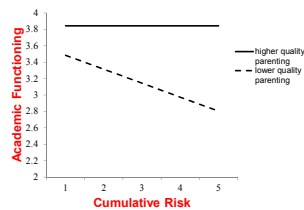
## Families matter

- Nurture body, mind and spirit
- Secure base (emotional security)
- Economic security
- Regulate stress
- Influence gene expression
- Monitor environment for safety
- Foster learning and self-regulation skills
- Facilitate achievement of developmental tasks
- Broker resources (social capital)
- Transmit cultural capital

## Roles of families in exposure

- Gatekeeping and shielding
  - Preventing or reducing exposure
  - Monitoring exposure
- Preventing family stress spillover
  - Cascading effects of stress on family function
  - Terrified parents are terrifying to children

## Parenting quality moderates risk in homeless families



See Herbers et al 2011, 2014

## Moderators of ACEs 2011/12 National Survey of Children's Health

- Good family functioning mitigated risk of ACEs on adolescent health and well-being
  - Balistreri & Alvira-Hammond 2016
- Able to stay calm in face of challenge associated with lower risk for emotional, mental, or behavioral conditions
  - Bethell et al 2016

## Parallel Protective Factors

Individual Resilience	Family Resilience
Nurturing, sensitive caregiving	Nurturing care of vulnerable members
Attachment, security, belonging	Family cohesion, sense of belonging
Skilled parent management, discipline	Maintaining family boundaries, rules
Agency, motivation to adapt	Active coping, mastery
Problem-solving, planning	Collaborative problem-solving
Self-regulation, emotion regulation	Co-regulation, family balance
Hope, faith, optimism	Hope, faith, optimism
Meaning making, life has meaning	Coherence, family meaning making
Positive views of the self or identity	Positive views of family/family identity
Routines and rituals	Family routines and rituals

## Parenting Resilience

"the capacity of parents to deliver competent, quality parenting to children despite adverse circumstances"

- Gavidia-Payne, Denny, Davis, Francis, & Jackson, 2015

- Social connectedness
- Family functioning
- Psychological well-being
- Self-efficacy

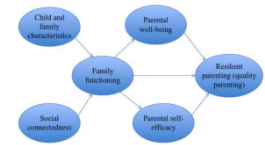


Figure 1 A parental resilience model.



## Schools matter

### Nurture resilience

- Build human capital
  - Cognitive and social skills
  - Knowledge and talents
- Promote positive relationships
  - Prosocial peer activities
  - Relationships with competent adults
- Opportunities for self-efficacy
- Normal routines

### Effective schools

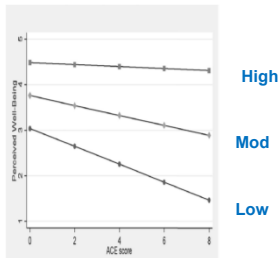
- Strong leadership
- Effective teaching
- Positive school climate
- Asset rich environments
- High expectations, support, & structure

## Communities matter

- ❖ Supports for families
- ❖ Supports for education
- ❖ Parks, libraries, recreation
- ❖ Health care
- ❖ Emergency services and disaster preparedness
- ❖ NGO + government services
- ❖ Policies and laws that support children & their families
- ❖ Traditions and rituals for overcoming stress
- ❖ Support for cultural practices and celebrations

## “Sense of community” moderates link of ACEs to adult well-being

Nurius et al 2015



2010 Behavioral Risk Factor Surveillance System BRFSS for Washington State (random dialing) N over 13,000

## Community-Level Parallels?

Individual	Community
Nurturing, sensitive caregiving	Care of vulnerable members
Attachment, security, belonging	Community pride, belonging
Skilled parent management, discipline	Skilled governance, effective services
Agency, motivation to adapt	Active coping, mastery
Problem-solving, planning	Collaborative problem solving
Self-regulation, emotion regulation	Well-regulated community
Hope, faith, optimism	Hope and optimism about community
Meaning making, life has meaning	Community coherence, meaning
Positive views of the self or identity	Positive views of community
Routines & rituals	Community routines & celebrations

## Important protective systems at other levels

- Within the individual (neurobiological)
  - Immune system
  - Arousal regulation systems
  - Stress regulation systems
- In religion and cultural systems
  - Meaning-making systems of belief, rules and rituals for living
  - Attachments to spiritual figures
  - Arousal regulation through meditation, prayer, mindfulness
  - Cultural practices that provide support

