

Gen Z Risk Perceptions: Crisis, Risk and Hope

Gabriel Rubin, Ph.D.

Professor of Justice Studies

Montclair State University

On December 10, 2021, Vivek Murthy, the US Surgeon General, declared a “youth mental health crisis” in response to spiking rates of depression, anxiety and suicidal behavior. Murthy emphasized the huge spike in hospitalizations among young women and girls (51%) as compared to young men and boys (4%) during the covid-19 pandemic¹. According to the University of Michigan’s Healthy Minds survey, suicidal ideation has more than doubled among college students (from 7% to 15%) in just the past 10 years and 2023 saw the highest number to date (in 15 years of study) in suicidal ideation². To be clear, the study shows that 1% act on these feelings with an actual suicide attempt, but the rise in this ideation is very troubling. A recent survey of 4,700 college students in New York and New Jersey found that 75% of students felt uncontrollable worry and 60% felt hopeless during the spring of 2020³. With people literally considering suicide due to their risk perceptions, it would be difficult to understate how important calibrating the risk perceptions of young people has become.

Gen Z young people, Americans born between 1997 and 2012, face enormous challenges that have not been fully appreciated. As will be detailed in this study, racial discrimination, mass shootings, the pandemic, climate change and social media combine to create a picture of a deeply

¹ Richtel, Matt, “Surgeon General Warns of youth Mental Health Crisis,” *The New York Times*, 7 December 2021, <https://www.nytimes.com/2021/12/07/science/pandemic-adolescents-depression-anxiety.html>.

² “College Student’s Anxiety, Depression Higher Than Ever. But So Are Efforts to Receive Care,” University of Michigan School of Public Health, 9 March 2023, <https://sph.umich.edu/news/2023posts/college-students-anxiety-depression-higher-than-ever-but-so-are-efforts-to-receive-care.html>.

³ “Study: 75% of college students reported uncontrollable worry during covid-19 pandemic,” NJ 12 News, 2 March 2022, http://newjersey.news12.com/study-75-of-college-students-reported-uncontrollable-worry-during-covid-19-pandemic?fbclid=IwAR36CXAtfmA1rXvgqqGyRhOEqb8rtEG1Z5X_UPS00mV0Tapydmedw5BEUrjY.

troubling world for young people who have experienced multiple crises during their lifetimes. Even though, we live in incredibly safe times with lifespans going up year-after-year in most of the world⁴, young people feel the opposite: they see a world that is fraying and deeply unsafe. To Gen Z, risk is everywhere and the world is a scary and grim place. Specifically, risk-to-life and risks that entail existential danger will be examined here.

This paper is based on an ongoing study of Gen Z young people in the Northeast. The study consists of structured interviews gathered through a network sampling method of Gen Zers. The interviews began in 2022 and have continued throughout 2023. To date, 50 interviews have been conducted and the sample is diverse while skewing female.

The goal of the interviews is to decipher what risk factors have led to the mental health issues plaguing young people and to examine how young people view risk⁵. These interviews clearly show that many factors contribute to the risk perception of young people including a constant stream of negative news delivered to their devices, parental pressures, the ongoing drumbeat of climate change and the fact that little is done to stop its progression, mass shootings and lockdown drills, racial tensions and the pressures of social media.

This paper will begin by discussing risk perception in general. It will then delve into the methodology and demographics of the study. Finally, it will discuss qualitative findings about risk factors that young people are exposed to and how these affect their perceptions of the world around them. It concludes with suggestions on how to alleviate the situation including social

⁴ Pinker, Steven, *The Better Angels of Our Nature: Why Violence Has Declined* (New York: Penguin Books 2011); Easterbrook, Gregg, *It's Better than It Looks: Reasons for Optimism in an Age of Fear* (New York: Public Affairs 2018).

⁵ This goal of the study is the focus of this paper. The interviews also cover Gen Z views of America and politics, which won't be the focus here.

media hygiene, adding context to news items that portray tragedies and teaching cost-benefit risk analysis.

Risk Perception

Fear and risk perception are intimately linked. We see the things we fear as inherently risky and use this emotion to survey our landscape. Yet fear is not our only guide. We seek out data to try to determine what activities and behaviors we should pursue and avoid and we weight the benefits of each pursuit against the potential drawbacks. The problem is that some activities are difficult to measure in our threat perception matrix, even given the contribution of data.

Paul Slovic, along with co-writers Howard Kunreuther and Gilbert White, lays out the cognitive processes behind risk assessment in an article entitled, “Decision Processes, Rationality and Adjustment to Natural Hazards.” The first theory he outlines for how people make decisions in risky situations is that they, “try to choose according to the ‘best bet.’” They do this by trying to maximize their expected utility of a given decision. The expected utility of a given event is measured using Bernoulli’s equation, which follows:

$$EU(A) = \sum_{i=1}^n P(E_i)U(X_i)$$

Here $EU(A)$ stands for the “expected utility of a course of action which has consequences X_1, X_2, \dots, X_n depending on events E_1, E_2, \dots, E_n , $P(E_i)$ represents the probability of the *ith* outcome of that action, and $U(X_i)$ represents the subjective value or utility of that outcome”⁶.

HA Simon, in criticizing utility maximization theory, observed that:

“The classical theory is a theory of a man choosing among fixed and known alternatives, to each of which is attached known consequences. But when perception and cognition intervene between the decision-maker and his objective environment, this model no longer proves adequate. We need a description of the choice process that recognizes that alternatives are not given but must be sought; and a description that takes into account the arduous task of determining what consequences will follow on each alternative”⁷.

Simon introduced the theory of *bounded rationality*, “which asserts that the cognitive limitations of the decision-maker force him to construct a simplified model of the world to deal with it. The key principle of bounded rationality is the notion of ‘satisficing’, whereby an organism strives to attain some satisfactory, though not necessarily, maximal level of achievement”⁸. Slovic summarizes the differences between the two theories, stating that, “Utility theory is concerned with probabilities, payoffs and the merger of these factors—expectation.” Whereas, “the theory of bounded rationality ... postulates that decision-makers do not think probabilistically and that they try to avoid the necessity of facing uncertainty directly.”

Supporting the bounded rationality thesis, Slovic reports that, “Perhaps the most widespread conclusion [in studies on the matter] is that people do not follow the principles of probability theory in judging the likelihood of uncertain events. Indeed, the distortions of

⁶ Slovic, Paul. *The Perception of Risk*. (London: Earthscan Publications Ltd. 2000), pg. 3.

⁷ Simon, HA. “Theories of decision making in economics and behavioral science,” *American Economic Review* 49, pg. 272 found in Slovic, *The Perception of Risk*, pg. 5.

