

Resilience and recovery

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The theme for this article identifies a shift in psychological, psychoanalytic concern from an individualistic interpretation of human experience to one that offers a systemic approach to a child's life. Resilience research departs from previous patterns in which psychological insight was grounded on what we knew about individuals in terms of their present and past experience. In describing resilience as a systemic approach, this article examines responses children make to trauma and loss, by looking at a whole world experience that shapes and informs those responses. Resilience research identifies external factors and internal characteristics of those children that develop their capacity to thrive under stressful conditions and recover after they have *experienced loss*.

The purpose of the article is to show that, by understanding the capacities some children have for resilience, others might gain knowledge to continue more meaningful lives despite, or perhaps due to, a significant loss. In addition, that knowledge may inform and inspire the adults who care for them. The possibility of recovering from loss is a human potential: as Confucius said, 'Our greatest glory is not in never falling, but in rising every time we fall'. Using several case studies, the author outlines the nature of resilience and picks out its role in recovery to make the point that resilience, i.e., doing well, despite adversity is an outcome of a set of interrelated components in a child's life. The argument is made that resilience relies for its development on relationships among positive personal responses to crises, a caring family, and a civil community.

Keywords: resilience; recovery; loss

Introduction: two case studies

One scenario: Two girls woke up to another morning of shouting between their parents who were arguing about their older brother because he had not come home again the previous night. Each parent was working at two jobs, trying to climb their way out of the poverty of an inner city subsidised housing project. Anna, scowled, as she put on the same clothes she wore yesterday, and she worried about what the kids at school would say about her. The other, Jenna, was already thinking of an art project her teacher assigned. She did not notice her mismatched socks as she waltzed into the kitchen, seeming almost oblivious to the tension that was thick in the room.

Another scenario: Two boys, John and Ryan, dozed in the back seat after an intense weekend at a basketball tournament when suddenly the van spun out of control and crashed into the side of the road. Three of their team mates were killed in the accident, but John and Ryan, sitting together at the back, were miraculously unhurt – or so it seemed at the outset. Both went back to school to resume their routine, but altered life. Counsellors were available to all students, but

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neither of these two boys went to see them. After several months John still woke up with nightmares, his grades were dropping, he seemed to have lost interest in many of his favourite things, and he refused to talk about the accident. His parents, initially concerned, were increasingly frustrated that he wasn't 'getting over it'. Ryan, though initially very sad and frequently emotional, appeared to be back on track. He spoke of their lost friends and wanted to start a basketball scholarship in their names, which was a surprise to those who knew him since before the accident, he was seen as quite shy and retiring.

Why is it that these children, similar in some characteristics, when faced with risk and trauma, have such different psychological outcomes? Why is it that for some young people, challenge leads to growth and change, yet for others only to more suffering? Questions such as these led researchers in the 1970s to explore an observation that some children develop well under risk conditions, while others do not. These researchers believed that understanding the factors and conditions that led to better outcomes in some children and youth could improve the life chances of all children who encounter hazardous experiences (Masten and Obradovic 2006, 14), such as those that were affecting Anna, Jenna, Ryan and John.

In this article, I explore the concept of resilience and propose that it is not a personality or inborn trait as was once thought; rather, resilience is a manifestation of a complex interaction of factors, both genetic and environmental. To make this point, I examine resilience as a form of adaptive behaviour and then apply its theory to the case studies above. Following that application, I will discuss the interactive relationships between a child's biology and his or her environmental conditions to show that neither biology nor environment alone can account for resilience. I will conclude with suggestions to show how the principles gained from resilience research can be applied to individual children and youth in the family and in society. Implicit in the discussion is a belief that children and youth can handle crises better if protective factors, skills and conditions are intentionally fostered in the family and in the community that surrounds it.

