

Fathers groups are currently advocating for a universal 50/50 shared time presumption.

While such agreements may benefit numerous families, many experts, including ourselves, worry that such a presumption may offer the “right” solution for the wrong group of parents: the 10% or fewer who contest custody in court⁵. Other concerns we share include avoiding extensive time away from attachment figures among very young children, avoiding placing excessive travel demands on children in order to share parenting time across long distances, whether shared time needs to be precisely 50/50, and if some child mental health problems (e.g., autism spectrum) or personality (e.g., high conscientiousness) make shared custody less likely to work⁵.

There is, therefore, a critical need for studies on interventions, including policy changes, that consider the risks, role of resiliency, and heterogeneity in the consequences associated with family instability.

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Resilience from a developmental systems perspective

Interest in human resilience is surging in the context of natural disasters, war, political conflict, and increasing awareness regarding possible consequences of adversity in childhood for health and well-being in adulthood^{1,2}. Although resilience science is not new, current research is more multidisciplinary, multilevel and developmental than ever before, reflecting a developmental systems perspective with profound implications for defining and investigating resilience, as well as for translating evidence into practice³.

Resilience science emerged from research on etiology of mental disorders¹. Investigators studying children at risk for psychopathology observed striking variation in outcome, as many individuals with risk factors for mental health problems (e.g., maltreatment, poverty) nonetheless developed well. Resilience research aims to understand this variation in order to inform interventions that mitigate risk and promote positive development.

Models of resilience shifted with the infusion of dynamic systems theory into developmental science⁴. As a living system, a human individual develops through myriad interactions at many levels, from genetic and neurobiological to social and cultural^{5,6}. Adaptive systems develop within the person (e.g., immune system, stress-regulation system, self-regulation system) as the individual, embedded in larger systems, adapts simultaneously to external contexts. All these dynamic interactions shape development, yielding diverse pathways of adaptive function³.

The capacity of a developing child to respond to challenges and adversities depends on the operation of many systems, varying from neurobiological stress-regulation systems to families, schools, community safety and health care systems, and numerous other sociocultural and ecological systems. Resilience reflects resources and processes that can be applied to restore equilibrium, counter challenges, or transform the organism.

Definitions of resilience evolved to reflect insights on developing systems. Currently, resilience can be defined broadly as “the capacity of a system to adapt successfully to disturbances that threaten the viability, function, or development of the system”¹. This definition can be applied to diverse systems, including individuals, families, businesses, communities, economies, or ecosystems. It has the advantage of scalability across system levels, which is increasingly crucial for integrating concepts and knowledge about human resilience across disciplines and levels of analysis.

As this definition suggests, the resilience of an individual depends on resilience of interconnected systems. Systems interdependence is salient in major disasters, when multiple systems are overwhelmed at the same time, and also in family-level crises, when disturbances in the mental health of a caregiver can disrupt the quality of care or lead to child maltreatment⁷. It is important to remember that resilience of an individual is not limited to the capacity that person can muster alone. Indeed, much of human resilience is embedded in relationships and social support⁸.

Accumulating evidence on resilience has identified a number of factors that could explain why some individuals fare so much better than others. Some factors are common, associated with positive adjustment during or following different adverse experiences, although they vary in form and relevance across development and context. Such factors may well reflect adaptive systems preserved by human evolution, biological and sociocultural, because they enhance survival¹. Common protective factors include effective caregiving and other supportive relationships, problem-solving and self-regulation skills, self-efficacy and optimism, and beliefs that life has meaning³. Identified early in resilience studies, common factors were

corroborated repeatedly in basic studies with diverse populations and in intervention trials designed to promote resilience³. Other protective factors appear to be relatively unique to a particular culture or context, such as specific forgiveness rituals or spiritual practices.

Initial resilience research focused on psychosocial factors that might mitigate risk or promote better adaptation. With advances in measurement at other levels of analysis, resilience science expanded rapidly to include the neurobiology of resilience, genetic processes, cultural influences, and the cascading spread of risk and protection across systems, levels and generations³. Advances in the study of epigenetic change raised interesting considerations about biological embedding of experience, via gene methylation and related processes, which may explain effects of trauma and caregiving quality on brain development and lifelong health⁹. One of the most provocative questions posed by recent theories of biological sensitivity to experience, and the related concept of differential susceptibility, is whether children who adapt poorly to adverse experiences may also be more responsive to positive experiences, such as interventions tailored to foster mental health and competence among sensitive individuals³.

Resilience research has had a transformative effect on multiple disciplines concerned with promoting mental health and well-being, shifting intervention frameworks away from deficit models toward more comprehensive approaches that include promotive and protective factors as well as risks and vulnerabilities, focusing on health as well as illness¹. Examples range from strength-based school counseling to global humanitarian efforts moving beyond child survival to thriving³. A meta-analysis of resilience-oriented school interventions found reductions in mental health symptoms (depression, anxiety), particularly for cognitive-behavioral strategies¹⁰.

Current directions in resilience science hold exciting promise for elucidating how adaptive capacity develops and operates to mitigate risk or promote resilience, guiding intervention models, targets and timing. Strategies could focus on preventing trauma, lowering stress, inoculating against stress through calibrated exposures, reducing vulnerability, boosting resources, restor-

ing and mobilizing powerful adaptive systems, or generating positive cascades across system levels or generations. Timely targeted interventions could range from preventing maternal perinatal stress to boosting social relationships in late adulthood. It is conceivable that key adaptive systems adversely affected by early trauma, such as neurobiological stress-regulation systems, can be “reprogrammed” later in development to improve adaptive function⁹.

Developmentally-informed research on resilience has the potential to elucidate processes across systems and levels that would inform efforts to promote mental health, prevent psychopathology, and facilitate recovery. Developmental studies may identify windows of opportunity when there is greater plasticity and leverage for change, so that interventions can be effectively tailored and timed for efficacy, adapted to individual, developmental and situational differences. Policy makers and non-governmental organizations are already evaluating synergistic effects of integrating their services across system levels (vertical), sectors (horizontal) and generations. As knowledge expands, resilience theory can be tested and refined through randomized trials that target malleable processes with strategic timing to leverage opportunities for change.

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