⁸ Slovic, *The Perception of Risk*, pg. 5.

subjective probabilities are often, large, consistent and difficult to eliminate”⁹. To Gen Z, much of life is uncertain, which distorts their risk perception. An important finding from a 1969 study by Chapman and Chapman, which studied “illusory correlation,” found that, “one’s prior expectations of probabilistic relationships can lead an individual to perceive relationships in data where they do not really exist”¹⁰. In other words, the role of perception is critical in risk assessment.

There are also cultural factors that affect risk perception. Slovic highlights a study by Englander et al., which found drastically different risk perceptions between American and Hungarian students. Not only did the Hungarians perceive much lower risks from 84 of the 90 activities they were polled on, but they ordered the risks differently as well. “Hungarians saw relatively greater risks from common hazards such as railroads, boating, home appliances and mushroom hunting, whereas the Americans were relatively more concerned with technological hazards pertaining to radiation and chemical technologies”¹¹. Further, risk assessment differs between genders and races. The majority of studies have found that males “seem to be less concerned about hazards than are women.”¹² White males in America seem to be the group least concerned about risks while a recent study showed that Black people perceive more risks in the American environment¹³.

Laypeople and experts differ in their perceptions of risk. “When experts judged risk, their responses correlated highly with technical estimates of annual fatalities,” Slovic writes. Though laypeople could assess these technical estimates if asked, “their judgments of ‘risk’ were

⁹ Slovic, *The Perception of Risk*, pg. 9.

¹⁰ Slovic, *The Perception of Risk*, pg. 12.

¹¹ Slovic, *The Perception of Risk*, pg. xxv.

¹² Slovic, *The Perception of Risk*, pg. xxiv.

¹³ Salvatore, Christopher and Gabriel Rubin, “A Socio-Demographic Analysis of Responses to Terrorism,” *Journal of Homeland Security and Emergency Management* 12:4, pgs. 941–966.

sensitive to other factors as well (e.g., catastrophic potential, controllability, threat to future generations) and, as a result, differed considerably from their own (and experts’) estimates of annual fatalities”¹⁴. Indeed, Slovic highlights that, “the public seems willing to accept voluntary risks roughly 1,000 times greater than involuntary risks at a given level of benefit”¹⁵. This is important when we consider the risk factors that young people are involuntarily subjected to such as random mass shootings, climate change and the covid pandemic.

In a chapter entitled “Perceived Risk, Trust and Democracy,” Slovic laments the fact that despite our society becoming healthier and safer on average over the past twenty years, the American public has actually become increasingly risk averse¹⁶. He believes that the reason for this lack of risk-taking in society is that negative (trust-destroying) events are both more visible and carry greater weight in our decision-making than corresponding positive (trust-building) events¹⁷. One bad experience, after all, has the potential to drastically change behavior. Slovic further cites distrust in government and the media’s relentless coverage of “bad news” as underlying factors¹⁸.

Risk and Heuristics

If risk is measured by our feelings and perceptions, then how do we know what to pursue and what to avoid? Amos Tversky and Daniel Kahneman’s seminal work showed that people estimate risk by using *heuristics*, which are mental strategies or shortcuts, that “allow them to reduce these difficult tasks to simpler judgments”¹⁹. For instance, *the availability heuristic*

¹⁴ Slovic, *The Perception of Risk*, pg. xxiii.

¹⁵ Slovic, *The Perception of Risk*, pg. 26.

¹⁶ Slovic, *The Perception of Risk*, pg. 316.

¹⁷ Slovic, *The Perception of Risk*, pg. 320.

¹⁸ Slovic, *The Perception of Risk*, pgs. 323-4.

¹⁹ Slovic, *The Perception of Risk*, pg. 13.

comes into play when a salient and familiar incident leads people to exaggerate a threat²⁰. Slovic describes the availability heuristic as one that causes a person to judge “the probability of an event (e.g., snow in November) by the ease with which relevant instances are imagined or by the number of such instances that are readily retrieved by memory”²¹. Though it is true that we can more readily access events that occur with greater frequency, other factors—such as recency and emotional saliency—affect our ability to retrieve memories²².

While mass shootings using semi-automatic rifles cause much less death in America than handgun-violence²³, “salient, vivid examples can make people overreact to small risks.” After a fear-inducing incident like a mass shooting occurs, people relay their emotions to one another “creating a kind of cascade of concern” regarding the incident²⁴. Sunstein, citing the availability heuristic, finds that, “people’s intuitions about risks are highly unreliable”²⁵.

While risks obviously come in varying degrees, “many people believe that risk is an ‘all or nothing’ matter.” In other words, they rate activities as risky or not risky without any measure in-between. Sunstein adds that typically, “a judgment of low risk accompanies a judgment of high benefits” and vice versa²⁶. This is due to the fact that typically either an activities’ risks or its benefits are salient in people’s minds²⁷. Additionally, “People tend to be loss averse, which

²⁰ Sunstein, Cass. *Laws of Fear: Beyond the Precautionary Principle*. (Cambridge, UK: Cambridge University Press 2005), pgs. 36, 206.

²¹ Slovic, *The Perception of Risk*, pg. 13.

²² Slovic, *The Perception of Risk*, pg. 14.

²³ Gramlich, John, “What the data says about gun violence in America,” Pew, 26 April 2023, <https://www.pewresearch.org/short-reads/2023/04/26/what-the-data-says-about-gun-deaths-in-the-u-s/>.

²⁴ Sunstein, Cass R. *Risk and Reason: Safety, Law, and the Environment*. (Chicago: University of Chicago Press 2002), pg. 2.

²⁵ Sunstein, *Risk and Reason*, pg. 29.

²⁶ Sunstein, *Risk and Reason*, pgs. 40-1.

²⁷ Sunstein, *Risk and Reason*, pg. 41.

means that a loss from the status quo is seen as more undesirable than a gain is seen as desirable”²⁸.

Another heuristic people use for making decisions is the *affect heuristic*, “by which people have an emotional, all-things-considered reaction to certain processes and products, and that heuristic operates as a mental shortcut for a more careful evaluation”²⁹. The affect heuristic is a method of decision-making that uses one’s emotional attitude towards a given risk. Sunstein writes that, “When presented with a risk people have a general emotional attitude to it—hence an ‘affect’—and this general attitude operates as a heuristic, much affecting people’s judgments about both benefits and dangers.” Interestingly, if one likes a product she will see high benefits and low risks associated with it, whereas disliking a product produces the opposite effect. Emotion can drive cognition because, “emotions are generally the products of beliefs, and hence an emotional reaction to risk—terror, for example—is generally mediated by judgments”³⁰. Slovic supports the use of the affect heuristic when he states that, “people’s ‘basic conceptualization of risk is much richer than that of experts and reflects legitimate concerns that are typically omitted from expert risk assessments”³¹.

