Investigating Intellectual Safetyism: What are the Consequences of Shielding Students from Emotional Discomfort?

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Samuel H. C. Pratt

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Without debate, without criticism, no administration and no country can succeed, and no republic can survive.

– John F. Kennedy

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Abstract

***Background and objectives*:** Various intellectuals have identified a burgeoning culture of intellectual safetyism on American college campuses, defined by efforts to shield students from words, ideas, and experiences that might cause emotional discomfort. Proponents insist that trigger warnings, safe spaces, and related practices support vulnerable students, while critics argue that these practices coddle students and undermine their resilience. Previous research has examined the impact of safetyism cross-sectionally and using brief experimental manipulations. Our study is the first to test how longitudinal exposure to a broad range of safetyism-inspired practices impacts various components of students' resilience.

***Methods*:** First-year students ($N = 107$) reported their weekly exposure to various safetyism-inspired practices for four weeks. We measured participants' perceived resilience and stress mindset at baseline and endpoint assessment. We also administered an online public speaking task at baseline and endpoint and measured participants' anticipatory stress appraisal and anxiety response at each timepoint.

***Results*:** Longitudinal exposure to safetyism-inspired campus practices did not impact students' perceptions of their resilience or stress mindset. Likewise, safetyism exposure did not affect students' anticipatory stress appraisals or anxiety response when confronted with a public speaking task. However, greater safetyism exposure was associated with heightened perceptions of how demanding the speech task was.

***Conclusion*:** Contrary to both critics and proponents of safetyism, we find that efforts to shield students from emotional discomfort are neither helpful nor harmful to students'

resilience. Limitations, directions for future research, and implications for higher education are discussed.

Investigating Intellectual Safetyism: What are the Consequences of Shielding Students from Emotional Discomfort?

Various intellectuals have warned of a culture of "intellectual safetyism" on American college campuses, characterized by the belief that students should be shielded from words, ideas, and experiences that might cause emotional discomfort. For example, trigger warnings, which originated to notify individuals with post-traumatic stress disorder (PTSD) in advance of potential reminders of their trauma, are now commonly used in the classroom to warn students about sensitive course topics. Similarly, some universities now provide "safe spaces" where students can take refuge with the assurance that their emotional well-being will not be jeopardized. For example, when a controversial speaker participated in a debate at Brown University in 2015, the president of the university organized a safe space for upset students replete with "cookies, coloring books, bubbles, Play-Doh, calming music, pillows, blankets and a video of frolicking puppies" (Shulevitz, 2015). Some professors and administrators now opt to remove potentially distressing material from the classroom altogether. A recent initiative at Stanford University proposed the elimination of words that certain groups may perceive as harmful, including such seemingly innocuous terms as "walk-in" (ableist) and "grandfather" (racist) (Stanford University, 2022). While intellectual safetyism can take many forms, a culture of intellectual safetyism is one in which the emotional "safety" of students is elevated to the highest priority, at the expense of other practical considerations (Lukianoff & Haidt, 2018).

The merits of intellectual safetyism have become the subject of widespread debate in the past decade. Proponents believe that shielding vulnerable students from emotional

discomfort is a necessary measure to protect them from psychological harm (e.g., Stokes, 2014). However, in their book *The Coddling of the American Mind*, free-speech lawyer Greg Lukianoff and social psychologist Jonathan Haidt (2018) argue that intellectual safetyism, however well-intentioned, may yield negative consequences for the students it purports to protect. Specifically, they contend that sheltering students from emotional discomfort will make them more psychologically vulnerable, ultimately hindering their ability to cope with challenges in the classroom and beyond (Lukianoff & Haidt, 2018). The current study set out to address the lack of empirical evidence on the topic by characterizing the prevalence of intellectual safetyism at an elite northeastern university and examining its impact on various components of student resilience.

The Rise of Intellectual Safetyism

On one hand, the rise of intellectual safetyism may be a product of social and moral progress that has made the world a safer place. Steven Pinker (2011) argues that one driving force behind the historical decline in violence was an increase in the valuation of children's lives. Indeed, the campaign to keep children safe has resulted in a variety of positive social changes including the creation of laws and regulations to protect children from abuse, neglect, and sexual exploitation (Pinker, 2011). However, Pinker cautions that the historical forces that caused the decline in violence can sometimes overshoot their goals, resulting in an overprotective and restrictive approach to the management of risk. Under this view, recent trends such as the decline of unsupervised free-play, school-wide prohibitions on dodgeball, and the removal of "dangerous" equipment (e.g., see-saws) from playgrounds demonstrate how well-intentioned efforts to

protect children from harm "can leave a culture with a legacy of puzzling customs, peccadilloes, and taboos" (Pinker, 2011, p. 389; Lukianoff & Haidt, 2018).

As we succeed in eradicating the more serious harms to society, perhaps it is only natural that we broaden the scope of what we consider harmful. Indeed, as the objective prevalence of various forms of adversity has declined, the meaning of many harm-related concepts has expanded to encompass a broader range of experiences (Haslam, 2016). Consider the emergence of the term "microaggression", which refers to minor and unintentional slights that would not have previously been classified as harmful. Within psychiatry, an expanding conceptualization of mental disorder has lowered the threshold for diagnosable pathology and broadened the range of clinical conditions that are considered pathological (Haslam, 2016; McNally, 2016). These trends may resonate through society *writ large*, as individuals begin to understand common experiences of unhappiness and distress in psychiatric terms (e.g., depression, anxiety, trauma; Haslam et al., 2021). Although there are plausible benefits to concept expansion (e.g., reduced mental health stigma), there is evidence to suggest that adopting a broader concept of harm can lead to greater psychological vulnerability (Jones & McNally, 2021). In this sense, concept expansion may be a "problem of progress." Writing about the expanding definition of trauma, Richard McNally proposes that "improvements in standards of living, including reductions in violence, may render people sensitive to stressors that seldom affected their grandparents. Perhaps the better things get, the more sensitive we become" (McNally, 2016, p. 47).

Consistent with the contemporary expansion of harm-related concepts, one key feature of intellectual safetyism is the qualitatively new application of the language of

"safety" to refer to psychological, as opposed to merely physical, well-being (Lukianoff & Haidt, 2018). For example, Lukianoff and Haidt note that despite a long history of students protesting speakers and ideas they dislike, only in recent years have these protests been justified by the claim that words can be forms of violence. As the cultural understanding of what constitutes harm expands, it is perhaps unsurprising that a society that values the safety of children and adolescents would employ measures to protect them from new classes of stimuli now considered harmful, including words, ideas, and common sources of stress. Ultimately, intellectual safetyism may be the manifestation of traditional safety concerns expanding into the realm of emotional safety.

A Nuanced View of Intellectual Safetyism

Importantly, there are possible benefits to a culture of intellectual safetyism. For example, practices that aim to protect students from experiencing emotional distress might allow for more attention to be given to hardships that previously went undetected, such as those faced by marginalized groups and other vulnerable populations. Becoming more attentive to minor forms of harm (e.g., microaggressions) might empower victims of prejudice and encourage positive social change (Cikara, 2016). Additionally, rates of mental health problems among college students have increased over the past several decades, with recent data suggesting that over one third of students are depressed or anxious (Eisenberg et al., 2020; Lipson et al., 2019). Protecting students from unnecessary stress and emotional discomfort might engender a supportive environment in which students are better able to navigate the challenges that college presents.

Antifragility

On the other hand, both age-old wisdom and empirical evidence suggest that we can derive immense strength from adversity. Early models of resilience proposed that moderate exposure to stressful events can 'toughen', 'inoculate', or 'steel' individuals against the effects of future stressful events (e.g., Dienstbier, 1989; Rutter, 2012; see Liu, 2015, for a review). In this vein, Nassim Taleb (2012) defines 'antifragile' systems as those that *benefit* from exposure to stressors. For example, muscles are antifragile in that they grow stronger by undergoing difficult workouts. Crucially, antifragile systems not only benefit from stressors but become weaker when deprived of them; in the case of muscles, lack of exercise leads to muscle atrophy (Taleb, 2012). To antifragile systems, stressors are not inherently negative but rather are opportunities to grow stronger.

Lukianoff and Haidt (2018) argue that intellectual safetyism and its associated practices reflect a fundamental misunderstanding about human resilience: that adolescents are fragile, requiring protection from even the most minor stressors. Instead, they posit that adolescents are *antifragile*, and that confronting challenges in a controlled academic setting can help students build resilience and learn valuable coping skills. The authors draw on a metaphor used by Taleb to demonstrate the importance of this distinction in understanding the potential consequences of intellectual safetyism: "wind extinguishes a candle but energizes a fire" (Lukianoff & Haidt, 2018, p. 23). If we view students as fragile, then it may make sense to protect them from feeling emotionally uncomfortable in the classroom. However, if students are antifragile, then intellectual safetyism may be robbing them of valuable opportunities to build resilience while increasingly leading them to view themselves as fragile (Lukianoff & Haidt, 2018).

Psychological Resilience

Early deficit-focused models of psychopathology revealed the many ways in which serious adversity can lead to the onset of mental disorders (Masten, 2001; Rutter, 1985). In turn, the focus on pathological outcomes following negative life events painted a picture of resilience as an exceedingly rare trait possessed only by a lucky few (Bonanno, 2004; Masten, 2001). However, the perception of resilience as extraordinary began to shift in the 1970s following the observation that many children raised in high-risk environments did not go on to develop psychopathology (Masten, 2001). As research began to characterize the variety of non-pathological responses to serious adversity, it became evident that resilience was far more common than previously imagined. Lecturing in 1985, psychiatrist Michael Rutter noted that "even with the most severe stressors and glaring adversities, it is unusual for more than half of children to succumb" (Rutter, 1985, p. 598). Indeed, decades of subsequent research have shown that the most common response to serious adversity is resilience – a stable trajectory of healthy psychological functioning (Bonanno, 2021b).