## Risk & resilience of individuals is linked to

- ❖ Dose of exposure (ACEs and other indicators of adversity)
  - Current and cumulative
- ❖ Recovery environment
  - Physical, psychological, social, spiritual
- ❖ Resilience in other systems
  - Family and other relationships
  - Schools and other community systems
- ❖ Individual differences
  - Biological health and stress systems
  - Age, sex, personality, sensitivity to experience

## Beyond ACES

- Variation – the missing story
- Assess assets, resources, & protections

*Clues to mitigating risk and promoting resilience!*

## Resilience science has transformed practice in many fields

- Clinical psychology
- Pediatrics, Psychiatry
- School psychology
- Counseling
- Social work
- Family social science

### Shifting the focus

- Positive outcomes
- Strength-based
- Promotive & protective processes
- Building capacity at multiple levels

## Resilience Framework for Action

<b>Mission</b>	Frame positive goals
<b>Models</b>	Include positive influences
<b>Measures</b>	Assess assets & positive goals
<b>Methods</b>	Prevent - promote - protect
<b>Multiple</b>	Multiple levels & disciplines

## Strategies

### Risk

- Prevent or mitigate damaging adversity exposures

### Assets and Opportunities

- Increase resources or access to resources

### Adaptive systems

- Support, restore, or engage human adaptive systems

## Risk-focused strategies for child development

- Prenatal care to prevent premature birth
- Reduce stress of pregnant women
- Screen and treat depression in mothers
- Reduce child maltreatment
- Avoid multiple foster care placements
- Reduce family violence
- Reduce school and neighborhood violence
- Clean up toxins
- Dig up landmines
- Prevent homelessness

## Asset-focused strategies

- Food, water, shelter, medical care, dental care
- Educate parents, teachers, and traditional “first responders”
- Add financial resources
- Provide books or a tutor
- Quality childcare & early education programs
- Build schools, playgrounds, libraries
- Build or restore community services
- Stabilize housing, schooling, case managers
- Scholarships from early childhood to adulthood

## Adaptive system focused strategies

### Engage powerful engines of change

- Foster secure attachment relationships
- Promote bonds with competent/caring adults
- Support healthy family life and function
- Protect and nurture brain development
- Facilitate school bonding and engagement
- Foster friendships with prosocial peers
- Integrate systems of care
- Provide opportunities to succeed, develop talents...
- Support cultural traditions

**Strengthen  
relationships  
brain power  
self control  
purpose**

## Keeping in mind

### ...interventions that work typically are

- Developmentally informed
- Culturally appropriate
- Ecologically and developmentally strategic
- Focus on the positive and existing strengths
- Promote the positive & reduce risk or problems
- Mobilize & support powerful adaptive systems
- **Well timed and targeted**

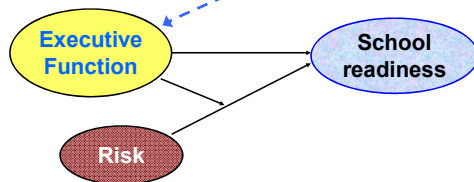
## Windows of opportunity

- When plasticity is surging
- When conditions converge for change
- When systems are in flux or unstable
- **Some are developmental**
- **Some arise from chance**
- **Some arise in the context of adversity**
- Some arise when people seek help
- **Ask when and where is there leverage for change?**

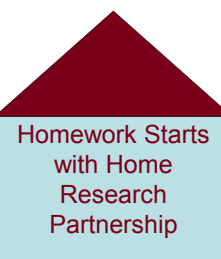
## Examples of interventions to promote school success in children from very high-risk homeless or highly mobile families

- ★ **Reduce risk & stress**
  - Reduce family stress; screen & treat depression in parents
  - Prevent homeless episodes & school changes
  - Reduce hunger and food insecurity
  - Prevent family and community violence
- ★ **Increase resources & access**
  - Financial supports, housing
  - Health care and mental health services
  - Quality childcare, early education, schools
  - Tutors, summer programs, computers, high speed internet
  - Family advocates
- ★ **Promote protective processes**
  - Effective parenting, teaching, mentoring
  - Self-regulation skills
  - Opportunities to succeed and develop talents
  - Support families & cultural traditions that promote resilience

## Ready? Set. Go! Intervention



## Grand Challenge: End Student Homelessness





## New Horizons



### Emerging neurobiology of resilience

- Interplay of genes, biological systems, and experience
- Programming and reprogramming of adaptive systems
- Biological embedding of stress, good parenting, culture
- Protecting brain development

### Aligning systems to foster resilience

- Linking families, healthcare, schools, peers, community
- Aligning state and national policies with child resilience

### Cultural traditions/practices that promote resilience



## Intriguing questions

- **Can resilience be transmitted across generations?**
- **When & how does experience with adversity foster resilience?**
  - Is overprotection a problem?
- **Are some children more sensitive to adversity?**
  - Are they also sensitive to positive experiences and intervention?
- **Are there hidden skills?**
  - Stress-adapted youth with skills that can be redirected?