As mentioned in the introduction, young people today suffer from high levels of anxiety. Anxiety itself “leads to an overestimation of risk and risk-averse behavior”³². As will be seen in the study data, some Gen Zers see risk everywhere and thus avoid a multitude of situations. This leads us to the distinct difference between fear of crime and risk of being the victim of crime. Clemente and Kleiman write that, “the cost of crime goes far beyond the economic and physical

²⁸ Sunstein, *Risk and Reason*, pg. 42.

²⁹ Sunstein, *Risk and Reason*, pg. 43.

³⁰ Sunstein, *Risk and Reason*, pg. 44.

³¹ Sunstein, *Risk and Reason*, pgs. 58-9.

³² Huddy, Leonie, Stanley Feldman, Charles Taber, Gallya Lahav, “Threat, Anxiety, and Support of Antiterrorism Policies,” *American Journal of Political Science* 49: 3 (July 2005), pg. 593, pg. 1 of printout.

losses imposed by criminals. It extends to the forced alteration of daily living habits as well as to the negative psychological effects of living in a state of constant anxiety.” Further, as with other fears, “Most commentators have noted an important element of irrationality in the public’s fear of crime: fear of crime is far out of proportion to the objective probability of being victimized”³³. For example, in 1977, a staggering 61% of women in the United States feared walking within a one-mile radius of their homes at night (compared to 22% of men)³⁴. As WI Thomas put it, “what people define as real is real in its consequences”³⁵. *Fear* of crime rather than any demonstrable *threat* has a deleterious effect on American society. When people think they are in danger they behave accordingly—even if they aren’t really in much danger.

As we saw during covid, the fear of contracting or spreading the virus led school districts to close. While the spread of the virus was surely lessened, young people suffered losses of socialization and education that will harm them for many years to come. Similarly, a study by Sivak and Flannagan found that 1,000 motorists died in auto accidents between September 11 and December 31, 2001 because they avoided air travel³⁶. Misperceiving risk can be a danger in and of itself.

The Precautionary Principle states that, “regulators should take steps to protect against potential harms, even if causal chains are unclear and even if we do not know that those harms will come to fruition.” To Sunstein, such a Principle “is literally incoherent, and for one reason: There are risks on all sides of social situations. [The Principle] is therefore paralyzing ...

³³ Clemente, Frank and Michael B. Kleiman. “Fear of Crime in the United States: A Multivariate Analysis,” *Social Forces*, 56: 2 (December 1977), pg. 520.

³⁴ Clemente and Kleiman, “Fear of Crime in the United States, pg. 527. This, despite the fact, that men were more likely to be victimized by criminal acts.

³⁵ Clemente and Kleiman, “Fear of Crime in the United States, pg. 521.

³⁶ Sivak, Micahel and Michael J. Flannagan. “Flying and Driving after the September 11 Attacks,” *American Scientist* 91: 1 (Jan.-Feb. 2003) cited in Mueller, John. “Terrorism and Bumps in the Night” presented at the 2006 Annual Meeting of the American Political Science Association, August 31-September 3, 2006, Philadelphia, pg. 6.

[b]ecause risks are on all sides, the Precautionary Principle forbids action, inaction, and everything in between”³⁷. Instead of weighing risk, people avoid certain activities or behaviors; for instance people “do not like to run a small risk of a large loss”³⁸. Sunstein adds that, “news sources do a great deal to trigger fear, simply by offering examples in which the ‘worst case’ has actually come to fruition”³⁹. Moreover, “Simply because of fear, the public and its leaders will favor precautionary measures that do little to protect security but that compromise important forms of freedom”⁴⁰. This is because, “In democratic nations, the law responds to people’s fears. As a result the law can be led in unfortunate and even dangerous directions”⁴¹. As mentioned above, the availability heuristic comes into play when a salient and familiar incident leads people to exaggerate a threat⁴². *Probability neglect* occurs when people ignore the probability of events occurring and instead rely solely on emotions⁴³.

As Diego Gambetta rightly underlines, it is nearly impossible to accurately assess what level of terrorist threat we are under at any given moment, especially given human nature’s tendency to overblow one-time, outlier occurrences⁴⁴. Jessica Stern defines dreaded risks as risks that “evoke disproportionate fears and are likely to be maximally” salient⁴⁵. She notes that though 100 Americans a day die in auto accidents, people view driving as voluntary and thus do not “dread” it⁴⁶.

³⁷ Sunstein, *Laws of Fear*, pg. 4.

³⁸ Sunstein, *Laws of Fear*, pg. 26.

³⁹ Sunstein, *Laws of Fear*, pg. 87.

⁴⁰ Sunstein, *Laws of Fear*, pg. 204.

⁴¹ Sunstein, *Laws of Fear*, pg. 1.

⁴² Sunstein, *Laws of Fear*, pgs. 36, 206.

⁴³ Sunstein, *Laws of Fear*, pgs. 35, 39.

⁴⁴ Gambetta, Diego. “Reason and Terror: Has 9/11 made it hard to think straight?” *Boston Review*, February/March 2004.

⁴⁵ Stern, “Dreaded Risks and the Control of Biological Weapons,” pg. 92.

⁴⁶ Stern, “Dreaded Risks and the Control of Biological Weapons,” pg. 102.

Ideally, humans would use cost-benefit analysis that doesn't just take fatality risk into account but that also looks at economic, psychological and other ramifications. Fatality risk alone is too simple and insufficient a metric for risk. Though it may be "irrational" to fear a threat that probability says is unlikely, people in this instance are right to follow their common sense and emotions. If one were told that 1 in 5,000 people at a football game would be randomly murdered (ten people in a stadium of 50,000), I doubt that many would brave the odds. It is one thing to ask of us to weigh risks, it is another to ask people to replace their emotions and common sense heuristics with the cold comfort of a series of calculated odds. Indeed, teenagers may view risk through too rational a prism. According to Maia Szalavitz, "Brain-scan research shows that when teens contemplate things like playing Russian roulette or drinking and driving, they primarily use rational regions of the brain—certain regions of the cortex—while adults use emotional regions like the insula. When risky decisions are weighed in a rational calculus, benefits like fitting in and feeling good now can outweigh real risks." To this end, psychologist Valerie Reyna suggests that teenagers—whose abilities to accurately assess risks are generally poor—be taught to rule out risks based on emotional responses⁴⁷. Since humans suffer from bounded rationality and lean heavily on mental heuristics, selecting risks by weighing either rationality or emotion alone may prove foolish.