A new way of thinking about adaptive behaviour

Resilience refers to doing well, despite adversity. Its research points out that the behaviour associated with the term is not simply part of someone's personality; it is not something some people are born with and others are not born with. It is a type of adaptive behaviour, a set of observable traits that arise when someone is faced with the difficult scenarios that Anna, Jenna, John and Ryan were experiencing. The term refers to an ability to rise above adversity and come out the better for it. People who demonstrate resilience are those who thrive in the face of trouble. Two of the children in the scenarios described above are able to adapt to difficulty in positive ways; two are not so able. How are we to understand the adaptability that Jenna and Ryan are expressing?

Adaptive behaviour in general, which can be defined as the ability to cope with the demands of one's environment, includes self-help strategies, communication and social skills. Adaptive behaviour has for a long time fascinated researchers, clinicians and parents alike. Until the 1970s, the study of typical human development and the study of abnormalities in psychological development (psychopathology) were predominantly two separate disciplines. The merging of these two perspectives led to the field of developmental psychopathology. As these two discourses were linked, resilience research benefited from their marriage because, as a form of adaptive behaviour, resilience requires that someone *both* be exposed to an adverse event or conditions *and* demonstrate an outcome in which that person does better than would have been expected. For example Jenna and Ryan's exposure to risk

was similar to Anna and John's but the outcomes differed. What is it about Jenna and Ryan, and their interaction with the system within which they lived, that led to differing outcomes, i.e. to their positive pattern of recovery?

As scientists examined the descriptors, underlying processes and conditions that led to positive responses in young people such as Jenna and Ryan, the field of resilience research unfolded. The exploration was greatly influenced by Bronfenbrenner's ecological systems theory, which held as a core idea 'that human individuals are living systems continually interacting with the contexts in which their lives are unfolding, including family, peer groups, schools and larger systems' (Bronfenbrenner 1979).

The pre-eminent scholar and child psychiatrist Sir Michael Rutter also posits that resilience research started by recognising the huge individual variation in people's responses to the same risk experiences. As an example, some children who lived with parents who had schizophrenia did not fare well, while their siblings did. Rutter suggested that if we could understand 'the mechanisms underlying that variation [it would] cast light on the causal processes and, by so doing, [would] have implications for the intervention strategies with respect to both prevention and treatment' (Rutter 2006, 43) of children and youth undergoing significant stress.

In contrast to the systemic approach associated with resilience studies, previous research looked at external circumstances and examined their effects on individuals. As examples, researchers asked about the effects on a developing child of environmental conditions such as poverty, single parenthood, dangerous neighbourhoods and parental schizophrenia. In contrast, the idea of resilience moves from focusing on external risk to investigating how external risks are dealt with by an individual relying on his or her dynamic internal processes. In one way, resilience researchers turned their field glasses around and looked through the other end: they focused not on the far object, i.e. the environment in which a child struggled, but looked close-up at internal processes of the child, the object near to hand. They studied children who were experiencing loss, rather than only examining the environment that necessitated their adaptive behaviour.

For example, Anna and Jenna were exposed to the same conditions of external risk: both experienced living in poverty, they shared the same parents, whose educational attainment did not improve during the girls early years. Yet they responded differently. What are the factors that led to their different adaptations? Is a healthier response an outcome of birth order, temperament, differences in their exposure to abuse, their intelligence, having preferred status in an important arena, or, is it simply that one of the girls got better genes for adaptive behaviour? Jenna's behaviour constitutes a better way of adapting to her situation, since she accepted mismatched socks and didn't worry what people would say about her. Her behaviour is a positive adaptation because she was able to think about an art project she looked forward to as a way of expressing her talent.

It is important to clarify that *resilience* is a term used in many contexts and is easily confused with other concepts, such as competence, coping, positive mental health, or even resiliency. Coping and adapting describe behaviour that is a response to stress; these strategies do not imply that the behaviour is positive or successful. We can be coping with stressors by simply going through the motions of our day-to-day rituals, as one example. Resilience refers to behaviour that is a constructive, positive adaptation to stressful situations.

