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Research Summary

Resilience

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Resilience Defined

Resilience is the capacity and dynamic process of adaptively overcoming stress and adversity while maintaining normal psychological and physical functioning.

Every individual experiences stressful events, and a majority are exposed to trauma at some point during life. Therefore, understanding how one can develop and enhance resilience is of great relevance, not only to promote coping mechanisms, but also to mitigate maladaptive coping strategies and stress responses. Recent investigations have identified these mechanisms as encompassing genetic, developmental, psychological, and neurochemical factors that underlie the development and enhancement of resilience and factors that predict vulnerability to stress and trauma.

Each person has different levels of resilience. Some individuals are able to experience difficult situations with resilience, while others can't. What issues may affect one person may have little impact on another. For example, an individual may demonstrate resilience in their personal life, but be less resilient at work.
There are numerous tools that can be utilized to increase resilience and the benefits that emerge from resilience training will be discussed further in the research summary.

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Resilience; Nature or Nurture?

There is a genetic component to resilience. Recent research indicates that protection in early years, or reassurance from a parent or any other close adult (teacher, grandparent, priest, etc.), regardless of economic circumstances, plays a key role in adult resilience. In addition, DNA research studies have zeroed in on various genes (e.g., glucocorticoid) that dictate just how intensely we react to stressful situations and events. Some people are naturally predisposed to keep their composure in the face of work and life challenges. Some people naturally find it easier to rebound and grow in the face of life's challenges.

Yet, the genetic component is only part of the story. To a large extent, resilience is a skill we can develop, it is dynamic, and habits and strategies to increase it can be learned. It is important to note that genetics can be mitigated through resilience training.

How to Build Resilience

Break negative thought cycles through self-awareness

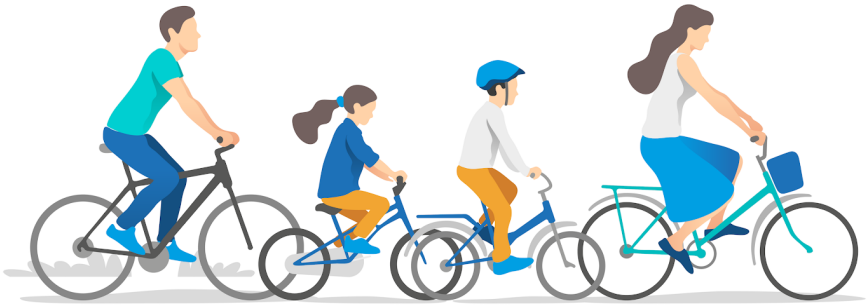
Do you attribute your setbacks to your own inadequacy or are you able to identify contributing factors that are temporary? You build resilience by reframing the situation from a negative experience to a learning experience. When we think positively, we put ourselves in a more empowered place to deal with challenges, and, as a result, setbacks are viewed as temporary and changeable. While positivity can help us to feel good in the short term, it can also help to rewire our brain in the long term. In fact, using positive thinking can train our brains to be more positive and activate the areas of our brain that are key to resilient ways of thinking and behaving.

Research also shows that positive thinking stimulates the growth of our frontal lobes, the areas of the brain that are responsible for functions such as logical thinking, focusing on goals, and making decisions.

Learned optimism-resilience training (more below)

Studies show that resilience training has an effect on an individual's ability to have a change of perspective. Training teaches learners how to focus on the positive.

Purpose



When we have a sense of purpose in life, we are more resilient to life's trials and stresses. We have a long term view and embrace challenges as a part of our growth. In one study of purpose and adversity, people with a greater sense of purpose showed better emotional recovery following a negative experience. Highly purposeful people, the authors argued, might be more inclined to use positive coping methods following a negative experience, and are less inclined to ruminate. A study of 121 outpatients diagnosed with depression and/or an anxiety disorder showed that a low or lack of purpose in life and less frequent physical exercise were correlated with low resilience.

This appears to be the case among adults: those with stronger purpose were more likely to use positive coping strategies, such as looking for the good in something bad, in response to negative life events. There is a bidirectional relationship between purpose and resilience. Purpose foreshadows resilience to adversity, yet adversity also helps to create purpose in life.

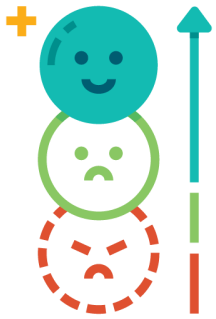
Gratitude

In three independent studies in 2003 U.C. Davis researcher Robert Emmons demonstrated that a conscious focus on blessings and gratitude in life had significant positive emotional and interpersonal benefits. In another study (Seligman, Steen & Peterson, 2005), delivering a letter of gratitude to a family member, friend or other loved one resulted in a significant increase in happiness that lasted for one month following the intervention compared to a group that was instructed to focus on a time in life when they were at their best and reflect on their strengths. Resilient people tend to live the saying that "things turn out best for those who make the best of how things turn out." Spend time each day reflecting on what you are truly fortunate to have in your life and focus on at least one thing that you treasure and value as a way to practice gratitude giving.

Optimism

In numerous studies, positive affect (positive emotion) has been found to be protective in the face of stress. In addition to decreasing autonomic arousal upon stress exposure, positive affect is also associated with quicker recovery times and better overall physical health. Similarly, optimism, herein defined as the expectation for good outcomes, has been consistently associated with the employment of active coping strategies, subjective well-being, physical health, and larger and more fulfilling social networks and connections. Unlike pessimists, optimists reported less hopelessness and helplessness and are less likely to use avoidance as a coping mechanism when under duress.