In general, humans approach risk with bounded rationality. Bounded rationality entails having a limited view of all of the costs and benefits of a given situation, and of the available options. Due to our bounded rationality, we employ mental heuristics, such as the availability and affect heuristics, as shortcuts to measure risk in our everyday lives. Further, due to our common sense and many times emotional approach to measuring risk, we particularly fear

⁴⁷ Szalavitz, Maia. "10 Ways We Get the Odds Wrong," *Psychology Today*, January-February 2008, <http://psychologytoday.com/articles/pto-20071228-000005.xml>.

activities or events that we view as new, uncontrollable, involuntary, irreversible, manmade and low-probability, high casualty⁴⁸.

Enter Gen Z

As the last section evidenced, humans live in a world where risk is hard to measure and where information on risk is not always available. Further, we are frequently guided by our emotions and by mental heuristics when making decisions in the face of risk. This is not all bad. Walking around (rather than through) a park where one might be attacked might be inefficient but the costs of a longer walk surely justify avoiding the small chance of becoming the victim of a crime. In this scenario, there is little harm (a longer walk) to a potentially inefficient or risk-averse action. But, as previously stated, risk aversion as a way of life carries its own set of risks including to one's mental and physical health.

Gen Z live in what they see as a deeply traumatic world. Imagine growing up in a time when schools and businesses shut down for over a year while racial tensions boil and news streams about “the world ending” due to global warming flit across your phone screen hourly. Such a world feels extremely unsettling. Add to this the effect of school and mass shootings and lockdown drills that instill the danger of everyday life in a young person. Even though these incidents may be rare, the risk they pose and their randomness makes young (and older) people obsess over how one can avoid these situations.

⁴⁸ Gambetta, “Reason and Terror”; Sunstein, *Risk and Reason*, pg. 59.

The study described here is driven by a desire to better understand the perceptions and concerns of Gen Z. It consists of structured interviews of Gen Z young people using a network sample. So far 50 interviews have been conducted. The sample skews female, which is not inappropriate given the high incidence of mental health issues among young women today. The sample is very diverse and includes young people mostly born between 2000 and 2005 (though one late Millennial/early Gen Zer born in 1995 is included).

Gen Zers are coming of age in a time of great upheaval in America. While they are frequently grouped together because they are the first generation to grow up with smartphones and tablets in their hands, ergo the moniker “iGen,” they are also the most diverse generation in American history. Gen Z sits at the fulcrum of many issues going on in America and have watched with great frustration as our ineffective government has failed time and again to improve their futures. Gen Z lost critical years of schooling during the covid-19 pandemic. They have experienced school shootings and related incidents, sometimes first hand. They have listened to teachers and scientists tell them how bad the environment will be in the near-future while older adults seemingly do nothing about it. Gen Z also lives in an age where information comes to them via unfiltered social media feeds that are unedited and that can provide novel views but also biased and false ones; this leads to some independent and some uninformed thinking.

While there is only one Gen Z congressperson so far, Gen Z’s views of the world will become increasingly important as time goes on. Along with Millennials, they have been credited with voting in outsized numbers in favor of President Biden⁴⁹. Gen Z are also in the vanguard

⁴⁹ Hess, Abigail Johnson, “The 2020 Election Shows Gen Z’s Voting Power for Years to Come,” *CNBC News*, 18 November 2020, <https://www.cnbc.com/2020/11/18/the-2020-election-shows-gen-zs-voting-power-for-years-to-come.html>.

with many movements for change be they the young people protesting after the Parkland School shooting, the many Gen Z who marched for Black Lives Matter against police brutality or Gen Zers like Greta Thunberg who support green policies.

Research to date on Gen Z has mostly been focused on marketing to this generation or on their mental health or use of social media. Gen Z’s views on risk have not been examined closely. As a group that will soon be a large voting bloc in America, this is a big blind spot for researchers. Further, much research on Gen Z has been survey-based or compares Gen Z to other generations. Such research treats Gen Z superficially and has contributed to stereotypes of Gen Z as tech-obsessed, anti-social young people whose development has been arrested by helicopter parenting. Of course, some of these findings have truth to them, but the interviews here of a diverse group of Gen Z individuals paint a fuller picture of the opinions of Gen Z and the effects of recent events on them.

The demographics of the study are featured in the below pie charts:

Chart 1. Birthyear of Gen Z participants.

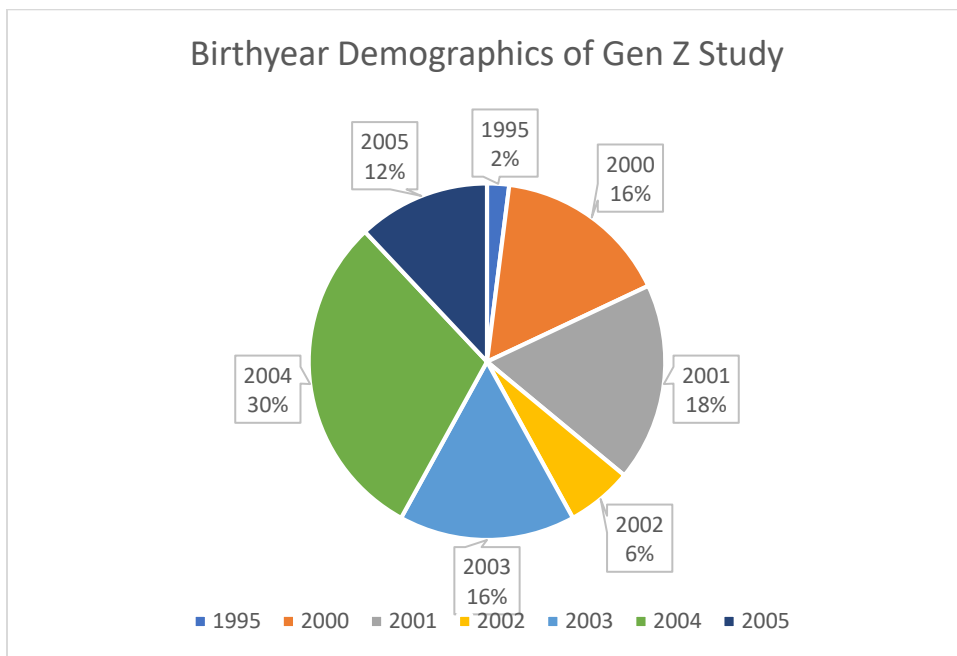


Chart 2. Gender Breakdown of Gen Z Participants.