Resilience is also different from resiliency. The latter term is a characteristic, or ability, to return to a previous level of functioning after a stressful experience; some would say it is a better descriptor of rubber bands than it is of people. Resilience, on the basis of my first-hand knowledge as a psychiatrist, as well as on the research, refers to being transformed and altered by an experience of adversity so that one is not the same: the person with resilience

does not return to a former state of functioning, but is actually better off. Resilience describes individuals who do not simply cope, but recover in a way that demonstrates they are moving on with life in a thoroughly positive way.

The characteristics of resilience

Individuals such as Mother Teresa, Pope Jean Paul II, Bill Clinton or Oprah Winfrey, to name some exemplars, are people who have faced significant adversity and demonstrated resilience. They had difficult early life experiences and not only overcame adversity but became great in at least some capacity. In the past, we may have thought they were invulnerable, superhuman, somehow inoculated against the conditions of their childhood. Such thinking was reflected in the 1970s by articles like one in the *Washington Post*, March 1976, which stated, ‘Trouble: A bubble to these kids’, a headline implying that some children could simply burst the bubble of adversity around them and move on. This view of children and adversity was followed by the myth of the ‘golden child’, one who stood in the midst of despair, yet remained gleaming and unscathed. The problem with this view of childhood and youth was that it promoted an idea not only that the resilient children were somehow special but also that resilience was a quality given only to a few.

These attitudes to recovery intimate that somehow children who bounce back from difficulty have been untouched or unaffected by those experiences or that they have superhuman traits that make them invulnerable to difficulty. As a result, people tended to think that resilience was an inherent quality of an individual – some people have it, some people do not. This is not only a false construct, but it minimises the effort and success of young people who have overcome adversity. The Latin term for invulnerable means ‘not to wound’ and intimates that one is incapable of being hurt or that one is immune to attack. It is essential to understand that resilient people have been attacked, felt the wound, were affected by adverse events, but they have surmounted them. What is it about them that allowed them not only to survive but to thrive? The answer may come as a surprise, since it lies in what they are able to rally to their aid.

Resilience does not come from rare and special qualities, but from the ‘everyday magic’ (Masten 2001) of ordinary, normative human resources in the minds, brains and bodies of children, as well as in their families, relationships and communities. The ongoing study of resilience has revealed that the adaptive behaviour connected to it arises from interactions within and between individual organisms (human beings) and their environment. As Masten discovered, what began as a quest to understand the extraordinary revealed the power of ordinary experience. The characteristics of resilience, then, are ordinary capacities people have internally (within the child) and externally (within the family and the community).

Characteristics within the child

Masten’s work was informed by a longitudinal study, Project Competence, which followed 205 children and families from the 1970s to the present. The study continues with over 90% of its initial population still participating (more than 20 years later). As she looked back over the data collected on these children, she observed that young adults that demonstrated resilience in their twenties had shown the following characteristics in childhood, namely

- Good intellectual and attention skills
- Agreeable personality in childhood
- Achievement motivation and conscientiousness

- Lower stress reactivity
- Parenting quality in childhood and adolescence
- Positive self-concept
- Competence in childhood conduct, academic and social.

Some might think that these characteristics are inborn, but in fact most are manifestations of interaction between biology and the environment. For example, the development of attention skill requires attentive care-giving in infancy and nurturing, warm responsiveness when setting limits in toddlerhood. We learn to inhibit our impulsiveness and focus our attention as we are embraced by our family members and at schools. A positive self-concept comes from the experience of doing well and being acknowledged for that accomplishment. Children who are bombarded with messages of what they are constantly doing wrong develop self-concepts that are negative and self-defeating. So what is it about Jenna that makes her resilient?

