



RESEARCH BRIEF: Resilience and Mental Health Outcomes

What is Resilience?

- “The protective factors, processes and mechanisms that contribute to a good outcome despite experiences with stressors shown to carry significant risk for developing psychopathology”
- The capacity of individuals and systems (families, groups, communities) to cope successfully in the face of significant adversity or risk (Hjemdal et al., 2007).
- Many factors affect resilience; we need a multidisciplinary, transdisciplinary perspectives for better understanding and implementation (psychology, neuroimmunology, epigenetics, neuroscience, psychiatry, sociology, philosophy, theology)
- Based on a strengths, not deficit, model

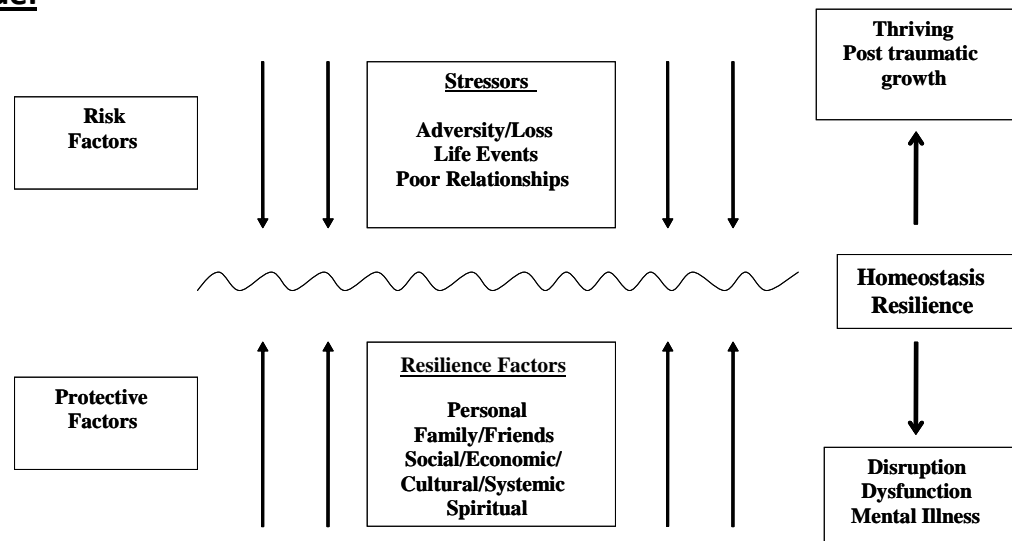
Adverse experiences

- “Negative life events that are statistically associated with adjustment difficulties or subsequent mental disorders”
- Poor/absent parenting
- Violence/war
- Traumatic events (e.g., child maltreatment, partner violence)
- Poverty
- Parental mental illness
- Physical illness

Factors that contribute to resilience

- Hardiness
- Optimism/hope
- Resourcefulness
- Self efficacy/self esteem
- Adaptability
- Internal locus of control
- Cognitive appraisal
- Sense of coherence

Resilience Model



What We Know About Resilience and Mental Health

- Research on resilience is relatively new, with 85% of existing articles published in the last decade;
- The ‘first wave’ of resilience research focused on individuals, i.e., that “people possess selective strengths or assets to help them survive adversity”;
- Results from resilience research might reveal promising knowledge useful in designing health-promoting and treatment interventions

Emerging approaches

- Newer theories of resilience focus on individuals, but also on the social determinants of health and systems more broadly;
- An emerging understanding is that relationships form the foundation of resilience, and that these are set in the broader context family, peers, schools, community, social support, policy
- Thus resilience may be both context- and content-specific and is likely not static and vary over time

The role of environment

- Harsh early environments affect developing brain structure and function and neurobiological systems, including changes in neural networks, brain size, and the hypothalamic-pituitary-adrenal (HPA) axis
- Chronic exposure to stress increases cortisol (a.k.a. the "stress hormone") production, which:
 - damages neurons
 - affects synthesis of reuptake neurotransmitters
 - affects sensitivity of receptors
- Supportive, sensitive early caregivers in infancy and childhood increase resilience by reducing “toxicity” during the development of the brain
- There may be “sensitive periods” when interventions work best

The interaction of genes and the environment

- ‘Meaney-Szyf Paradigm’: maternal care of rat pups influences the development of HPA stress responses; adult rat offspring of mothers that had increased pup licking/grooming and arched back nursing had more modest HPA responses to stress.

Resilience across the lifespan

- Adults can enhance children’s chances of doing well by providing consistency, building trust and encouraging inner strengths
- Strong relationship with a caring and competent adult can be a protective measure for children exposed to violence
- Intriguing early studies on increased resilience in the elderly



Measuring Resilience

- Quantitative tools to measure resilience have been developed, including:
 - Resilience Scale for Adults (RSA) (Friborg, 2003; Friborg et al., 2005; Friborg et al., 2006; Hjemdal, 2007)
 - Resilience Scale for Adolescents (READ) (Hjemdal et al., 2006; Hjemdal et al., 2007)
 - Connor Davidson Resilience Scale in 25-item (CD-RISC) (Connor & Davidson, 2003), 10 item (CD-RISC-10) (Campbell-Sills & Stein, 2007) and 2-item versions (CD-RISC-2) (Vaishnavi, Connor, Davidson, 2007).
- Qualitative research on the topic is a rich source of exploratory data that provides different views about the same questions, for example:
 - Adolescents value sense of agency, self reflection, and investment in relationships outside of their family of origin.

Resilience Interventions

- Current thinking about resilience emphasizes the following regarding intervention research in this area (Luthar & Cicchetti, 2000):
 - Focus on competence (strengths) rather than maladjustment (deficits)
 - Exploration of links between vulnerability and protective factors
 - Look beyond individual to the environment
 - Foster resilient pathways not just resilient behaviours/people
 - Interventions need robust evaluations and address important questions in health policy and practice (need for integrated knowledge translation and exchange in developing and researching resilience interventions)

What We Don't Know – Research Gaps

- This is an emerging area of inquiry with huge gaps in knowledge and the need for extensive research across the spectrum from epidemiology through to intervention studies;
- An integrated research agenda in resilience involves determining the critical requirements for evidence-based interventions at individual, family, community and systemic levels;
- Primary prevention efforts include interventions to reduce abuse and neglect in families;

Practice & Policy Implications of Current Best Evidence

- There are inadequate studies on gender and cross-cultural differences in resilient responses to adverse and traumatic exposures, including the nature, limits and antecedents of resilient adaptation across diverse at-risk groups across the lifespan.
- Further work is required to determine policy and practice implications.



Key References

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