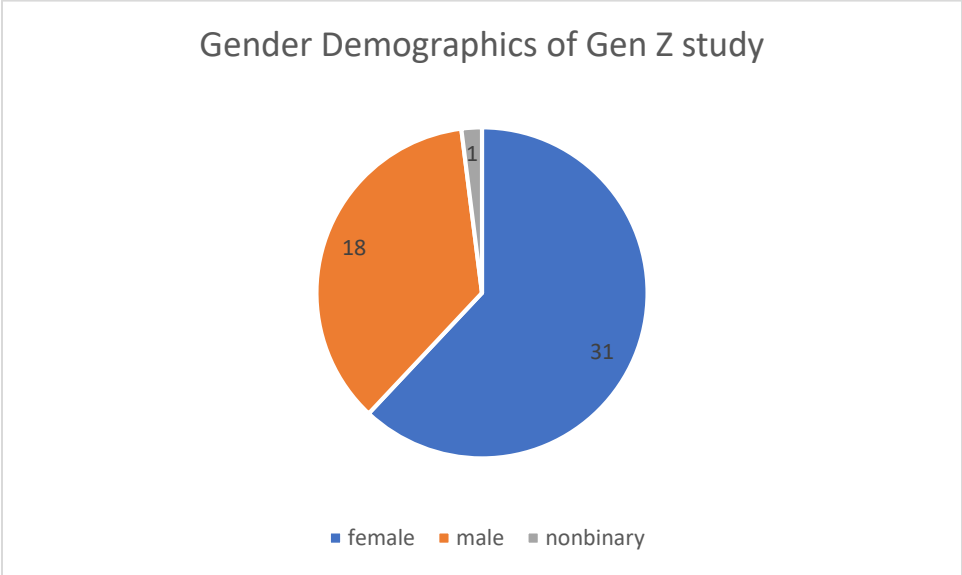
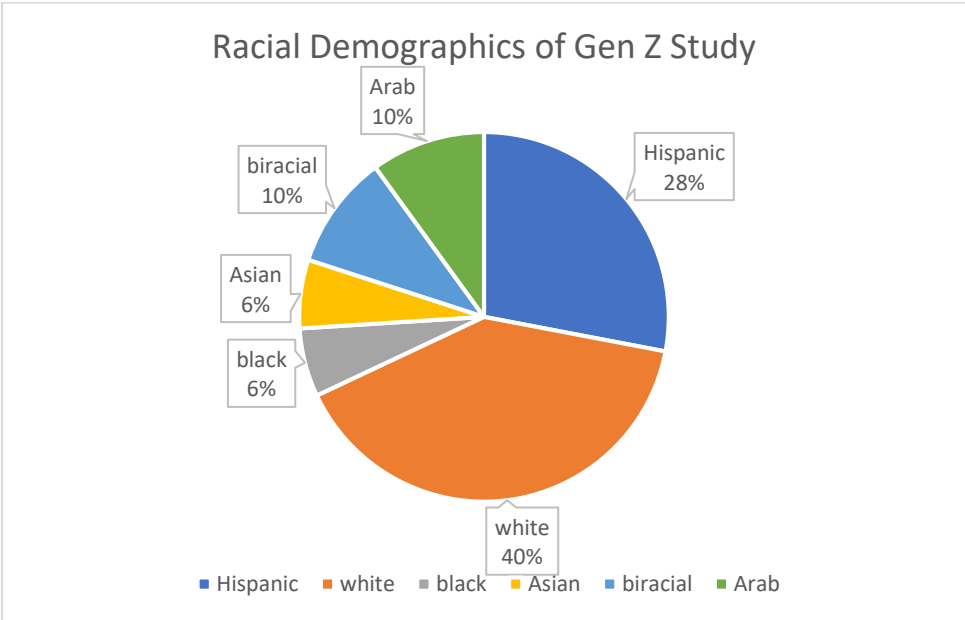


Chart 3. Racial Breakdown of Gen Z Participants.



Findings

In my interviews, Gen Z exhibited a wide range of opinions and a diversity of views that belied the stereotype of Gen Z as monolithic, oblivious and ungrounded. Gen Zers were also very aware of their generational identity and while many were proud of their peers, others were very critical of them. For instance, many respondents were critical of young people “playing up” or “exaggerating” their personal hardships online. Many also lamented the harshness of online critics who could cancel you for saying the wrong thing. Some interviewees noted that Gen Zers were too sensitive in certain instances which led to a rigid environment where speech is constrained because others could become triggered by it. For instance, Jana, an Arab woman born in 2005, stated, “I think kids are ‘softies.’ Any tiny miniscule problem can trigger them. Anything will set them off. There’s a lack of holding responsibility.” Caiden, a mixed Filipina and white woman born in 2004, went further, “We go past inclusion into favoritism...Just because you were once looked down upon, doesn’t mean you have to be looked up to.” Some Gen Zers were proud of their generation. Others referred to Gen Z as “them.” Sara, a Palestinian female born in 2004, said “we found ourselves during covid.” Hasi, a South Asian male born in 2004, said, “We’re the generation of social media. We’re the pioneers of ‘genders.’” Adrian, a Hispanic male born in 2005, stated, “People are too sensitive and it’s bringing our society down.” These views show the diversity of opinions of Gen Z.

Gen Z are committed to racial equality and have a keen sense of racial bias in the criminal justice system, which came up in many interviews. On racial discrimination and protesting, Oriannys, a Black Dominican female born in 2004, stated, “One protest that moved me, and people of my color, was the protest around George Floyd, even Ahmaud Arbery. The BLM Movement raised concern about the issue. If it wasn’t for people speaking up, there

wouldn't be justice. There's power in our voice, but we need to constantly bring it out in social media to be heard." While some saw power in protest, many approved of protests as long as they didn't become violent. Kailee, a white female, saw protests as just a sign of the continued downward trajectory of America: "The protests divided us even more. People hate the protestors and the protestors hate the other people. Everyone is against each other." Adrian, a Hispanic male born in 2005, stated, "If I speak out enough, I will have a voice in the political system but I feel that that doesn't go for everyone because there's prejudice in society. Some groups don't have much of a voice. There's a huge social class issue and celebrities have a lot of power." Sam, a Filipina, stated, "Discrimination is the big umbrella word. We're anti-discrimination. Race issues, sexuality issues. In Jersey City, I saw a lot of discrimination toward my race. I've seen friends and relatives experience discrimination. People say 'this is just a joke,' but someone could get offended. I have friends who were harassed for exposing their sexuality. Why do we live in a world where you can't walk outside without fearing harassment?" A'Blessin, a black female born in 2004, stated, "Coming from my background and ethnicity, we view America the same as before because we don't have the equality we want and we're being mistreated. It has gotten a little better." Caiden, a mixed Filipina and white woman who expressed mostly conservative views, stated, "There is discrimination in the intensity of punishment people get. Class differences show up in the criminal justice system. Minority groups have less money and can't pay bail, for example. The system is unfair, it could be better."