In one of the most extraordinary case studies on human resilience, researchers tracked the mental health of a large sample of New York area residents following the September 11th terrorist attacks. The researchers were interested in the prevalence of PTSD symptoms following the attacks – after all, New York City clinical psychologists and crisis hotlines had launched an unprecedented response in anticipation of a massive surge in anxiety and PTSD (Bonanno, 2021a). However, when the researchers followed up with residents six months after the attacks, they were surprised to find that most people were resilient: 65% of individuals were experiencing either one or no symptoms

of PTSD, and just 1% of Manhattan residents met the clinical threshold for the disorder (Bonanno et al., 2005; Bonanno et al., 2021a)[1].

Studies of individuals exposed to other forms of serious adversity yield similar results. Most individuals follow a resilient trajectory, defined by a lack of significant and chronic symptoms of distress, following military deployment (Bonanno et al., 2012b; Hughes et al., 2005), serious spinal cord injury (Bonanno et al., 2012a; Quale & Shanke, 2010), motor vehicle accidents (Bryant et al., 2000), acute coronary syndrome (e.g., heart attack; Meli et al., 2020), and the loss of a loved one (Zisook et al., 1997). Although these findings should not minimize the suffering of the traumatized, bereaved, and otherwise afflicted, they demonstrate that psychological resilience, not fragility, is the normal human response to adversity. As Masten put it, "resilience does not come from rare and special qualities, but from the everyday magic of ordinary, normative human resources" (2001, p. 235).

Antifragile Humans: The Benefits of Moderate Adversity

Supporting the notion that humans are antifragile, longitudinal research has identified a curvilinear relationship between adversity and resilience such that individuals who experience moderate lifetime adversity report better mental health outcomes, greater life satisfaction, lower distress, and greater positive affect compared to those exposed to low or high levels of adversity (Dooley et al., 2017; Seery et al., 2010a). Individuals with a history of moderate adversity also demonstrate greater resilience when faced with immediate stressors in their environment; in one study, they reacted less negatively to

[1] In the month following the September 11th attacks, 7.5% of Manhattan residents and 20% of individuals living near the World Trade Center were estimated to have met the clinical threshold for PTSD, but most of them did not go on to develop chronic PTSD (Galea et al., 2002).

pain and exhibited more adaptive psychophysiological responses during a challenging test (Seery et al., 2012). In another study, adolescents who had experienced moderately adverse events growing up (e.g., academic failure; family moving) were less likely to develop depressive symptoms in response to recent stressors compared to their peers who had experienced fewer adverse events (Shapero et al., 2015). Although the debilitating effects of serious life adversity are well documented (e.g., Heim & Nemeroff, 2001), there may be a threshold at which moderate levels of adversity that are challenging but manageable help to build resilience (Liu, 2015; Seery et al., 2010a).

The Perils of Overprotection: Helicopter Parenting

If adolescents are antifragile, then we should see negative outcomes when they are shielded from stressors to an excessive degree. Supporting this notion, research on 'helicopter parenting' has found associations between developmentally inappropriate overprotection (e.g., immoderate concern over the child's safety; solving the child's problems for them) and various adverse psychological outcomes including increased rates of anxiety, ADHD, and depressive symptoms (Meyer et al., 2022; Petegem et al., 2020; Petegem et al., 2021). One objection to this line of research is that non-experimental studies cannot rule out the possibility of reverse-causality, that is, that overprotection is a *response to*, rather than a *cause of*, child psychopathology. However, research suggests that even when parents respond to their children's symptoms of distress with well-intentioned efforts to protect them, they only make matters worse. Meyer and colleagues (2022) found that child ADHD symptoms at age three predicted overprotective parenting at age six, but that overprotection at age six predicted anxiety symptoms at age nine.

Taken together, these findings suggest that overprotective parenting styles may have deleterious effects on youth mental health.

The negative effects of overprotection may become especially pronounced when adolescents reach college and are required to independently navigate a new environment fraught with challenges. For example, a study of incoming college freshman found that those with highly protective parents experienced a robust increase in social anxiety during their first semester relative to their peers (Spokas & Heimberg, 2008). Other studies of college students have linked helicopter parenting to higher levels of depression, lower well-being, and recreational use of painkillers (Le Moyne & Buchanan, 2011; Schiffrin et al., 2014). These studies find that paradoxically, hyper-protecting youth from potential harm may do more harm than good.

One explanation of the negative effects of helicopter parenting is that excessive protection can foster a belief in children that the world is an inherently dangerous place, leading them to become anxious and avoidant in the face of new challenges (Meyer et al., 2022; Ungar, 2009). For example, Fulton and colleagues (2013) find that the relationship between overprotective parenting and anxiety severity is partially driven by a heightened tendency to avoid experiencing emotional distress. Additionally, when children have their problems solved for them by others, they may lose out on opportunities to develop resilience and come to doubt their ability to overcome challenges on their own (Meyer et al., 2022; Petegem et al., 2020; Schiffrin et al., 2014). Lastly, overprotection may undermine a child's sense of autonomy and create a feeling of dependence on others. Research has shown that children and adolescents with overprotective parents are more likely to have an external locus of control, a risk factor for psychopathology characterized

by the belief that their life outcomes are largely determined by external factors (Chorpita et al., 1998; Lynch et al., 2002; Spokas & Heimberg, 2008).

The literature on helicopter parenting underscores the potential hazards of overprotection and therefore provides a useful framework for theorizing about the consequences of intellectual safetyism on college campuses. Resilience in the face of adversity is a dynamic process that requires individuals to recognize what is required by the situation, flexibly apply various coping techniques, and adjust their response based on what is working and what is not (Bonanno, 2021b). Overprotection may be problematic for adolescent resilience because it deprives individuals of exposure to stressors, which provide opportunities to learn and master the skills required for successful coping. Further, overprotection may implicitly instill a variety of maladaptive beliefs and coping strategies that ultimately undermine resilience. We now discuss several relevant components of resilience that might be affected by efforts to shield students from experiencing emotional discomfort.

Stress Appraisal

The biopsychosocial model of challenge and threat (BPS; Blascovich & Tomaka, 1996; Lazarus & Folkman, 1984) proposes that the way in which individuals perceive and interpret a potentially stressful event largely shapes their stress response. Specifically, in the moments following exposure to a stressful event, an individual's primary appraisal of the demands posed by the stressor and a secondary appraisal of their coping resources interact to determine the individual's physiological, cognitive, and behavioral response (Jamieson et al., 2012; Tomaka et al., 1993). A stressful situation is experienced as a positive challenge when the individual perceives themselves as having

sufficient resources to cope with the demands of the situation. Conversely, a stressful situation is experienced negatively as a threat when situational demands are perceived to exceed one's own coping ability.

Jamieson and colleagues (2013) employ a useful metaphor to demonstrate how individual appraisals influence the acute stress response. Imagine that two skiers, one novice and one expert, stand atop a mountain preparing to descend a treacherous slope. As the skiers size up the trail, they come to divergent conclusions. The expert skier, confident in her ability to handle the trail, experiences a positive state of challenge. The novice skier, overwhelmed by the difficulty of the trail, experiences a negative state of threat. Both skiers experience increases in physiological arousal as their bodies prepare for action: their hearts begin to beat faster and harder, and the release of adrenaline in their bloodstream provides a burst of energy (Blascovich et al., 2004; Seery et al., 2010a; Seery; 2013). For the expert skier, research shows that a state of challenge is additionally accompanied by increased cardiac output (CO) and lower total peripheral resistance (TPR); her arteries dilate to allow more blood to be pumped through the body (Blascovic et al., 2004; Seery et al., 2010a; Seery et al., 2013; Tomaka et al., 1993; Tomaka et al., 1997). The novice skier, having appraised the trail as a threat, experiences a release of cortisol into the bloodstream as her arteries constrict to reduce blood flow (Blascovich, 2004; Seery, 2011; Seery, 2013; Gaab et al., 2005).

The skiers' divergent physiological responses following their respective appraisals of challenge and threat are subsequently accompanied by contrasting cognitive and behavioral outcomes. The expert skier is likely to interpret her physiological arousal as excitement, experiencing greater positive affect and less subjective stress compared to

the novice (Tomaka et al., 1997). She is motivated to perform and recognizes the possibility for growth by overcoming the challenge before her. The novice skier's subjective experience of threat is characterized by greater negative affect and stress (Tomaka et al., 1993; Tomaka et al., 1997). Fearful of the task ahead, she sees little potential for gain is instead focused on minimizing the harm that could befall her (Seery, 2013; Jamieson et al., 2012; Tomaka et al., 1993).

It should come as little surprise that challenge appraisals facilitate resilient outcomes, whereas the opposite is true of threat appraisals. In a study of victims of serious spinal cord injury, those who exhibited greater challenge appraisals upon hospitalization were more likely to follow a resilient trajectory of low, stable levels of depression (Bonanno et al., 2012a). Conversely, among recent victims of a major trauma, perceived threat to life predicted subsequent PTSD onset (Holbrook et al., 2001). By many accounts, individual appraisals of threat can exert an even stronger impact on health outcomes than the severity of the event itself. In a study of patients hospitalized for potential acute coronary syndrome, perceived threat predicted subsequent post-traumatic stress symptoms regardless of whether they were ultimately diagnosed with the disease (Meli et al., 2020). Similarly, among victims of motor vehicle accidents, perceived threat to life predicted PTSD onset irrespective of the extent of physical injury; individuals who had severe injuries but didn't fear for their lives were often resilient, whereas individuals with very minor injuries but high threat perceptions sometimes went on to develop PTSD (Blanchard et al., 1995).

In the face of non-traumatic stressors, positive appraisals are conducive to mastery and success. One study measured the physiological responses of college baseball

and softball players as they performed a stressful public speaking task. Athletes who exhibited cardiovascular indicators of a challenge state subsequently outperformed their threat-oriented teammates during the season (Blascovich et al., 2004). A similar research paradigm found that students who exhibited cardiovascular markers of a challenge state at the beginning of a college course outperformed their classmates by the end of the semester (Seery et al., 2010b). Interventions designed to actively facilitate a state of challenge lead to similar improvements in academic and athletic performance (Brady et al., 2018; Jamieson et al., 2010; Jamieson et al., 2016; Moore et al., 2012). While exposure to stressful events is ubiquitous in our lives, approaching stressors in positive and constructive ways can lead to resilience and even growth.