On the surface, we could read her story and decide that she just doesn't get it – that she is not paying attention to what is going on in her household, that her sister actually has a better grip on reality. However, according to resilience research, Jenna has a different outlook, one of optimism. She appears to have a more agreeable personality. Is that because she is temperamentally less intense, so she can let things go and is thereby easier to parent and subsequently receives less negative attention? She has lower stress reactivity; things don't stress her as much as they do her sister. When events are stressful, she is able to get back to a pre-stress state more quickly. We all know people who can't let go of issues and get stuck and even make themselves sick. The ability to leave issues aside requires the self-reflective ability to say, 'I can deal with this later'. This response is developed through having positive experiences of successfully dealing with challenges.

Anna, by contrast, is stuck in a negative outlook. She has not been able to see beyond the moment that is 'stressing her out'. Perhaps as the older of the two girls, she has had more responsibility placed on her shoulders, which has left her feeling resentful. Perhaps she has a temperament that dislikes change, is slow to warm up, gives out less warmth in social interaction so that her family members feel less secure in her love for them. She may be prickly in new situations; due to the overriding stress of poverty, her parents may be unable to find a way to help her identify her negative emotions and to mature by reflecting upon them.

Jenna has a sense of purpose and can focus her attention on her interests and exclude distracters. She is aware of the conditions in her family, she focuses on what can be, rather than on what is absent in her environment. Perhaps she epitomises the African proverb, 'It is not what you call me, but what I answer to that names me'. Anna, however, can think only of what she does not have.

But resilience is more than optimism. Jenna has faced the difficulties and has continued in an intentional way to be hopeful. It is not that she is oblivious to her circumstances – something else is going on. Masten concluded that she and her colleagues

learned that youth who overcome childhood adversity and continue on to adult success have more protections and resources in their lives than their peers who do not fare as well. We observed 'late bloomers' whose lives took a dramatic turn for the better in the transition to adulthood, suggesting that new resources, opportunities, and supports converge in this window to promote positive change. (Masten 2008)

Another group of researchers under the direction of Harvard university professor Stuart Hauser and colleagues addressed the processes that underlie resilience. They interviewed 67 teens who had been significantly enough disturbed as teenagers to be admitted to a locked unit in a psychiatric facility. Their book, *Out of the woods* (2006) tells the stories

of four of these youth who have not only survived but are thriving. Sadly, only nine of the 67 young people were doing well at all; many continued to lead very troubled lives. By looking at their narratives from the time of their admission to the facility at age 15 until adulthood, Hauser's group could delineate three characteristics crucial to resilience:

- Personal agency and a concern to overcome adversity
- A self-reflective style
- A commitment to relationships (Hauser et al. 2006, 39).

In Hauser et al.'s terms, Jenna and Ryan had a sense of agency – a sense that what they do matters and that they could intervene successfully in their lives. They believed they could make a difference even when their optimism was challenged. Rather than be emotionally beaten by the loss of his friends, Ryan wanted to make meaning out of their deaths by creating a scholarship in their names. He had a sense that he could make a difference. He may very well have had a family that understood that his reticence stemmed from introversion, not avoidance; they may successfully have communicated that they accepted him as he was and were available to provide support when he asked for it. In contrast, John's behaviour suggests that he was feeling isolated and lost. He did not use others as a means of comfort or seek out assistance. This reaction is seen often in children whose parents cannot meet their emotional needs when they are upset, distressed or ill. Attachment theory proposes that when children have predictable adults in their life that respond to their emotional needs, they will face stressors (stress-inducing events) better. If caregivers avoid responding when children need them, or are unpredictable in their responsiveness, the young develop a working model or worldview that tells them people are not reliable. This can lead them to give up and focus the blame for their difficulties outside of themselves, rather than looking for ways to be agents of change.

Masten and Hauser et al. discovered that competence and developmental tasks at one age are effective forecasters of good future development; that is, resilience tends to endure. Yet they also learned that late resilience is possible: many thriving young people did not demonstrate resilience as they struggled through earlier hardships, but they did so eventually. This is a profound lesson and brings parents, teachers and counsellors much hope, although resilience research also points out that the child or young person has to express receptivity to that positive affirmation and support. Resilient children are those that can tell the story of their lives; that is, they are reflective of their experience; they can stand back from their difficulty and hence impact the story in positive ways.