In addition to seeing the American system as racially biased and unfair, Gen Z were mostly strongly against guns. With few exceptions, they were angry and afraid due to the mass shootings going on in America. Nicole, a Hispanic female, stated, "I'm afraid to have kids. They're not safe in school. The government is forcing you to have kids they can't protect."

Oriannys, a Black Dominican female born in 2004, stated, “I would want politicians to know about the amount of guns that are readily available for people my age. My age group are the ones mostly doing these shootings like the Uvalde shooting. There are innocent people losing their lives because of usually one person in my age group. Something needs to be done to help prevent this situation. Maybe you’ll need to be 25 to 30 years old to get a gun. We need pediatric psychologists to help with these situations. It’s too easy to get guns for young people.” Kailee, a white female, stated, “What I’d tell a politician on guns is: they do nothing to prevent this. Who do they think they are?! They don’t work hard enough during an event while it happens either. Think of the Uvalde shooting. They did nothing while kids were being shot in their faces. They blame mental health and say there’s nothing we can do. They don’t care until it’s their kid. The security drills are not that effective either. They train you to sit against a wall in a dark classroom. They don’t even teach you to hide. A kid brought a gun to my school. We were in lockdown for 5 hours. I said goodbye to my mother [via text]; my sister was on the other side of the school. The school swept it under the rug. There aren’t enough regulations.” Sam, a Filipina, stated, “First of all, I’d say I’m scared. I’m not saying I don’t feel safe here but it’s very concerning with all the mass shootings lately. How are you letting mass shooting after mass shooting happen without doing anything?! We learn history to not repeat it, but with this we don’t do shit. It sounds like we need some specific number of people dying for some change to happen. It seems like politicians think shootings are not ‘good enough’ [meaning deadly enough] to make a change.”

In addition to racial tension and guns, another risk factor that comes with social media is bullying. Gen Z interviewees mentioned bullying and the effect of online bullying repeatedly. This is an issue that deeply affects them that older generations may not fully appreciate. Kyle, a

white male born in 2000, said, “Cyberbullying is a huge issue. I’ve experienced it first-hand. There’s a huge difference between the casual bullying in second or third grade and then the bullying I experienced over Snapchat in 7th grade. Over Instagram and Snapchat, people post embarrassing things about you. Bullied classmates have depression and anxiety and don’t want to talk to anyone. People, kids, don’t know how to act with these new apps at their fingertips.” Kailee, a white female, experienced bullying differently, “As someone diagnosed with anxiety and depression, it comes from associating with kids our age. I grew up with a single Mom, we didn’t have much money and had to buy our clothes at Walmart. Everyone needed the newest clothes, shoes and stuff to increase their social media following. People, especially girls, use anything that’s wrong with you to go against you and spread rumors about you. You become lonely, have self-doubt. It’s hard to accept yourself.” Daniel, an Albanian male born in 2005, noted the effects of online bullying on young people as well: “People place great importance on what people think about them online, this affects their mental health. People gang up on them in voice-chat in a game and it makes them depressed. In person, if you don’t have the right trends, you won’t be popular.”

Social media’s effects on mental were a major topic for Gen Z respondents. Nick, a white male, stated, “Social media entails seeing the top 1% of genetics and comparing yourself to them. Seeing kids your age being so successful and then sitting in a college class asking yourself ‘what am I doing with my life?’” Karlee, a white female, mentioned both social media and family pressures as contributing to Gen Z anxieties, “When you asked about anxiety, I wanted to say technology is the cause right away. You go on Instagram and see people living the perfect life. You wanna be like that person. You see them getting so much attention. You’re still you. People look a certain way and have a certain amount of money. There’s a lot of comparing going

on. A lot of pressure to look like them. The comparison stems the stress and anxiety. There are also pressures from family. I'm a first-generation college student. Parents influence us. They want us to go to college, but maybe we're not always happy going. There is a lot of pressure to conform to social expectations."

Covid and the related lockdown and school closings hurt Gen Z more than older generations. Niko, a white male born in 2004, stated, "Covid drove down our motivation to do anything. Work ethic is hard to build up. The previous generations had incentives, we don't have much to look forward to. Taxes are rising, we have shitty credit, so we jump from shitty house to shitty house." Bruno, a Hispanic male born in 2005, stated, "People aren't socially connected. No one wants to talk or say anything in class or even say 'hi.'" Kailee, a white female, stated, "Gen Z, we don't know how to socialize. I was in 9th grade when school shut down. We were babies, 14 years old, we had to make due with doing everything online. You sit in a room, solitary, isolated and go to school then sit in the same room the rest of the day. We're so far behind academically. It's easier not to pay attention and get distracted when you're on a Zoom call [for class] for two hours." Adrian, a Hispanic male born in 2005, had an absolutely crushing experience during the covid period, "Covid had a major impact on Gen Z. From personal experience, my entire personality changed. I had a lot of trauma there. It was a huge negative experience. Before I was cheerful and outgoing and excessively loud, now I'm a bit more of a loner, introvert type and very conservative [socially]. I feel like I was being deprived of everything I once was and everything I held close to me. I met someone who picked me up, but I wouldn't be here right now if not for that person. From the covid time period, I remember conversations I had with people and I remember nothing else. I was so dependent on those few interactions, because without them I was nothing." Charlotte added, "At first, covid made Gen Z

depressed while in quarantine and mental health declined. Gen Z became sloppy when it came to responsibilities. Life didn't feel real." Sam, a Filipina, stated, "A good part of anxiety and depression is because of covid. There's so many different directions you could take it into. Family, school, covid. In the pandemic, you couldn't go out or do sports. It took a toll. It took a toll on me being in the same room doing the same thing every day. It made me lose motivation. Having a set routine. It was weird seeing family 24/7. I never saw my parents in that low of a state. Especially my Dad who was unemployed; that boredom drives you to emotions you can't handle."

The covid isolation and bullying speak to a lack of community in America that Robert Putnam chronicled in his 2000 work *Bowling Alone* and a sense of division that Putnam described in the more recent *Our Kids*⁵⁰. One salve may be religious participation. Jana, an Arab woman, stated, "Religion gives me something to hold onto that these people don't have. Religion balances my mood. There's a bigger picture out there. Social media has a big role in how my generation behaves. Depressed people post videos online and normalize small problems and glorify suicide and being fragile."

