



Contextualizing Risk Tolerance

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“Just because it’s open doesn’t mean it’s safe.”
“I’d rather risk infection than be alone.”
“I probably won’t get that sick, even if I do get infected.”
“I’m just not willing to risk it.”

“How do we cope, when every decision we make involves an immediate risk to our health?”

How do we respond to threats to our safety? How do we cope, when every decision we make involves an immediate and pervasive risk to our health? How do we adjust as the pandemic extends for more than a year? People differ in their tolerance levels for risk and uncertainty, and this is even more apparent during times of stress. Considering the developmental and environmental origins of this variability can help us to develop empathy and compassion for those who make different choices than we do.

The COVID-19 pandemic has revealed the variety of ways in which people calculate risk – to themselves and to others – and has led to intense judgment of those whose decisions differ from our own. When considering decisions around in-person activities, understanding the range of risk tolerances can help us make effective policy. But what are the variety of factors that influence risk-taking decisions? And how can an individual’s early life and current context shape their willingness to take risks?

“Early life adversity can quite literally change our brains”

In the United States, the response to this pandemic has been largely focused on individual choices and behaviors, while paying little attention to the structural forces that influence those choices. There are stark disparities in COVID-related infection and mortality by race and ethnicity, as well as by income. An inadequate public health response, combined with historically-rooted structural vulnerabilities, has left many people – especially in marginalized communities – facing impossible decisions, forcing them to balance risks to their health and finances, with no good solutions.

Individual differences in risk tolerance layered on top of these structural constraints may, in part, be embedded in the structure of our physiology. I do not mean to say that risk tolerance is biologically determined, but rather that early life experience, as we adapt to the context in which we live and grow, shapes our biology. Early life adversity can quite literally change our brains, altering neural pathways involved in the processing of threat and reward. These adaptations have been associated with increased health-related risk taking in adulthood.

I study the biology of stress, the ways in which social contexts become biologically embedded to promote either vulnerability or resilience. Often, we consider the behavioral choices people make when faced with adversity – coping strategies, health-related behaviors, decision-making processes, even academic outcomes. And each of these is shaped by an individual’s tolerance for risk, their own personal weighing of risk and reward. Understanding the effects of context on decision making not only increases empathy, but can also lead to increasingly effective and equitable policies.