Intellectual Safetyism and Stress Appraisal

One implication of this research is that external factors can either enhance or hinder an individual's resilience, depending on how they alter the individual's perceptions of the risk posed by stressors and their ability to cope with them. In the context of intellectual safetyism, practices aimed at protecting students from potentially distressing words, ideas, and experiences might inadvertently lead students to view these types of stressors as more harmful or demanding than they otherwise would. For example, trigger warnings have been reliably found to increase anxiety in anticipation of potentially distressing content, presumably because they create an expectation of harm (Bridgland et al., 2023). Similarly, priming people to think about words as harmful makes them perceive more harm in ambiguous phrases (Bleske-Rechek et al., 2023).

Alternatively, proponents of safetyism may be correct that these practices engender a supportive environment in which students can confront stressors on their own

terms. In that case, students might benefit from more positive perceptions of their ability to cope with stressful situations. A heightened sense of safety could ultimately be conducive to a challenge appraisal (Seery, 2011). The same might be said of helicopter parenting, however, which is robustly associated with adverse mental health outcomes (Meyer et al., 2022; Petegem et al., 2020; Petegem et al., 2021). Rather, practices designed to protect students from experiencing emotional discomfort (e.g., safe spaces) may signal to students that they are incapable of dealing with challenges on their own, resulting in decreased perceptions of coping resources. In sum, safetyism-inspired practices may lead students to view otherwise manageable challenges as threats.

Stress Mindset

Distinct from an individual's appraisal of immediate stressors in their environment is the general mindset that one adopts towards the nature of stress itself. Research shows that individuals vary in their beliefs about stress, ranging from the belief that stress is strictly detrimental to health and well-being (i.e., a stress-is-debilitating mindset) to the belief that stress can have benefits and lead to personal growth (i.e., a stress-is-enhancing mindset) (Crum et al., 2013). Although most people tend to hold negative beliefs about stress, endorsing a stress-is-enhancing mindset is associated with better health and more positive cognitive, affective, and physiological responses to stressors (Crum et al., 2013; Crum et al., 2017).

The belief that stress has benefits can confer resilience, enabling individuals to cope more effectively with stressful life events. Adolescents who endorse a stress-is-enhancing mindset are less likely than their peers to develop symptoms of anxiety and depression following exposure to stress and adversity (Huebschmann & Sheets, 2020;

Jiang et al., 2019). A positive stress mindset can improve outcomes even in the most stressful of conditions. In a recent study, researchers tracked a cohort of Navy SEAL candidates during BUD/S, an intensive training course known for its high dropout rates and extreme levels of physical and psychological demand (Smith et al., 2020). They found that SEAL candidates with a stress-is-enhancing mindset persisted longer without dropping out, performed better on a timed obstacle course test, and were evaluated more positively by their instructors and peers compared to those who held neutral mindsets toward stress.

On the other hand, the belief that stress is strictly negative can compromise resilience and exacerbate the possible consequences of stress exposure. A largescale survey of the U.S. population found that high levels of reported stress are associated with a 43% increased risk of premature mortality *only* among individuals with a strong belief that stress negatively affects their health (Keller et al., 2012). Similarly, compared to those who believe in the benefits of stress, adolescents who endorse a stress-is-debilitating mindset tend to experience more distress in the wake of adverse life events (Park et al., 2018).

Much like the proposed mechanisms underlying stress appraisals, the effects of stress mindsets on health and performance outcomes are likely driven by the physiological and behavioral responses that these mindsets invoke (Crum et al., 2013). A stress-is-enhancing mindset is associated with more moderate cortisol release under stressful conditions, allowing the body to reach the optimal level of physiological arousal to cope effectively with the task at hand (Crum et al., 2013). Hence, in the same way that patients in a placebo condition improve when they believe they are receiving a valid

treatment, the belief that stress has benefits can become a self-fulling prophecy as the body responds to stress in more adaptive ways. Further, individuals who believe in the potential for stress to confer benefits react to stressful events differently than individuals who anticipate harmful outcomes. Research suggests that individuals with positive stress mindsets tend to use more approach-oriented coping styles (e.g., positive reframing, seeking emotional support), whereas individuals with negative stress mindsets are inclined towards avoidance-oriented coping (e.g., substance use, behavioral disengagement) (Chen & Qu, 2021). Put simply, individuals who believe that experiencing stress will harm their performance and well-being are likely to respond to stress in unproductive ways that ultimately make this belief a reality.

Intellectual Safetyism and Stress Mindset

Importantly, an individual's stress mindset can change over time in response to environmental cues that signal the beneficial or harmful nature of stress (Crum et al., 2013; Goyer et al., 2021). For example, practices that encourage the avoidance of stressors may impress the belief that stress is debilitating, leading to maladaptive responses to stressful situations (Crum et al., 2013; Jamieson et al., 2018). In line with this assumption, it is possible that efforts to shield students form words, ideas, and experiences that evoke emotional discomfort could have a negative effect on students' general mindset toward stress.

Students are invariably confronted with challenging and stressful experiences as they navigate life in college. For example, they might have their deeply held beliefs challenged by their peers and professors, or encounter course topics that make them upset or distressed. These experiences can often be uncomfortable, but the ability to embrace

and even seek out emotional discomfort as a positive experience can be a valuable tool in motivating personal growth (Woolley & Fishbach, 2022). When teachers and administrators encourage students to disengage from potentially distressing material by employing trigger warnings, making distressing course content optional, cancelling controversial speakers, and arranging safe spaces, students may come to view stress as inherently negative. Other campus practices may inspire a negative attitude towards stress in more subtle ways. For example, well-intentioned efforts to heighten students' attention to mental health resources or emphasize the importance of their emotional "safety" may inadvertently signal to students that experiencing stress is a sign of pathology and harm, as opposed to a normal experience that can lead to personal growth. Broadly speaking, in their effort to support students through the various challenges that college presents, safetyism-inspired practices may instill a mindset that stress is debilitating.

The Current Study

Building on prior theory and research, the current study asked whether intellectual safetyism might inadvertently hinder student resilience in a variety of ways. Specifically, we tested how exposure to safetyism-inspired practices over a four-week period impacted students' perceptions of their resilience, stress mindset, appraisal of a public speaking task, and anticipatory anxiety in response to the speech task. We also wanted to assess whether theoretically relevant individual differences might affect how students are impacted by safetyism-inspired practices. Therefore, we explored the potential moderating roles of trait anxiety, students' perceptions of their own need for intellectual safetyism, and the strength of students' belief that words can cause psychological harm.

First-year undergraduate students were invited to participate in a four-week online study involving a baseline survey and four subsequent weekly surveys. In the first survey, participants completed a battery of baseline measures including measures of their perceived resilience and stress mindset. Then, participants completed a brief online public speaking task in which they were given two minutes to prepare a four-minute speech. We measured the extent to which participants appraised the speech task as a positive challenge versus a negative threat, as well as participants' anxiety changes in anticipation of the task. For the next four weeks, participants reported in weekly surveys how often they experienced a variety of safetyism-inspired practices throughout the week. At the end of four weeks, participants completed a final survey similar to the first. We measured participants' perceived resilience and stress mindset for a second time, as well as their appraisal of and anticipatory anxiety response to a second public speaking task identical in its instructions to the first.

Research Question 1: Does Exposure to Intellectual Safetyism Adversely Affect Psychological Resilience?

Hypothesis I

Exposure to intellectual safetyism-inspired practices during the study period will predict changes in perceived resilience, such that individuals exposed to higher levels of intellectual safetyism will experience greater decreases in perceived resilience from baseline to the endpoint assessment.

Hypothesis II

Exposure to intellectual safetyism-inspired practices during the study period will predict changes in stress mindset, such that individuals exposed to higher levels of

intellectual safetyism will experience greater shifts towards a stress-is-debilitating mindset from baseline to the endpoint assessment.

Hypothesis III

Exposure to intellectual safetyism-inspired practices during the study period will predict changes in stress appraisal of the public speaking task, such that individuals exposed to higher levels of intellectual safetyism will appraise the second speech task as a greater threat compared to their appraisal of the first speech task.

Hypothesis IV

Exposure to intellectual safetyism-inspired practices during the study period will predict changes in anticipatory anxiety response to the public speaking task, such that individuals exposed to higher levels of intellectual safetyism will experience greater anxiety increases in anticipation of the second speech task compared to the first.

Research Question 2: Do Individual Differences Moderate the Impact of Exposure to Intellectual Safetyism?

We further explored whether three theoretically relevant individual differences (i.e., trait anxiety, perceived need for intellectual safetyism, and the belief that words can harm) moderated the impact of exposure to safetyism-inspired practices on the aforementioned variables. Due to the sparse research on these variables in the context of intellectual safetyism, we framed these potential moderators as exploratory and did not advance specific hypotheses as to the direction of their effects. However, we offer some tentative theory below as to how each variable might impact the effects of safetyism-inspired practices.

Trait Anxiety

Given that safetyism-inspired practices are often aimed at supporting vulnerable students, we might expect that students who are particularly anxious would benefit from these practices. On the other hand, anxious students might be especially receptive to cues arising from safetyism-inspired practices that signal the negative nature of stress and stressors.

Perceived Need for Intellectual Safetyism

Individuals may differ in the extent to which they endorse safetyism-inspired practices as beneficial to their academic functioning and psychological well-being. For example, while some studies find that most individuals support the use of trigger warnings (Bellet et al., 2018), other studies find that most students disagree with trigger warnings and believe that universities should help students *face* anxiety, rather than avoid it (Burch et al., 2018). Individual differences in these beliefs moderate the effect of trigger warnings. Gainsburg and Earl (2018) found that trigger warnings increase anticipatory anxiety most strongly for individuals who view them as supportive, as opposed to coddling. Given that requests for trigger warnings, safe spaces, speaker cancellations, and related practices often come from students themselves, it is important to understand whether these individuals are differentially impacted by safetyism-inspired practices.

The Belief That Words Can Harm

Similarly, individuals may differ in the extent to which they endorse the belief that minor stressors such as upsetting or offensive words can cause psychological harm. Differences in this belief may impact how students are affected by safetyism-inspired practices. For example, Bellet and colleagues (2018) found that receiving a trigger

warning increased anxiety in response to a distressing literary passage only among individuals who believed that words can cause harm.