Cognitive Reappraisal (Reframing)



Strongly associated with resilience is the ability to monitor and assess negative thoughts and replace them with more positive ones. Known as cognitive flexibility, reappraisal, or cognitive reframing, this emotion regulation strategy involves changing the way one views events or situations. Consciously reassessing adverse or traumatic events to find the silver lining is associated with resilience. Viktor Frankl, the author of Man's Search for Meaning, attributed his psychological endurance and survival of concentration camps mainly to "meaning finding" (also known as "purpose finding"), the belief that striving to find a meaning in one's life is the most important, powerful motivating and driving force to continue living. Attachment style may also play a role in reappraisal ability and resilience. In a study of 632 men and women, researchers found that secure attachment was associated with higher cognitive reappraisal and resilience and that these two factors partially mediated individuals' well-being. Securely attached participants were more likely to reframe situations as less emotional and less likely to suppress emotional expression.

Active Coping

Coping through utilizing behavioural or psychological techniques utilized to reduce or overcome stress, has been linked to resilience in individuals. The literature distinguishes between active and avoidant coping.

1. Active coping:

Active coping is adaptive and is focused on changing your reaction to the situation. It involves behavioral and/or psychological strategies to change the qualities of the stressor, the stressor itself, or how the stressor is perceived. It involves reframing and reappraisal.

2. Avoidant (passive) coping:

Avoidant coping is maladaptive. It is about short-term benefits and long term costs. It involves activities and mental processes that are employed in lieu of

dealing directly with the stress trigger. Emotional or behavioural withdrawal, and substance abuse are classic examples of avoidant coping behaviour.

Active coping has consistently been associated with adaptability and psychological resilience.

Social Support

Both the presence of social support and the behaviour of seeking social support have been associated with resilience and flourishing in the face of major adverse life events. The inverse also appears to be true; poorer social support has been linked to psychiatric disorders.

Connecting with others in the face of difficulty increases resilience and is protective against negative mental and physical health issues such as depression. According to resiliency researcher Elliot Friedman, "The availability of social support in all its forms matters, and helps us when facing a challenge." Most studies show that the primary factor in resilience is having caring or supportive relationships.

The perceived availability and satisfaction with one's social support network, particularly emotional support, has direct effects on physical health and buffers the negative effects of stress.

Most people who live to old age do so, not because they have beaten cancer, heart disease, depression, or diabetes, instead, these long-lived individuals appear to all have long-lasting, meaningful connections with others as a core survival component. Psychologists Howard Friedman and Leslie Martin (2011) analyzed ongoing data from an eight-decade study first initiated by Stanford University researcher Lewis Terman. In 1921 Terman studied 1,500 adolescents and explored the factors that contributed to those who lived the

longest. Friedman and Martin found that on average sociable children did not live longer, however, being satisfied with and using one's social support network did, in fact, predict longevity. They also found that beyond social network size, the clearest benefit of social relationships came from helping others. Those who helped their friends and neighbors, advising and caring for others, tended to live to very old age.

Several studies of "Blue Zones" in the world, which are locations having a population that live longer than the general public (e.g., Island of Ikaria), have found one major contributing factor is having a strong social network.

Humor

Humor has been identified as a form of active coping contributing to resilience not only for its capability for alleviating tension and but also for its ability to attract social support. In a study of 215 sojourn students from Mainland China studying at a Hong Kong university, humor was seen as imperative to students' ability to adjust to the new culture and thrive in the face of acculturative stress.

Physical Exercise

Physical exercise has positive effects on psychological well-being as well as mood, clinical depression, and self-esteem. Physical exercise has been shown to affect neurobiological factors of resilience in human studies. Our physical well-being is integral to our mental ability to bounce back from adversity.

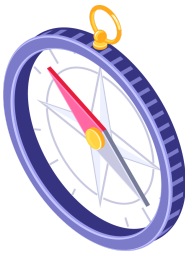
Trait Mindfulness

Trait mindfulness is another psychological factor associated with resilience. Originated as a Buddhist meditation practice, mindfulness concentrates on moment-to-moment awareness of bodily activities, feelings, emotions, or sensations, while purposely perceiving and discarding any distracting thoughts that come into awareness. Studies on trait mindfulness suggest that strong pre-trauma mindfulness skills

may help prevent ruminative thinking. Trait mindfulness may reduce avoidant coping in response to stress and contribute to resilience

According to the Mayo Clinic, the most important exercise for improving resilience is to train your attention and awareness. Becoming intentional and purposeful will decrease negativity about the situation.

Moral Compass



The existence of a moral compass or an internal belief system guiding values and ethics is commonly shared among resilient individuals. Religion or spiritual practice is often central to one's moral compass, yet, the concept of a moral compass is grounded in the human belief in morality. Low spirituality prevails as a leading predictor of low resilience.

Stress or Psychological Inoculation | SIT - Stress Inoculation Theory (SIT)

Stress Inoculation Theory is the belief that exposure to small amounts of stress helps individual's build resilience to address larger stressors in the future and avoid negative outcomes of stress.

Resilience can be built before a stressor occurs. When resilient tools are used during small stressors or to maintain well-being they can inoculate the brain and body prior to a severe stressor or trauma (Steeling Effect). Teaching the body and brain how to become more resilient, can then be utilized when larger stressors occur.

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