Gen Z respondents felt a divide with older generations and sought respect from them. Niko stated, "I think older people are mad they didn't have social freedoms when they were younger. These people have to live out their life with rancid homophobia." Sam, a Filipina, stated, "I believe respect must be met both ways. You can't dismiss everything I say and then demand respect." Many others described friction with older generations who they saw as dismissive of Gen Z and overly traditional. One interviewee said that Gen Z didn't respect older

⁵⁰ Putnam, Robert, *Bowling Alone: The Collapse and Revival of American Community*. (New York: Simon & Schuster 2000); Putnam, Robert, *Our Kids: The American Dream in Crisis* (New York: Simon & Schuster 2015).

generations because older generations don't respect them and deride their worldviews including on mental health and gender.

Gen Z sees American legislation as outdated, on guns and abortion for instance, and seeks out new voices in government. Women's rights were mentioned as a cause to champion repeatedly, but sadly almost exclusively by women. Charlotte, a mixed Hispanic female, stated, "This legislation [on abortion and guns] is outdated, it doesn't reflect the country today and we're slowly trying to update and modernize them." Nicole, a Hispanic female, stated, "Eventually [pause for thought]...we're going to lose all of our rights and have no say in anything." Laydeliz, a Hispanic female born in 2004, stated, "Politicians keep saying they want to change laws, but people are still out here killing kids and teachers." Kailee, a white female, stated, "We care about women's rights. This is number one. Every other woman I've talked to agrees. How can we live in a world where we can't make decisions that will affect our whole life? Men are not educated on what abortion is." Charlotte, a mixed Hispanic female, stated, "Our basic rights are being stripped away in terms of abortion."

Climate change was also a frequent target of Gen Z's desire for change. On the environment, Kyle, a white male who related that he is conservative, stated, "Global warming is a huge problem. We want to reduce the emissions that go into the atmosphere." Others stated that the environment and climate were among the main issues Gen Z cares the most about.

Many Gen Z were determined to make changes, while others didn't know what was possible. Nicole, a Hispanic female, stated, "If the world is going to change, our generation will make it change. Gen X and Millennials are too scared to make it change." Kyle, a white male, stated, "Who knows what Gen Z will do? Hopefully we'll save the world because there's a lot of problems and many of us wanna fix them." Other respondents noted that speaking out was easy

but making change would be difficult. For instance, Sam, a Filipina, stated, “After the Parkland shooting, teenagers brought so much attention to that issue. It’s easy to speak out, but actually making change is the difficult part.”

Gen Z are frustrated. They’re hurt and feel abandoned by previous generations. They want to change the world but also feel isolated. They feel like a United States that is still headed by a President from the Silent Generation needs change. They don’t understand why there is so much discrimination and dysfunction in the America they are growing up in. They don’t understand why climate change, which will greatly affect their adult life, hasn’t been seriously addressed—or else, they cynically feel like older generations don’t care about the issue because they “won’t be around” when it gets worse. They see an America where many problems need to be solved and where little or nothing is being done. The future they see is an admonishment on everyone who has come before them.

For instance, Niko stated, “We’re fed up with the glut of problems: homelessness, food insecurity, access to healthcare. There’s a very uneven playing field—it’s terrifying. We’re obsessed with learning about money and finance.” He went on, “If America lasts that long and the White House isn’t a crater, all the good, bad and ugly would be expanded. Some problems would get worse. Gen Z is disproportionately liberal. We see conservatives as close-minded; we need to educate them in a way that doesn’t insult them. We would clean up the mess if we were in charge: we’d deal with the environment, welfare reform, there’d be a nationwide right to abortions, no marriage restrictions, no limits on homosexuals adopting. We’d fund research on gender dysphoria; it did exist in the past, people just killed themselves.” Kailee had a cynical view of the future: “A lot of people think our opinion means everything, I think it means nothing. Most us just became old enough to vote. Politics is split in Gen Z. Some are MAGA cowboys,

others are very liberal. This will be my first election voting. We have split opinions and hatred toward each other. This will drive our country to a bad place. Most people just wanted Trump out. Our emotions will get the best of this country. People get canceled for political opinions. What's acceptable is different for each person.” Similarly cynical, Jana, an Arab female from Dubai born in 2005, laughed when asked what Gen Z would do if they were in charge of America; she thought they didn't deserve to be in charge of anything and could be in charge of “the Ministry of Happiness.” Charlotte was more even-handed, “Gen Z will do what any other generation would: instill our own ideologies when we're in charge. People in power now are installing legislation that they find fit but isn't for young Americans and the general public.” Sam, a Filipina, stated, “It's hard to say what the future holds. In the back of my mind, I feel like ‘is this system ever going to be fixed?’ because if it could've, it would've more quickly. Will it ever get solved? We definitely will be out promoting change. We have so many battle scars that need to be fixed. I don't think one generation can solve what's been going on for so long.”

Gen Z and Risk Perception

As the section on risk perception established, humans are not particularly good at evaluating risks. We try our best using mental heuristics, such as the availability heuristic, as well as our perceptions of risk, our (limited) knowledge and our emotions. For Gen Z, a confluence of factors make it harder to analyze risk than it has been for previous generations of young Americans.

The loss of rights due to the overturning of *Roe v. Wade* was a concern for many Gen Z young women. Veronica, a white woman born in 2001, said she worries about her future “as a

woman.” She described never imagining that her rights would be taken away and wondered what other rights might be taken away from her. “Could they take away my right to vote?” She felt that there were many factors leading to the mental health crisis among Gen Z: “It’s a mix of many things. What’s happening in households as well as what’s happening out in society. There’s no rest: it’s anxiety after anxiety after anxiety.” She listed factors such as bullying, body image and abortion rights in addition to family problems as contributing to this reality. Riley, a white woman also born in 2001, said, “Gen Z has gone through a lot personally.” She noted events in the US such as covid and racial tensions that she felt her “parents didn’t go through.” She described mass shootings but also crushing college debt as contributing to the poor mental health of Gen Z. Yuleisy, a Hispanic woman born in 2003, described racial and justice issues as weighing on Gen Z but prefaced these by listing economic issues such as student loans and inflation.