Method

Participants

All procedures were approved by the Harvard University Committee on the Use of Human Subjects. First-year students (i.e., members of the class of 2026) were recruited on a rolling basis during the fall semester of 2022. After gaining approval from the Office of Undergraduate Education, we recruited prospective participants via a posting on the Harvard Study Pool, flyers posted on approved campus bulletin boards, advertisements in Harvard newsletters and class social media pages, and instructor outreach to students enrolled in their courses. The study was advertised under the title "Life at Harvard," and prospective participants were able to access the first survey via a link in the recruitment materials.

Measures

Participants completed a wide variety of measures throughout the five surveys. Below we describe only the measures relevant to the current study.

Demographic Questionnaire

This questionnaire asked participants to report their gender, age, sexual orientation, and ethnicity (see Appendix A).

Psychiatric History

Participants were asked whether they had ever been diagnosed with a psychiatric or psychological problem (see Appendix B). Participants who responded yes were prompted to select all applicable diagnoses from a dropdown menu.

Exposure to Intellectual Safetyism Scale

We created a 16-item scale (see Appendix C) to assess participants' exposure to safetyism-inspired campus practices (i.e., practices aimed at shielding students from experiencing emotional discomfort). Participants completed four weekly questionnaires in which they reported their frequency of exposure to a variety of events on campus during the prior week. Participants indicated how often they experienced each event on a sliding scale (0 = *never*, 50 = *3-4 times*, 100 = *daily or more often*). Critical items assessing safetyism-inspired practices (e.g., *I was given a trigger warning or content warning to notify me of potentially distressing material*) were intermixed with noncritical filler items (e.g., *I went to office hours to get extra help for a course*) to avoid heightening participant attention to safetyism-inspired campus practices and revealing the true focus of the study. Participants' scores across each of the four exposure surveys were averaged to generate a single composite score for each individual, representing average exposure to intellectual safetyism throughout the duration of the study. In our sample, the Exposure to Intellectual Safetyism Scale demonstrated good internal consistency across all timepoints ($\alpha = 0.83$ (Week 1), $\alpha = 0.89$ (Week 2); $\alpha = 0.92$ (Week 3), $\alpha = 0.93$ (Week 4)).

Generalized Anxiety Disorder Scale – 7-item – Modified

Trait anxiety was assessed using the Generalized Anxiety Disorder Scale – 7-item (GAD-7) (Spitzer et al., 2006). This scale is widely used in research and clinical practice to screen individuals for symptoms of generalized anxiety disorder.

The GAD-7 demonstrates strong convergent validity with structured psychiatric interviews for anxiety (Spitzer et al., 2006). It is also an excellent measure of symptom

severity, with higher scores being associated with multiple domains of functional impairment, self-reported disability days, and greater healthcare usage (Spitzer et al., 2006). The GAD-7 prompts participants to report how often they have been bothered by each of the seven core symptoms of generalized anxiety disorder, as defined in the DSM-IV. Because we were interested in trait anxiety, as opposed to current anxiety symptoms, we modified the prompt to ask participants about their experience with each symptom *in general*, rather than over the past two weeks. Participants reported how often they are generally bothered by several problems (e.g., *not able to control or stop worrying*) on a 4-point Likert scale (0 = *not at all*, 3 = *nearly every day*). Responses to each item were summed to generate a composite score. The GAD-7 demonstrated good internal consistency in our sample ($\alpha = 0.87$).

Perceived Need for Safetyism Scale

We developed the Perceived Need for Safetyism Scale (PNSS; See Appendix D), an 8-item scale that assesses the degree to which an individual believes that practices aiming to shielding them from stress and emotional discomfort are beneficial to their emotional well-being as well as their academic and social functioning on campus. Items include "Receiving a trigger warning can help me mentally prepare for distressing content" and "Campus practices designed to ensure my emotional safety are an invaluable part of my education" as well as reverse-scored items such as "It is my own responsibility to manage and monitor my emotional well-being." Participants indicated their level of endorsement for each statement on a sliding scale ranging from 0 (*strongly disagree*) to 100 (*strongly agree*). Responses were averaged to generate a composite score, with higher scores indicating a greater perceived need for intellectual safetyism.

The Perceived Need for Safetyism Scale displayed acceptable internal consistency in our sample ($\alpha = 0.68$).

Words Can Harm Scale – Modified

The Words Can Harm Scale (WCHS) (Bellet et al., 2018; See Appendix E) measures the degree to which an individual feels that offensive or distressing words can cause serious harm. Participants indicated their level of agreement with nine statements (e.g., *I could be left emotionally scarred by something I read*) on a sliding scale ranging from 0 (*strongly disagree*) to 100 (*strongly agree*). Because we were specifically interested individuals' perceptions that words can be harmful to *themselves*, six of the original items were reworded to refer to the self, as opposed to other people. Responses were averaged to obtain a composite score, with higher scores indicating a stronger belief that words can cause harm to oneself. The WCHS demonstrated excellent internal consistency in our sample ($\alpha = 0.93$).

Brief Resilience Scale

The Brief Resilience Scale (BRS) (Smith et al., 2008) measures individuals' perceptions of their own resilience (i.e., ability to recover from stressful events). The BRS has shown strong convergent validity in previous samples, as evidenced by positive correlations with other components of resilience (e.g., optimism, social support) and negative correlations with adverse mental health outcomes (e.g., anxiety, depression) (Smith et al., 2008). Participants indicated their agreement with each of six statements (e.g., *I usually come through difficult times with little trouble*) on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*) at two different timepoints: in survey one (Time 1) and survey five (Time 2). Individual scores at each timepoint were calculated by

reverse scoring negatively worded items (e.g., *I tend to take a long time to get over setbacks in my life*) and then calculating the mean of all six items. Higher scores indicate greater levels of perceived resilience. The BRS demonstrated good internal consistency in our sample (α = 0.87 (Time 1), α = 0.89 (Time 2)).

Stress Mindset Measure

The Stress Mindset Measure (SMM) (Crum et al., 2013) is an 8-item scale that assesses the extent to which an individual believes that the effects of stress are enhancing versus debilitating. Scale items evaluate an individual's general mindset towards stress (e.g., *the effects of stress are positive and should be utilized*), as well as beliefs about the specific effects of stress in the domains of performance and productivity, health and vitality, and learning and growth (e.g., *experiencing stress inhibits my learning and growth*). Participants indicated their endorsement of four stress-is-enhancing statements and four stress-is-debilitating statements (reverse coded) on a 5-point Likert scale (0 = *strongly disagree*, 4 = *strongly agree*) at two different timepoints: in survey one (Time 1) and survey five (Time 2). A composite score for each timepoint was obtained by reverse scoring the stress-is-debilitating items and then calculating the mean score of the eight items, with higher scores indicating a mindset that stress is enhancing. In our sample, the Stress Mindset Measure demonstrated acceptable to good internal consistency (α = 0.81 (Time 1), α = 0.77 (Time 2)).

Acute Stress Appraisal Scale

Mendes and colleagues (2007) developed a scale to measure individual appraisals of an acute stressor (i.e., the degree to which an individual appraises a stressful task as a manageable challenge versus an overwhelming threat) (ASAS; See Appendix F). The

ASAS comprises two subscales. The demand evaluation subscale (ASAS-D) includes five items assessing appraisals of task demands (e.g., *the upcoming task is very stressful*). The resource evaluation subscale (ASAS-R) includes five items assessing appraisals of coping resources in the context of the task (e.g., *I have the abilities to perform the upcoming task successfully*). Participants indicated their endorsement of the ten total statements on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) at two timepoints: after learning about the public speaking task in the first survey (Time 1) and after learning about the public speaking task in the fifth survey (Time 2). To score this measure, demand and resource evaluations were first averaged separately. Then, average demand evaluations were divided by average resource evaluations to generate a challenge/threat ratio at each timepoint. Scores greater than one represent a threat appraisal, indicating that the demands of the task are perceived to exceed one's own coping resources. Scores less than one represent a challenge appraisal, indicating that one's coping resources are perceived to outweigh the demands of the task. After collecting data, we removed one item from the demand subscale (i.e., "a poor performance on this task would be very distressing for me") and one item from the resource subscale (i.e., "it is very important to me that I perform well on this task") to improve the reliability of the measure. After removing these items, both subscales of the measure displayed acceptable to good internal consistency (ASAS-D: $\alpha = 0.83$ (Time 1), $\alpha = 0.88$ (Time 2); ASAS-R: $\alpha = 0.70$ (Time 1), $\alpha = 0.77$ (Time 2)).

Momentary Anxiety Scale

Participants rated the degree to which they felt a variety of emotions in the present moment via slider bars (0 = *not at all*, 100 = *extremely*) at four different timepoints:

before (Time 1) and after (Time 2) learning about the public speaking task in the first survey, and before (Time 3) and after (Time 4) learning about the public speaking task in the fifth survey. The target emotion was anxiety, and all other emotions (e.g., *sad*, *angry*, *disgusted*) were included to reduce demand effects. See Appendix G for the full list of emotions reported.

Procedure

Survey 1 (Baseline)

Participants were screened for eligibility upon navigating to the first survey. Eligibility requirements constituted being (1) a member of the Class of 2026, (2) at least 18 years of age, (3) a fluent English speaker, and (4) willing to complete all five surveys. Eligible participants then read an institutionally approved consent form with detailed information about the study and selected a radio button if they wished to continue and participate.

After providing informed consent, participants completed a battery of baseline measures. The measures administered were the Demographic Questionnaire, Psychiatric History, PNSS, GAD-7, SMM, BRS, and Momentary Anxiety Scale.

Next, participants were asked to complete a brief online public speaking task. Despite being administered online, the task was similar in format to in-person tasks used in previous studies to elicit an anxiety response (McNally et al., 2013).
Participants were given the following information:

> "In the next section we would like to assess your ability to perform under pressure. You will have 2 minutes to prepare a 4-minute speech on a topic of our choosing. The survey software will record your speech and automatically submit

it once 4 minutes have elapsed. Researchers will assess your submitted speech based on your preparation, persuasiveness, and delivery."