## How do we leverage the power of integrated systems?

- **Given that resilience depends on multiple systems**
  - Individual
  - Family, school, peer systems
  - Cultures and religions
  - Communities
  - National identities
  - Informational and social media
- **Will aligning sectors and disciplines yield synergy?**



## Integrating resilience across systems, disciplines, applications

### In theory

- ❖ Molecular & global
- ❖ Individual & family
- ❖ Family & community
- ❖ Psychosocial & ecological
- ❖ Human & electronic
- ❖ Social & economic

### In action

- ❖ Disaster response
- ❖ Humanitarian
- ❖ Prevention science
- ❖ Public health
- ❖ Climate change
- ❖ Peacebuilding



## Take home messages

- Resilience is common despite ACEs
- Resilience is dynamic & many systems influencing adaptive capacity
- Recovery depends on multiple interacting systems
- ACEs can and should be prevented
- Resilience can and should be promoted
- Resilience of children & families depend on other systems



## Resilience in Minnesota & societies around the world depends on the resilience of children & families



Invitation to a MOOC on Coursera.org



## Resources by Ann Masten

### Book on resilience

Masten, A. S. (2014). *Ordinary magic: Resilience in development*. New York: Guilford Press. Paperback (2015) Available through Amazon and Guilford for about \$25. Opening chapter free at Guilford Press. <https://www.guilford.com/books/Ordinary-Magic/Ann-Masten/9781462523719/reviews>

PopTech talk on resilience: <https://www.youtube.com/watch?v=GBMet8oIvXQ>

### MOOC: Resilience in Children Exposed to Trauma, Disaster and War: Global Perspectives.

Mass Open Online Course (free or pay for CEU credits from CEHD, University of Minnesota) <https://www.coursera.org/learn/resilience-in-children> . There is a video “trailer” at <https://www.class-central.com/mooc/1768/coursera-resilience-in-children-exposed-to-trauma-disaster-and-war-global-perspectives>

### Resilience overviews and commentaries [open access; google the doi to locate a free copy]

Masten, A. S. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory and Review*, 10, 12-31. doi:10.1111/jftr.12255 <https://onlinelibrary.wiley.com/doi/abs/10.1111/jftr.12255>

Masten, A. S., & Barnes, A. J. (2018). Resilience in children: Developmental perspectives. *Children*, 5, 98. doi:10.3390/children5070098

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85, 6-20. doi:10.1111/cdev.12205

Southwick, S. M., Bonanno, G. A., Masten, A. S., ... (2014). Resilience definitions theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5, 25338 (1-14). doi:10.3402/ejpt.v5.25338

### Encyclopedia on Early Childhood Development ~ section on resilience

Resilience section (edited by Masten). There is a summary and also articles by leading researchers. <http://www.child-encyclopedia.com/resilience/introduction> (free to download complete topic)

### Risk and resilience in homeless families – overviews of 25 years of research

Masten, A. S. et al., (2015). Educating homeless and highly mobile students: Implications of research on risk and resilience. *School Psychology Review*, 2015, 44, 315-330.

EDtalk on resilience in students experiencing homelessness given in Minneapolis Sep 25, 2017 <https://www.achievempls.org/edtalks>

### Concise articles on resilience for educators

Masten, A. S. (2009). Ordinary Magic: Lessons from research on resilience in human development. *Education Canada*, 49(3), 28-32. <https://www.edcan.ca/?s=Ordinary+magic>

Masten, A. S. (2018). Schools nurture resilience of children and societies. *Green Schools Catalyst Quarterly*, V(3), 14-19. <http://catalyst.greenschoolsnationalnetwork.org/gscatalyst/Store.action>

### Children in war and disaster

Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war and terrorism: Pathways of risk and resilience. *Annual Review of Psychology*, 63, 227-257. doi: 10.1146/annurev-psych-120710-100356 [open access]