On risk assessment, Yuleisy felt that Gen Zers do what they see other young people do, including vaping (an unfortunate habit that other Gen Zers emphasized). Valeria, a Hispanic woman born in 2002, agreed with Yuleisy’s contention on Gen Zers following what other young people do. She said, “We have to fit in. We want to be like everyone else. We try to get attention no matter for what.” Elena and Abigail, both white women (one born in 2004, the other in 2000), expressed “an overwhelming, overarching sense of doom and dread.” Elena said, “There’s so much that’s happening that feels like it’s gonna explode in ten years. Racial conflict, climate, until we do something about it, it’s gonna get gradually worse.” Abigail added, “I emphasize that we don’t feel safe anywhere.” She went on, “Everyone has a story. Everyone is aware of it [meaning: gun violence]. In classes, a busy place, a movie theater. You see who’s coming in and look for the exits.” Mason, a white female born in 2003, felt the same about going to concerts

and described how she makes sure she is sober at concerts with friends so that she will not be impaired in case something like a shooting occurs. Ally, a white female born in 2001, expressed a common view, “The country was good and flowing when we were younger and the world became a mess.”

Gen Z’s mental health has deteriorated due to a worldview that the society and environment around them are crumbling: rights are being taken away, the Earth is burning, maniacs could kill you with a gun, and viruses could shut down society again. In such a world where mediated imagery warps the mind, distorts one’s view of one’s body and jars the conscience with random horrible news, reality ends up looking incredibly grim. When one adds the isolation of covid that Adrian experienced or the scary lockdown drills or real gun-initiated lockdowns that Kailee experienced, the ability to measure risk becomes incredibly difficult. Is anywhere safe in such a world?

Prescriptions

It would be pedantic to simply counsel that everyone view risks as they really exist on an actuarial table. Humans fear certain activities, sometimes with very good reason, and many times have limited information on what to do, which can make caution a good course of action. That said, viewing the world as one calamity after another and full of deadly risks has its own suite of problems. Viewing life in America, where life expectancy is high, where incomes are good, where the economy and labor market are good and where quality of life is as strong as it has been, as being completely unsafe has led to mental health problems, increased isolation, and problems socializing in person.

It is true that the level of mass shootings in America is altogether too high and that something must be done about the topic⁵¹. But guns kill more people by suicide than by homicide and most people who are killed by guns are killed by handguns not in mass shootings. Where rights and climate change are concerned, mobilization versus cowering in fear may be a more effective response.

There are five main prescriptions this study can contribute to mental health and risk assessment concerns with Gen Z. The first is to curate social media so that the individual is not bombarded with imagery that is upsetting, disturbing or depressing. A few Gen Z respondents described “doubling down on depression” by watching sad videos while already sad. Mason, the young woman born in 2003, realized that social media was ruining her mood and decided to do something about it. She stuck to accounts with images and updates about people she cared about, but cut out ones with topics that disturbed her. Her logic is that if using social media is for fun, why should she look at random, jarring images (such as those of people being killed) during that time? Curating one’s accounts and limiting time on social media would additionally help young people by, as Madelyn, a young woman born in 2001, making sure they “touch grass” rather than living “chronically online.” This sort of social media hygiene should be taught in schools and promoted through ads by government and by organizations that deliver this content to young people.

The second prescription is to teach that risk is not all-or-nothing. This is the basis of cost-benefit analysis. Knowing that an activity carries a miniscule risk of death may help people see that their perceptions of risk are off. Knowing actuarial statistics may not be enough; videos that counter the prevailing narratives that “nowhere is safe” need to be disseminated to quell the

⁵¹ “There have been 39 mass killings with guns in 2023,” *The Washington Post*, 6 December 2023, <http://www.washingtonpost.com/nation/interactive/mass-shootings>.

concerns of scared young people. The problem is that this statistical knowledge of risk needs to be wedded to actual action about the real concerns of young people.

This leads us to the third prescription: that the core issues behind the feelings of risk that young people hold need to be addressed. Learning how to breathe slowly won't cure the backsliding in women's rights or the gun problem in America or bullying or climate change. These issues need to be dealt with head-on in a way that can show young people that the adults they see aren't all dysfunctional. This real action toward change will motivate young people while also allaying some of their fears. Including young people in these efforts, through inter-generational coalitions or movements or actions, would benefit all Americans.

Fourthly, context is needed to help with perceptions brought on by the availability heuristic and probability neglect. Social media is a mess of first-hand accounts, hot takes, and quick opinions. All of it barely hangs together for people who understand what's going on in the world, let alone for people who are still learning about it. Contextualizing tragedies and news items in media and social media will help people see where risks really lie. This may not be something that all news organizations go for, but perhaps social media and media organizations catering to young people can be convinced that a little context can be incredibly nourishing for their audience.

Finally, the value of in-person community is clearly critical to mental health. Humans need time together in person. As Mason described, social media isn't really very social. Young people are isolating themselves. The explosion of the digital world and the covid pandemic combined to greatly harm the social worlds of young people. Fewer people are attending things like religious services, which provide opportunities to connect with others⁵². In mental health

⁵² Grose, Jessica, "The Largest and Fastest Religious Shift in America is Well Underway," *The New York Times*, 21 June 2023, <https://www.nytimes.com/2023/06/21/opinion/religion-dechurching.html>.

campaigns, the value of in-person community gathering needs to be emphasized. This is a message that young people may be prone to accept especially if it is combined with their impetus to make change in the world. They are well aware of the ineffectiveness of hashtag activism⁵³ and pushing them to do more with others could be a message that resonates with Gen Z.

Gen Z live in a world where they really are many risks. But they also live in one where people are living long, healthy rich lives. By incorporating some of these prescriptions into our national conversation, the world will be a better one for Gen Z and all Americans.

⁵³ Frost, Amber A'Lee, "The Problems with Hashtag Activism," *Jacobin*, 1 December 2020, <https://jacobin.com/2020/12/hashtag-activism-review-twitter-social-justice>.

Appendix: Interview Questions

Gen Z Interview Questions

Basic demographics (race, gender, birth year)

AMERICA AND POLITICS

What do you feel about the state of America and its political system?

Do you think society we live in is getting better or worse? Why?

In terms of America, what do you think the future of the country holds and what, if anything, worries you about that future?

CRIME.

If an important politician was in front of you, what would you want to tell them about mass shootings in America?

How did the protests and riots that occurred over the past few years affect you?

What do you think of America's response to crimes (meaning how America punishes people)?

GEN Z.

How do you think covid affected GZ?

How do you think your generation views America differently than previous generations?

People note high incidences of depression and anxiety in your generation. Why do you think that is?

How do you think young people assess risk, in other words, how do you think they evaluate what is a safe versus a risky behavior?

Do you feel like you and your generation have a real effect on American society and politics?

What issues do you feel your generation cares about? Do you care about these issues? What if anything concerns you about your generation?

When your generation is in charge of America, what do you think they will do?