In reality, participants were neither being recorded nor assessed on the quality of their speeches; these instructions were merely intended to facilitate a motivated performance situation in which individuals' stress appraisals and anxiety responses could be assessed. Immediately after receiving the instructions for the speech task, participants were informed that "before you complete this task, we're going to ask you a few questions about how you're feeling right now regarding the task you're about to complete." Participants then completed the Momentary Anxiety Scale for a second time as well as the ASAS. The survey then advanced to a two-minute speech preparation period in which participants received a shortened version of the speech prompt used in the Trier Social Stress Test, which is considered the gold standard for studying acute stress responses in humans (Allen et al., 2017). The speech prompt was as follows: "Imagine that you are interviewing for your dream job. You will have four minutes to convince your potential employer that you should get the job." The survey then advanced to a four-minute speech delivery period.

After completing the speech task, participants were thanked for their participation and informed that the next survey would be emailed to them in one week. Participants accessed all subsequent surveys via a link provided in a weekly email.

Surveys 2, 3, and 4

In surveys 2, 3, and 4, participants completed the Exposure to Intellectual Safetyism Scale, reporting how frequently they had experienced a variety of both safetyism-inspired and filler campus events during the prior week.

Survey 5

Participants completed the final survey four weeks after completing the baseline survey. First, participants completed the Exposure to Intellectual Safetyism Scale for a fourth and final time. Then, they completed a subset of the measures administered at baseline for a second time: the SMM, BRS, and Momentary Anxiety Scale. Next, participants were asked to perform an additional public speaking task, which was identical in its instructions to the task completed at baseline. Participants read the instructions and then completed the Momentary Anxiety Scale for a second time as well as the ASAS. Then, instead of advancing to the speech preparation and delivery periods, participants were informed that the study had concluded[2]. Participants were thanked for their participation and were provided debriefing information that included the purpose and hypotheses of the study as well as the researcher's contact information in the case of any questions or concerns.

After data collection was complete, individuals who had participated via the Harvard Study Pool were compensated via 2.5 Study Pool Credits and entry into a $50 lottery. Those who participated outside of the Harvard Study Pool were compensated via entry into a cash lottery for each survey they completed, with total potential winnings up to $110 (See Appendix H for the specifics of the lottery structure).

Planned Analyses

All analyses were conducted using R-Studio (Version 4.0.3; R Core Team, 2020).

Missing Data

[2] Because we were only interested in anticipatory anxiety and stress appraisals prior to the delivery of the speech, we did not ask participants to deliver the second speech after they had completed these measures in the final survey. The reason that participants were asked to deliver their speech in the first survey was to give the impression that the task was genuine and would be assessed by researchers.

We planned to use mean imputation to replace missing values, except where a scale was less than 80% complete, in which case it was considered missing. For analyses, we planned to deal with missing measures using pairwise deletion.

Exclusion Criteria

We planned to exclude from analyses any participants who did not make sufficient progress on the baseline and endpoint surveys, as well as a minimum of two of three intermediary exposure surveys. For each survey, progress was deemed sufficient for inclusion if at least one measure used in analyses was completed in accordance with our plan for removing missing measures.

Outlier Detection Procedure

We planned to perform several procedures to detect extreme values, including visually inspecting boxplots and using the interquartile range (IQR) method. The IQR method involves calculating the first and third quartiles (Q1 and Q3) of the data and then determining the range (IQR) between them. Outliers are defined as values that fall more than 1.5 times the IQR below Q1 or above Q3. We planned to run each analysis with and without outliers and report the results of each model.

Baseline Characteristics

First, we planned to examine the sample characteristics and conduct a series of bivariate correlations (Pearson's *r*) to assess the zero-order correlations between our proposed moderator variables, outcome variables, and age. We also planned to conduct a series of *t*-tests to determine whether scores on outcome variables differed significantly by demographic categories (i.e., gender, ethnicity, sexual orientation, psychiatric history).

Finally, we planned to conduct a series of *t*-tests to examine differences in perceived need for safetyism by demographic category.

Exposure to Intellectual Safetyism

We planned to generate an average exposure score for each participant by computing the mean of all completed weekly exposure surveys. Next, we planned to check the validity of our scale as a distinct construct by assessing its correlations with trait anxiety, perceived need for safetyism, the belief that words can harm, perceived resilience, and stress mindset. Finally, we planned to conduct univariate analyses to assess the prevalence of intellectual safetyism as a whole and of each individual scale item.

Main Analyses

Hypothesis I: Does exposure to intellectual safetyism predict changes in perceived resilience? We planned to conduct a linear regression to test whether exposure to intellectual safetyism predicts changes in perceived resilience (operationalized as the difference in BRS scores from Time 1 to Time 2).

Hypothesis II: Does exposure to intellectual safetyism predict changes in stress mindset? We planned to conduct a linear regression to test whether exposure to intellectual safetyism predicts changes in stress mindset (operationalized as the difference in SMM scores from Time 1 to Time 2).

Hypothesis III: Does exposure to intellectual safetyism predict changes in acute stress appraisal of the speech task? We planned to conduct a linear regression to test whether exposure to intellectual safetyism predicts changes in acute stress appraisal

of the speech task (operationalized as the difference in ASAS scores from Time 1 to Time 2).

Hypothesis IV: Does exposure to intellectual safetyism predict changes in anticipatory anxiety response to the speech task? We planned to conduct a linear regression to test whether exposure to intellectual safetyism predicts changes in anticipatory anxiety response to the speech task (operationalized as the difference in momentary anxiety change scores from the first speech task [T2 – T1] to the second speech task [T4 – T3]).

Exploratory Moderation Analyses

We planned to conduct a series of regression-based interaction tests to determine whether three theoretically relevant variables (i.e., trait anxiety, perceived need for intellectual safetyism, the belief that words can harm) moderate the effect of exposure to intellectual safetyism on changes in each outcome variable. For each multiple regression, we planned to include exposure to intellectual safetyism, the proposed moderator, and their cross-product as independent variables. In the case of any statistically significant cross-product coefficients, we planned to conduct a simple-slopes analysis to interpret the effect of exposure to intellectual safetyism on the outcome variable at varying levels of the moderator. We planned to adjust our *p*-values for the False Discovery Rate (FDR) within this set of analyses.

Results

Seven hundred sixty-two individuals navigated to the first Qualtrics survey via a link in the recruitment materials. Due to a large volume of incomplete survey responses, participants were only considered enrolled in the study, and therefore emailed the

subsequent surveys, if they completed at least one of the dependent variables in the first survey (i.e., completed at least ~27% of the survey). After excluding participants who did not pass the initial eligibility questions, provide informed consent, enter a valid email address, and make sufficient progress on the first survey, we were left with 288 participants who enrolled in the study and were emailed the subsequent surveys.

After completing data collection but prior to examining the data, 181 participants were excluded from analyses for (1) failing to take the final survey and reach at least the first dependent variable (n = 180), and (2) failing to complete at least 80% of the safetyism exposure measure in two out of three intermediary surveys (n = 1). The final sample used for analyses included 107 participants who made sufficient progress on the first survey, the last survey, and at least two of three intermediary surveys.

Prior to analyzing the data, we conducted pairwise deletion and mean imputation in accordance with our plan for handling missing data. When calculating scores for the WCHS, 1 instance of missing data was removed and 2 means were imputed. When calculating scores for stress appraisals at each timepoint, missing data were handled as follows: ASAS-$D_{Time\ 1}$: 23 cases removed, 2 means imputed; ASAS-$R_{Time\ 1}$: 23 cases removed, 1 mean imputed; $ASAS_{Time\ 1}$: 23 cases removed; ASAS-$D_{Time\ 2}$: 21 cases removed, 1 mean imputed; ASAS-$R_{Time\ 2}$: 21 cases removed; $ASAS_{Time\ 2}$: 21 cases removed; $ASAS_{Change}$: 34 cases removed. When calculating scores for anticipatory anxiety responses at each timepoint, missing data were handled as follows: Anxiety $Response_{Time\ 1}$: 23 cases removed; Anxiety $Response_{Time\ 2}$: 22 cases removed; Anxiety $Response_{Change}$: 34 cases removed. When calculating scores for exposure to intellectual safetyism at each timepoint, missing data were handled as follows: Week 1: 4 cases

removed, 1 mean imputed; Week 2: 5 cases removed, 1 mean imputed; Week 3: 6 cases removed; Week 4: no missing data.

Power Analyses

Our final sample size (N = 107) provided sufficient power (1 – β error probability = .80) to detect a small to medium effect size in our planned main analyses (f^2 = .07), which included one predictor variable, and in our planned interaction analyses (f^2 = .10), which included three predictor variables. Our sample size for analyses involving the ASAS and Momentary Anxiety Scale (N = 73) provided sufficient power (1 – β error probability = .80) to detect a small to medium effect size (f^2 = .11) in our planned main analyses and a medium effect size (f^2 = .15) in our planned interaction analyses.

Sample Characteristics

The mean age of participants was 18.3 years old (SD = 0.85 years, range: 18-24). Self-reported gender in our sample was 64% female (n = 69), 32% male (n = 34), and 4% other ("non-binary", n = 2; "gender-fluid", n = 1; "gender-queer", n = 1). Participants identified their ethnicity as White (45%, n = 48), Asian (23%, n = 25), Hispanic or Latino (10%, n = 11), Black or African American (8%, n = 9), Native Hawaiian or Pacific Islander (2%, n = 2), or other (11%, n = 12)[3]. Self-reported sexual orientation in our sample was 68% straight (n = 73), 13% bisexual (n = 14), 12% gay or lesbian (n = 12), and 6% other ("pansexual", n = 3, "queer", n = 2, "bi-curious/heterosexual", n = 1). A total of 25 participants (23%) reported having been previously diagnosed with a

[3] The ethnic breakdown of our sample was similar to that of the overall class of 2026, which is 42.5% White, 27.6% Asian American, 14.4% Black or African American, 11.9% Latinx, and 3.6% Native American or Native Hawaiian (Hamid & Orakwue, 2022).

psychiatric or psychological problem. Table 1 displays the demographic characteristics of the sample.