The characteristics within the family

A crucial factor appeared in the lives of children who showed resilience: it was the presence of a secure base, a safe harbour. Children and youth who demonstrate resilience had one or more adults who loved and believed in them and remained connected to them in order to provide consistent emotional support. Grandparents, uncles, aunts, friends and teachers had shone the magic of connectedness on these children and encouraged resilience in their lives. Models of family functioning described by Olson, Russell and Sprenkle (1989) identify three characteristics central to healthy families, which are

- Cohesion, which facilitates togetherness
- Adaptability, which balances flexibility and stability
- Clear, open, consistent communication.

Research studies demonstrate that healthy families solve problems with cooperation, creative brainstorming, and openness to others (Reiss 1980), which is a point of research that is very similar to the processes described by Hauser. If families feel they can make a difference in a difficult situation and exert positive control over some aspects of it, better outcomes ensue. In addition, having the ability to reach out to others for support appears to be a characteristic of resilience, both in individuals and in families. This reaching out includes maintaining ties to institutions and social groups. Schuster and others found that 90% of Americans surveyed immediately after the 9–11 attacks reported turning to prayer, religion or spirituality in an effort to cope (Schuster et al. 2001).

Resilience is a construct, a theory that identifies the cumulative effects of a way of functioning that has positive outcomes when people face trouble with the attitude that 'this too will pass'. In terms of family dynamics, resilient families are less reactive; they employ creative brainstorming when difficulty arises and they express openness to others.

The characteristics within the neighbourhood

The well-being of the family is also impacted by the neighbourhood. In the community at large, resilience is strengthened when there is cohesion among neighbours, adaptability and open and consistent communication. Dr Felton Earls is the lead researcher in a multi-year, multimillion dollar study called the Project on Human Development in Chicago Neighborhoods. He is studying the impact of neighbourhoods in Chicago on development. He co-authored a pivotal paper in 1997 appearing in *Science*, in which the authors proposed 'that the differential ability of neighborhoods to realise the common values of residents and maintain effective social controls is a major source of neighborhood variation in violence' (Sampson et al. 1997, 918). They hoped that the notion they termed 'collective efficacy' would become a buzzword among social scientists and policymakers. Collective efficacy is a form of social cohesion among neighbours, in which they understand that they are all willing to intervene on behalf of the common good (918). At the heart of the concept is 'Trust, reciprocity, and a willingness among people to look out for one another', and Earls also notes that 'cities that sow community gardens may reap a harvest not only of kale and tomatoes, but safer neighbourhoods and healthier children' (cited in Hurley 2004).

Froma Walsh, from the University of Chicago, also studied traumatic loss and gave a compelling argument for expanding the focus from individual symptom-focused intervention to an approach that 'taps strengths and resources in relational networks to foster healing and posttraumatic growth' (Walsh 2007, 2007). As with individuals and families, when a neighbourhood believes in its collective efficacy in resolving its own difficulties, it acts out the characteristics that inhere in resilience.

Biology and environment

The topic of resilience also requires that we address the role of genetics. There is a continuing debate in the literature about whether a 'resilience gene' exists. One of the most exciting areas of research currently is the study of *epigenetics*. Genetics is the study of DNA-based inherited characteristics in organisms; epigenetics looks at factors that affect gene *functioning*, without changing the actual DNA. Imagine the workings of a computer in which DNA or the genome (the complete set of 23 chromosomes) is the hardware; epigenetics is the software that tells the genome how and when to work, as well as how hard to work. Others liken it to a metaphor using words and stories: the DNA is the words, but the story is ever-changing

through the frequency and timing of particular words, and this is the epigenome. Epigenetics is a branch of research concerned with gene and environment (G×E) interactions and is the next great frontier in science.

