



## A Life Worth Living: The Science of Human Flourishing

Insights for individuals, caretakers, and professionals from research by [Dr. Anthony Ong](#), Assistant Professor in the Department of Human Development, Cornell University

Anthony Ong

*The gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages; the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile.*

*(Robert Kennedy, 1968)*

What do we know about human well-being? The answer is surprising little, compared with what is known about human illness, dysfunction, and disease. Scientific progress on the positive side of human functioning—understanding what constitutes human flourishing and how it comes about—lags woefully behind strides on the negative side of health assessment, treatment, and research. But as Cornell developmental psychologist Anthony Ong affirms, “The keys to the kingdom are changing hands.” Ong’s developmental research has documented the remarkable capacity of some individuals, from early life through old age, to thrive in the face of life’s challenges and setbacks.

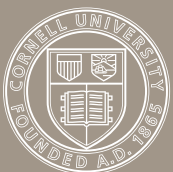
### Positive Emotions as a Basic Building Block of Flourishing in the Face of Adversity: Four Intersecting Pathways

In an effort to delineate the key features of human flourishing and resilience, Ong has conducted naturalistic studies and laboratory experiments



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that examine the enduring balm that positive emotions can provide for the stresses of life, even the stress of interpersonal loss. “When we first started to study the challenges associated with bereavement, the prevailing scientific view in the literature was that efforts to understand positive emotions should take a back seat while psychologists learn more about how to effectively treat the suffering generated by negative emotions, such as anxiety and depression. But then we began to ask the question, What if positive emotions could help to explain some of the problems that negative emotions produced?” Ong argues that



positive emotions can have a wide range of effects on individual health and well-being. “When we look at the question in a multivariate way, we do not find a single, simple answer to the question of how positive emotions influence health. Instead, the most accurate assessment is to say that it is lifelong process that proceeds along at least four intersecting pathways.”

Positive emotions undo negative emotion arousal. Converging empirical work on positive emotions in Ong’s lab and others have raised the possibility that positive emotions are important facilitators of adaptive recovery, quieting or undoing the autonomic arousal generated by negative emotions. In laboratory studies in which positive and negative emotions are experimentally induced, Ong finds that positive emotions are linked to faster cardiovascular recovery from negative emotional arousal. Other investigations have confirmed the importance of positive emotions in fostering recovery from stressful major life events such as conjugal loss.

Positive emotions broaden attention and thinking. Ong is quick to point out that scientific evidence for the proposition that positive emotions broaden peoples’ modes of attention and thinking comes from two decades of pioneering experiments conducted by Cornell psychologist Alice Isen. “Professor Isen and her colleagues were the first to document that people experiencing positive affect show patterns of thought that are notably flexible, integrative, and efficient.” Ong is currently collaborating with Isen on a study funded by the National Institute of Aging (NIA) that explores the ways in which positive emotions may widen the array of thoughts and actions that come to mind when individuals are under stress.

Positive emotions fuel psychological resilience. What psychological traits are implicated in the generation and maintenance of positive emotions in the face of stress? An emerging adult literature suggests that individual differences in psychological resilience may account for the adaptive ways in which life stressors are encountered, managed, and transformed. Ong suggests that traits with functional properties associated with positive emotions (e.g., psychological resilience) may serve to strengthen resistance to stress by affording greater access to positive emotional resources, which, in turn, may help to provide a momentary respite from ongoing stressful experiences. In a series of coordinated experimental and individual difference studies published in the *Journal of Personality and Social Psychology*, Ong and his colleagues have found that high-resilient individuals exhibit faster physiological

and emotional recovery from stress. In one study, higher trait resilience was linked to quicker cardiovascular recovery following a laboratory stressor. In another study, higher trait resilience was associated with lower subsequent depressive symptoms. Most notably, the effect of trait resilience on duration of cardiovascular reactivity and depressive symptoms was mediated by subjective reports of positive emotion. Although far from definitive, Ong notes that the available empirical evidence suggests that psychological resilience is associated with resistance to and recovery from stressful life events, and positive emotions may be the underlying mechanism by which high-resilient individuals achieve their adaptive outcomes.

Positive emotions trigger emotional and physical well-being. By undoing lingering negative emotions, broadening peoples’ mindsets, and fueling psychological resilience, Ong maintains that over time positive emotions should also enhance peoples’ emotional and physical well-being. The results of a longitudinal study of bereaved widows Ong recently conducted suggest that psychological resilience enhances the mood-boosting effects of positive emotion, triggering an upward spiral of prolonged positive emotionality. However, Ong adds that “the capacity for positive emotional engagement in the context of stress has consequences that are not just emotional but physiological.” Ong suggests that deficits in positive emotions create a subtle but persistent difference in cardiovascular function that sets the stage for trouble in later life. In a study published in the *Journal of Psychology and Aging*, Ong notes that “Although greater cardiovascular reactivity is generally interpreted as a marker for risk, increases in blood pressure are not inherently pathogenic. It may be slow or prolonged recovery from stress responses that portends risk to older adults. By accelerating cardiovascular recovery from daily negative emotions, positive emotions may function in the service of health by averting delays in adaptation to subsequent stressors. These effects, moreover, may be more evident in older adults due to the stability and centrality of quality social ties in late life.”

Based on his research findings, Ong concludes that the notion that positive emotions have adaptive value is no longer contestable, but what precisely this means for individual lives and societies has not been fully appreciated. Ong adds though that one thing is for sure: “When our positive emotions are in short supply—when we feel hemmed in by negative emotions such as fear and sadness—we become stuck in a rut and painfully predictable. But when our positive emotions are in ample supply—when we feel lifted by the centripetal force of our

closest relationships—we take off and become generative, resilient versions of ourselves.”

### Tips for Promoting Positive Emotions

1. Find meaning in everyday life through (a) reframing adverse events in a positive light; (b) infusing ordinary events with positive value; and (c) pursuing and attaining realistic goals.
2. Explore relaxation techniques (e.g., imagery, muscle, and meditation exercises) that create conditions conducive to experiencing contentment and inner calmness.
3. Make connections by reaching out to others.
4. Engage in activities that you enjoy and find intrinsically motivating.
5. Take care of yourself by eating right, getting enough sleep, and engaging in regular physical activity.

### Further Resources

Resilience and Lifespan Development Laboratory at Cornell University (<http://www.lifespan-resilience.human.cornell.edu/>)

American Psychological Association (APA) Resilience Guide for Parents and Teachers (<http://www.apahelpcenter.org/featuredtopics/feature.php?id=39&ch=2>)

American Psychological Association (APA) Resilience Guide for Teens (<http://www.apahelpcenter.org/featuredtopics/feature.php?id=40&ch=2>)

American Psychological Association (APA) Stress Tip Sheet (<http://www.apahelpcenter.org/articles/article.php?id=166>)

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