Table 1

Demographic Characteristics of the Sample (N = 107)

Variable	
Age (*M*, *SD*)	18.3 (0.85)
Gender (*n*, %)	
Female	69 (64.5%)
Male	34 (31.8%)
Other	4 (3.7%)
Ethnicity (*n*, %)	
White	48 (44.9%)
Asian	25 (23.4%)
Hispanic or Latino	11 (10.3%)
Black or African American	9 (8.4%)
Native Hawaiian or Pacific Islander	2 (1.9%)
Other	12 (11.2%)
Sexual Orientation (*n*, %)	
Straight	73 (68.2%)
Bisexual	14 (13.1%)
Gay or lesbian	12 (11.2%)
Other	6 (5.6%)
Psychiatric History (*n*, %)	
Yes	25 (23.4%)
No	82 (76.6%)

Scores on outcome variables did not differ significantly based on ethnicity, sexual orientation, or psychiatric history. However, we found a moderate positive correlation between age and changes in anticipatory anxiety response to the speech task, $r(71) = .24$, $p = .04$. Therefore, we controlled for age by including it as an additional predictor variable in our linear regressions and regression-based interaction tests examining

changes in anxiety response. Additionally, a Welch's two-sample *t*-test revealed that males and females differed significantly in stress mindset change during the study period, $t(57.09) = 2.26$, $p = .03$. On average, males tended to develop a more positive stress mindset ($M_{Change} = 0.12$), whereas females tended to develop a more negative stress mindset ($M_{Change} = -0.07$). Therefore, we controlled for gender by including it as an additional predictor variable in our linear regressions and regression-based interaction tests examining changes in stress mindset. Table 2 displays the descriptive statistics of moderator and outcome variables that we measured.

Table 2

Descriptive Statistics of Moderator and Outcome Variables (N = 107)

Variable	Possible Range	Observed Range	Mean	Median	SD
Trait Anxiety (GAD-7)	0-21	0-20	5.87	5.00	4.56
Perceived Need for Safetyism (PNSS)	0-100	9.38-73.00	48.68	49.75	11.89
Belief That Words Can Harm (WCHS)[a]	0-100	0-92	46.35	49.17	20.15
Perceived Resilience (BRS)					
Baseline	1-5	1.67-5	3.38	3.5	0.73
Endpoint	1-5	1.17-5	3.30	3.33	0.75
Change Score	–4-4	–1.83-1.33	–0.08	0.00	0.58
Stress Mindset (SMM)					
Baseline	0-4	0-2.75	1.67	1.75	0.60
Endpoint	0-4	0-2.75	1.66	1.75	0.55
Change Score	–4-4	–0.75-0.88	–0.02	0.00	0.38
Acute Stress Appraisal (ASAS)					
Baseline[b]	0.14-7	0.35-4.33	1.31	1.11	0.78
Endpoint[c]	0.14-7	0.15-5.20	1.28	1.06	0.91
Change Score[d]	–6.86-7.14	–2.39-2.12	–0.06	–0.12	0.67
Anxiety Response					
Baseline[e]	–100-100	–43-86	8.17	2.00	22.49
Endpoint[f]	–100-100	–55-66	0.25	0.00	20.20
Change Score[g]	–200-200	–79-37	–6.88	–1.00	22.32

Note. [a]$n = 106$. [b]$n = 84$. [c]$n = 86$. [d]$n = 73$. [e]$n = 84$. [f]$n = 85$. [g]$n = 73$.

Bivariate Correlations

Table 3 displays a matrix of bivariate correlations between variables of interest.

Table 3

Bivariate Correlations Between Variables of Interest at Baseline

Variable	Age	GAD-7	PNSS	WCHS	BRS_1	SMM_1	$ASAS_1$	Anxiety $Response_1$
GAD-7	.08	–						
PNSS	-.21*	.17	–					
WCHS	-.16	.22*	.40***	–				
BRS_1	.11	-.38***	-.43***	-.27**	–			
SMM_1	.00	-.09	-.06	.00	.19*	–		
$ASAS_1$	-.04	.44***	.36***	.27*	-.35***	.02	–	
Anxiety $Response_1$	-.13	-.05	.16	.13	-.06	.12	.25*	–
N	107	107	107	106	107	107	84	84

Note. GAD-7 = Trait anxiety, PNSS = Perceived need for safetyism, WCHS = Belief that words can harm, BRS_1 = Perceived resilience at baseline, SMM_1 = Stress mindset at baseline, $ASAS_1$ = Acute stress appraisal of the public speaking task at baseline, Anxiety $Response_1$ = Anxiety response to the public speaking task at baseline.

*$p < .05$, ***$p < .001$.

Differences in Perceived Need for Safetyism

Table 4 displays the results of our *t*-tests examining whether perceived need for safetyism differed by demographic characteristics.

Table 4

Differences in Perceived Need for Safetyism by Demographic Category

Variable	N	PNSS Mean	SD	*df*	*t*	*p*	Cohen's *d*
Gender							
Male	34	44.92	11.64	66.52	–2.19	.03*	0.46
Female	69	50.28	11.78				
Sexual Orientation							
Heterosexual	73	48.13	12.23	67.85	–0.58	.56	0.12
Non-heterosexual	33	49.53	11.08				
Ethnicity							
White	48	46.33	12.53	94.49	–1.85	.07	0.36
Non-white	59	50.59	11.02				
Psychiatric History							
Yes	25	49.27	12.19	38.80	0.28	.78	0.06
No	82	48.50	11.83				

Note. PNSS = perceived need for safetyism.

*$p < .05$.

Exposure to Intellectual Safetyism

We conducted a series of Pearson's product-moment correlations to examine the discriminant validity of our exposure scale with relevant measures. Average exposure to intellectual safetyism across all timepoints was not significantly correlated with trait anxiety, $r(105) = .02$, $p = .86$, perceived need for intellectual safetyism, $r(105) = .19$, $p = .055$, the belief that words can harm, $r(104) = .04$, $p = .67$, perceived resilience at baseline, $r(105) = –.03$, $p = .79$, or stress mindset at baseline, $r(105) = –.07$, $p = .46$, indicating that individuals who differed in these regards did not report significantly different degrees of safetyism exposure.

Table 5 displays the participants' average exposure to intellectual safetyism during the study, as well as average exposure to each individual item on the Exposure to Intellectual Safetyism Scale.

Table 5

Average Exposure to Intellectual Safetyism and to Each Constituent Scale Item (N = 107)

Variable	Observed Range[a]	Mean	Median	SD
Average Safetyism Exposure	0.33-60.53	21.08	17.30	15.41
Scale Item				
I was informed of the campus mental health resources available to me.	0-72.50	31.54	29.75	20.02
I was given a trigger warning or content warning to notify me of potentially distressing material.	0-69.75	20.35	15.75	17.17
My teacher made certain distressing course content optional to students.	0-76.75	18.26	12.00	19.81
It was emphasized that I should avoid the stress associated with college.	0-67.67	18.72	15.00	18.48
A teacher/administrator arranged a time or place intended to help students deal with distressing course material or campus events (e.g., a "safe space").	0-77.67	19.81	16.00	19.62
I was encouraged to seek out mental health resources in the event that I experience school-related stress.	0-71.25	24.63	21.75	19.28
My teacher emphasized their willingness to accommodate students in order to minimize course-related stress (e.g., make a test open-book, remove assignments from the syllabus, etc.).	0-88.75	24.39	22.50	19.42
A teacher/administrator emphasized the importance of my emotional safety.	0-80.00	23.57	17.33	20.96
A presentation, talk, or class was canceled due to distressing content or offensive viewpoints.	0-73.00	6.46	0.00	13.03
It was emphasized that my emotional well-being is as important as my physical safety.	0-85.00	23.20	18.25	20.46

Note. Each week for four weeks, participants were asked to report how often they experienced each event on a sliding scale (0 = never, 50 = 3-4 times, 100 = daily or more often).

[a]The possible range of each item was 0-100.

Main Analyses

Hypothesis I: Effect of Intellectual Safetyism Exposure on Changes in Perceived Resilience

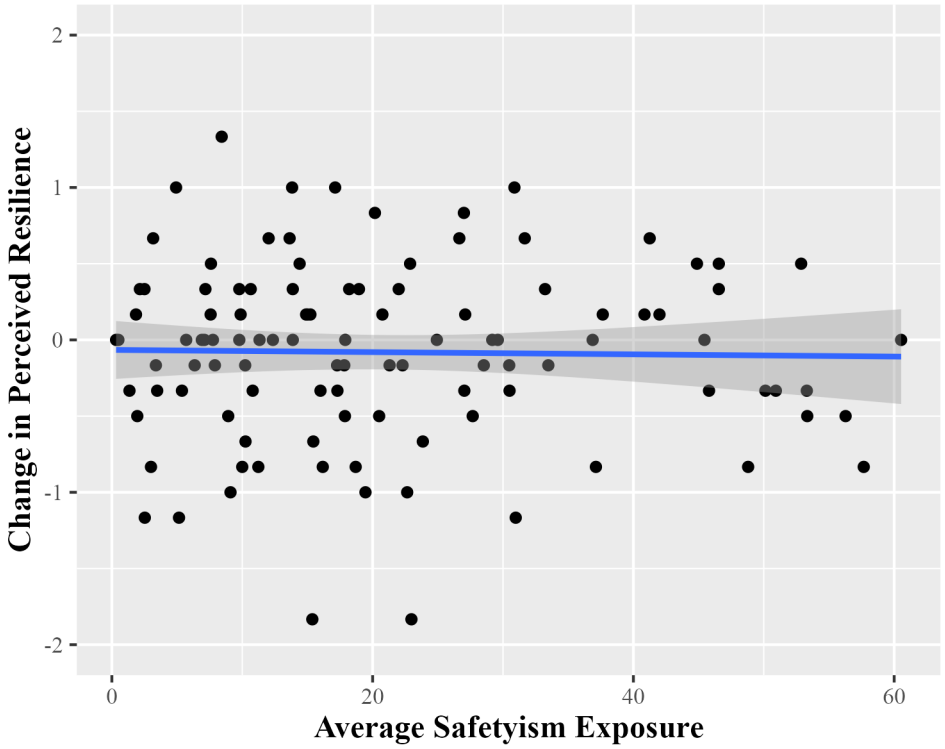
We computed a linear regression with the change in perceived resilience from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The overall model was not statistically significant (R^2 = .0004, F[1, 105] = 0.04, p = .84). Exposure to intellectual safetyism did not significantly predict changes in perceived resilience (β = –0.0007, t[105] = –0.197, p = .84). We re-ran the model after removing two outliers and report the results in the footnote below[4].

