



## 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

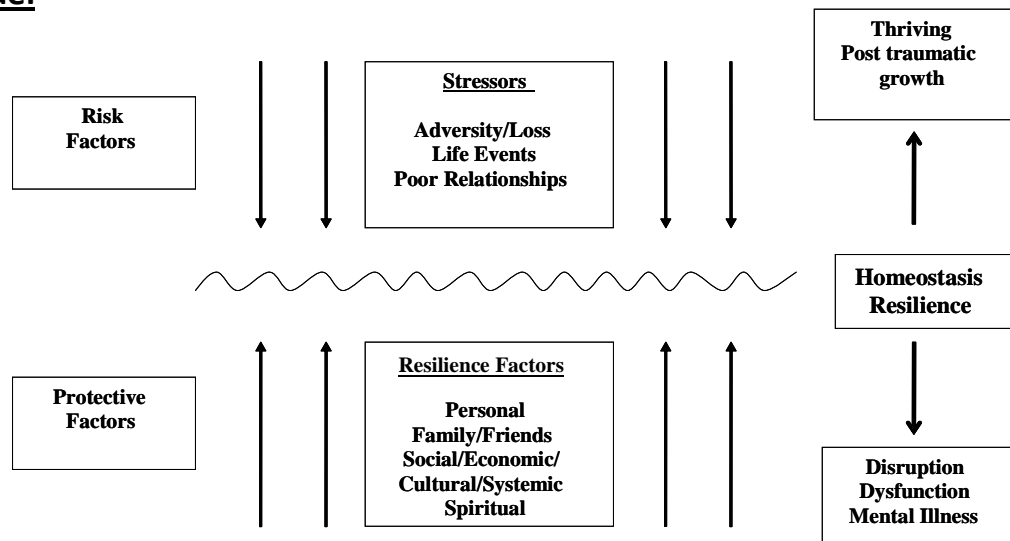
#### **Adverse experiences**

- “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



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## **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



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## **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.



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## **How to cite this document**

Stewart, D. Research Brief: Resilience and Mental Health Outcomes. PreVAiL: Preventing Violence Across the Lifespan Research Network. London, ON. 2010.

## **For more information**

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