As part of this early epigenetic research, the Dunedin study is a large longitudinal study from New Zealand that is providing ground-breaking evidence of genetic and environmental interaction. Researchers know that people are born with variations in their genes depending on their parents' contribution. We get one set of genes from each parent. A gene often comes in two varieties (such as a gene for eye colour that makes eyes brown or blue). An individual can thus have two copies of the gene of the same variety (brown-brown or blue-blue), or two copies of different variety (brown-blue). When looking at serotonin, a neurotransmitter in the brain known to be involved in depression, researchers found that people receive serotonin transporter genes from their parents that have either two short alleles (like the blue-blue above), two long alleles (like brown-brown), or one long and one short allele (blue-brown).

There is a relationship between the length of alleles and a tendency toward depression, but what the researchers discovered is that unlike eye colour, in which these genes cause eye colour, the mere presence of these alleles is not enough to *cause* depression. Rather, in people who have both the presence of two short alleles (making them vulnerable to depression) those who also experience maltreatment in childhood experienced high levels of depression (Caspi et al. 2003). Similarly, with the gene that regulates another neurotransmitter, monoamine oxidase inhibitor A, which is seen to be low in people with antisocial or conduct problems, low levels alone do not lead to difficulty; but if children have low levels of these transmitters and they also experience maltreatment in childhood, their problems soar (Caspi et al. 2002). Rutter also concluded that findings like these strengthen the idea that there is not a single universally applicable resilience trait. From the perspective of biology and environment, resilience is an outcome of the interaction of genetic makeup and environmental effects, which is also why, when neighbourhoods act together and believe that their collective actions can have significant effects on their quality of life, they are thought of as resilient.

Conclusion

Resilience research offers hope to children and youth as well as to their parents, teachers and counsellors. But how does research help parents, teachers and community members to foster resilience in the young? The evidence in the research suggests that what matters is a basic sense of connectedness with others through attachment and social support. The oft used African proverb, 'It takes a village to raise a child', truly is the heart of resilience; but we need also to recognise that sometimes 'it takes a child to raise a village'. Children can be exemplars of resilience and can teach us how to recover from loss in a way that makes all of us more human. If parents are supported in their attempts to be emotionally responsive and available to their children and focus on the development of social relatedness with them and other community members, they will enhance the role of empathy throughout childhood and into young adulthood.

This develops the pathways for empathy and resilience to work together. Too often parents are challenged to focus their attention on making children behave well, rather than emphasising a desire that they should grow up to be people that can love well. If we accomplish the goal, a second factor comes along with it. Children become able to regulate emotion, arousal and behaviour. If they are given opportunities to learn and experience effectiveness, they develop what is called self-efficacy, which is having a sense that 'I can

do it'. Self-efficacy is a fundamental attitude in civil life if and when it is paired with a child who knows how to be open to and to love others. Civic-mindedness, then, is having a sense that what you do matters.

The four young people in the opening scenarios can now be viewed through the lens of resilience. They have access to varying levels of internal strength in terms of attention, ability to regulate their emotions, ability to relate to others, and hope for the future. Does this mean that Anna and John are doomed? Not at all. What resilience research tells us is that they are demonstrating a greater need for supportive environments, for people in their lives who can help them construct a new narrative, a new meaningful story around which to live their lives. People can come around Anna and John, people who can focus on what they do well, who believe in them and who will help them develop internal strengths and the capabilities to cope, develop competence and hope.

Hope is perhaps the greatest internal characteristic of resilience. In addition to having hope, we need to learn how to ask for help. Humour is important to resilience as an adaptive response. As well, 'viewing ourselves and others in terms of strengths not weaknesses; and having some kind of meaning in life – which does not necessarily mean having a formal religion', but it does mean having a large enough story to live in that we can feel at home in the world. 'Ultimately, a sense of connectedness lies at the heart of resilience' (Deveson 2004, 3). As Ghandi said, and showed us, as human beings, our greatness lies not so much in being able to remake the world – that is the myth of the atomic age – as it is in being able to remake ourselves.

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Notes on contributor

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