See Figure 1 for a plot of the relationship between exposure to intellectual safetyism and changes in perceived resilience.

[4] When two outliers detected in our outlier detection procedure were removed from the model, the regression to detect a relationship between exposure to intellectual safetyism and change in perceived resilience (Hypothesis I) remained statistically nonsignificant (R^2 = .0008, F[1, 103] = 0.09, p = .77). Exposure to intellectual safetyism did not significantly predict changes in perceived resilience (β = –0.001, t[103] = –0.294, p = .77).

Figure 1

Changes in Perceived Resilience as a Function of Average Safetyism Exposure



Note. Positive values indicate increases in perceived resilience.

Hypothesis II: Effect of Intellectual Safetyism Exposure on Change in Stress Mindset

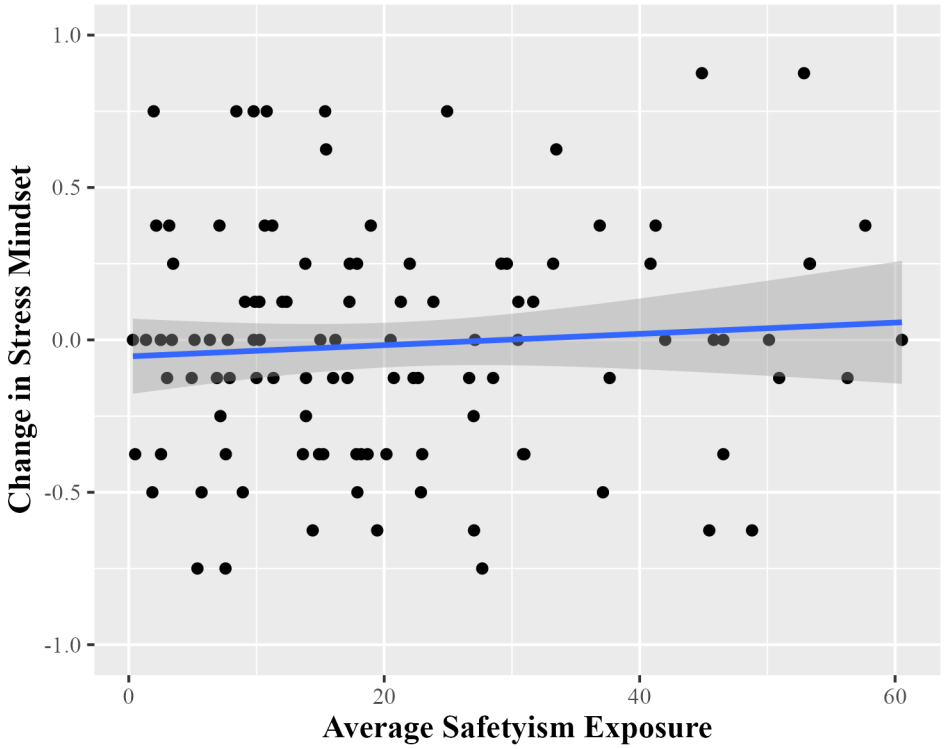
We computed a linear regression with the change in stress mindset from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The overall model was not statistically significant (R^2 = .006, F[1, 105] = 0.59, p = .44). Exposure to intellectual safetyism did not significantly predict changes in stress mindset (β = 0.0018, t[105] = 0.769, p = .44). To control for significant differences between males and females in changes in stress mindset, we ran a separate analysis including gender (coded as a dummy variable, where 0 = male and 1 = female) as an additional independent variable in

the regression equation. The model remained statistically nonsignificant when controlling for gender (R^2 = .05, F[2, 100] = 2.82, p = .06).

See Figure 2 for a plot of the relationship between exposure to intellectual safetyism and changes in stress mindset.

Figure 2

Changes in Stress Mindset as a Function of Average Safetyism Exposure



Note. Positive values indicate a change towards a more positive (i.e., stress-is-enhancing) stress mindset.

Hypothesis III: Effect of Intellectual Safetyism Exposure on Change in Acute Stress Appraisal of the Speech Task

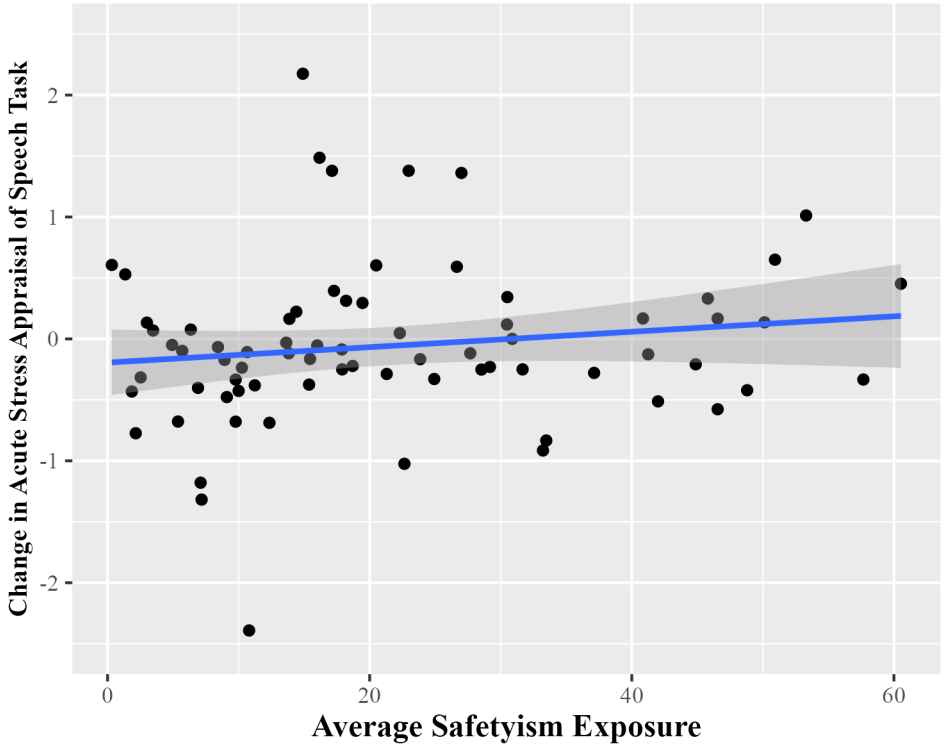
We computed a linear regression with the change in acute stress appraisal of the speech task from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The

overall model was not statistically significant (R^2 = 0.02, F[1, 71] = 1.53, p = .22). Exposure to intellectual safetyism did not significantly predict changes in acute stress appraisal of the speech task (β = 0.0063, t[71] = 1.237, p = .22). We re-ran the model after removing eight outliers and report the results in the footnote below[5].

See Figure 3 for a plot of the relationship between exposure to intellectual safetyism and changes in acute stress appraisal of the public speaking task.

Figure 3

Changes in Acute Stress Appraisal as a Function of Average Safetyism Exposure



[5] When eight outliers detected in our outlier detection procedure were removed from the model, the regression to detect a relationship between exposure to intellectual safetyism and change in acute stress appraisal of the speech task (Hypothesis III) remained statistically nonsignificant (R^2 = .02, F[1, 63] = 1.07, p = .30). Exposure to intellectual safetyism did not significantly predict changes in acute stress appraisal (β = 0.003, t[63] = 1.04, p = .30).

Note. Positive values indicate that the second public speaking task was appraised as more threatening compared to the first.

Hypothesis IV: Effect of Safetyism Exposure on Change in Anxiety Response to the Speech Task

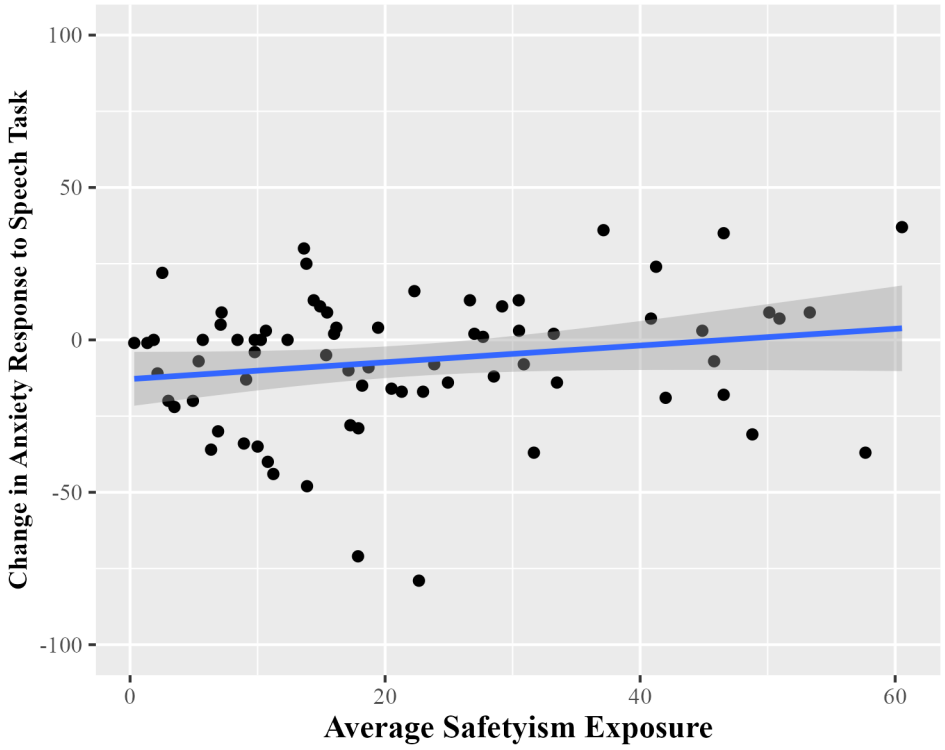
We computed a linear regression with the change in anxiety response to the speech task from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The overall model was not statistically significant (R^2 = .04, F[1, 71] = 2.67, p = .11). Exposure to intellectual safetyism did not significantly predict changes in anxiety response to the speech task (β = 0.275, t[71] = 1.633, p = .11). We re-ran the model after removing two outliers and report the results in the footnote below[6]. To control for a significant correlation between age and changes in anxiety response, we ran a separate analysis including age as an additional independent variable in the regression equation. The overall model was statistically significant when controlling for age (R^2 = .08, F[2, 70] = 3.22, p = .046), however, exposure to intellectual safetyism did not significantly predict changes in anxiety response to the speech task when controlling for age (β = 0.2425, t[70] = 1.459, p = .15).

See Figure 4 for a plot of the relationship between exposure to intellectual safetyism and changes in anxiety response to the public speaking task.

[6] When two outliers detected in our outlier detection procedure were removed from the model, the regression to detect a relationship between exposure to intellectual safetyism and change in anxiety response to the speech task (Hypothesis IV) remained statistically nonsignificant (R^2 = .05, F[1, 69] = 3.30, p = .07). Exposure to intellectual safetyism did not significantly predict changes in anxiety response (β = 0.26, t[69] = 1.82, p = .07).

Figure 4

Changes in Anxiety Response as a Function of Average Safetyism Exposure



Note. Positive values indicate that the second public speaking task was more anxiogenic compared to the first.

Exploratory Moderation Analyses

We tested three theoretically relevant variables (i.e., trait anxiety, perceived need for intellectual safetyism, the belief that words can harm) as potential moderators of the relationship between exposure to intellectual safetyism and each dependent variable using regression-based interaction detections. We found that neither trait anxiety, nor perceived need for intellectual safetyism, nor the belief that words can harm significantly moderated the relationship between exposure to intellectual safetyism and any of the dependent variables. The results of these analyses are reported in Appendix I.

Additional Exploratory Analyses

Does Safetyism Affect Demand and Resource Appraisals?

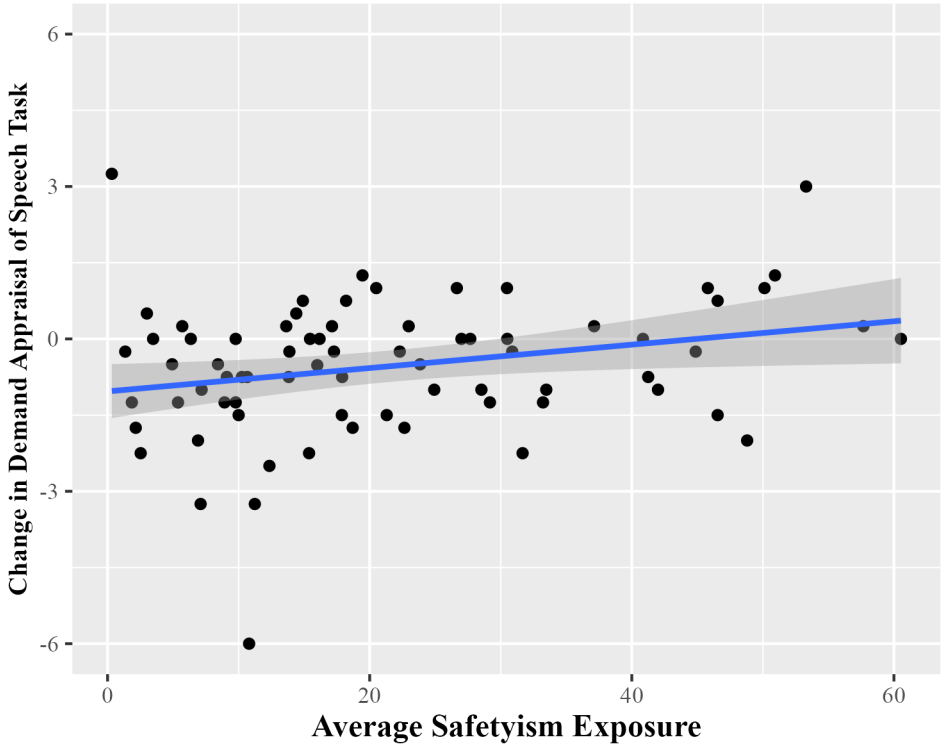
We further probed the data on appraisals of the speech task by examining whether exposure to intellectual safetyism independently predicted changes in the two subscales of the acute stress appraisal scale: appraisals of the demands of the task (ASAS-D), and appraisals of one's own coping resources in the context of the task (ASAS-R). The biopsychosocial model identifies demand and resource appraisals as distinct appraisals in determining the stress response, and we were interested in whether safetyism exposure affects these two types of appraisals differently.

Demand Appraisals. First, we computed a linear regression with the change in demand appraisal of the speech task from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The overall model was statistically significant ($R^2 = .07$, $F[1, 71] = 5.19$, $p = .03$). Exposure to intellectual safetyism significantly predicted changes in appraisals of the demands of the speech task ($\beta = 0.023$, $t[71] = 2.28$, $p = .03$). On average, individuals with less exposure to intellectual safetyism perceived the speech task to be less demanding the second time ($B_0 = -1.03$). However, individuals with greater exposure to intellectual safetyism perceived the second speech task to be roughly as demanding as the first. We re-ran the model after removing three outliers and report the results in the footnote below[7]. Figure 5 displays the relationship between safetyism exposure and changes in demand appraisals.

[7] When three outliers detected in our outlier detection procedure were removed from the model, the regression to detect a relationship between exposure to intellectual safetyism and change in demand appraisals of the speech task remained statistically significant ($R^2 = .08$, $F[1, 68] = 5.73$, $p = .02$). Exposure to intellectual safetyism significantly predicted changes in demand appraisals ($\beta = 0.02$, $t[68] = 2.39$, $p = .02$).

Figure 5

Changes in Demand Appraisals as a Function of Average Safetyism Exposure



Note. Positive values indicate that the second public speaking task was perceived as more demanding compared to the first.

Resource Appraisals. Next, we computed a linear regression with the change in resource appraisals from baseline to endpoint assessment as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. The overall model was not statistically significant (R^2 = .008, F[1, 71] = 0.55, p = .46). Exposure to intellectual safetyism did not significantly predict changes in appraisals of coping resources in the context of the speech task (β = –0.006, t[71] = –0.74, p = .46).

We re-ran the model after removing one outlier and report the results in the footnote below[8].

Testing For a Recency Effect in Safetyism Exposure

We tested the possibility that more recent exposure to intellectual safetyism had a disproportionate impact on our outcome variables. We computed a series of product-moment correlations between average exposure to intellectual safetyism in each week and each outcome variable. We then compared the correlations, displayed below in Table 6, to determine whether later exposure surveys were more strongly correlated with outcome variables compared to earlier exposure surveys. Later exposure surveys did not appear to be more strongly correlated with our outcome variables.

Table 6

Correlations between safetyism exposure surveys and outcome variables (N = 107)

Variable	BRS_{Change}	SMM_{Change}	$ASAS_{Change}$	Anxiety $Response_{Change}$
Week 1 Exposure	–.02	.01	.17	.23
Week 2 Exposure	.08	.04	.14	.19
Week 3 Exposure	–.07	.08	.10	.19
Week 4 Exposure	–.02	.06	.10	.11

Note. BRS_{Change} = Change in perceived resilience from baseline to endpoint, SMM_{Change} = Change in stress mindset from baseline to endpoint, $ASAS_{Change}$ = Change in acute stress

[8] When one outlier detected in our outlier detection procedure was removed from the model, the regression to detect a relationship between exposure to intellectual safetyism and change in resource appraisals in the context of the speech task remained statistically nonsignificant ($R^2 = .003$, $F[1, 70] = 0.23$, $p = .63$). Exposure to intellectual safetyism did not significantly predict changes in resource appraisals ($\beta = –0.004$, $t[70] = –0.48$, $p = .63$).

appraisal of the public speaking task from baseline to endpoint, Anxiety Response$_{Change}$ = Change in anxiety response to the public speaking task from baseline to endpoint.

Avoidance of the Public Speaking Task

During data analysis we found that in the first and final surveys, a subset of participants quit the survey after receiving the instructions for the public speaking task, but before delivering the speech (i.e., they presumably chose not to participate in the speech task). We first conducted a series of *t*-tests to determine whether individuals who avoided the speech task at each timepoint were different in any meaningful way from participants who did not. Then, given the theoretical role of safetyism in facilitating avoidance, we computed a logistic regression to test whether exposure to intellectual safetyism predicted an increased probability of avoiding the second speech task at endpoint assessment.

Do individuals who avoided the first speech task differ from those who didn't? Compared to individuals who participated in the first speech task ($N = 99$), individuals who avoided the speech task ($N = 8$) were more anxious ($M_{Avoid} = 8.00$; $M_{Participate} = 5.70$; $t(7.80) = 1.17$, $p = .27$), had a stronger perceived need for intellectual safetyism ($M_{Avoid} = 50.17$; $M_{Participate} = 48.56$; $t(8.8) = 0.43$, $p = .67$), and believed more strongly that words can harm ($M_{Avoid} = 54.13$; $M_{Participate} = 45.80$; $t(7.0) = 1.10$, $p = .31$). Avoiders also perceived themselves as less resilient ($M_{Avoid} = 2.88$; $M_{Participate} = 3.42$; $t(7.7) = –1.67$, $p = .13$) and viewed stress more negatively ($M_{Avoid} = 1.50$; $M_{Participate} = 1.69$; $t(8.8) = –1.01$, $p = .34$). None of these differences were statistically significant, however this analysis was significantly underpowered ($1 – \beta$ error probability = .58) to detect even a large effect (Cohen's $d = 0.8$).

Do individuals who avoided the second speech task differ from those who didn't? Compared to individuals who participated in the second speech task ($N = 101$), individuals who avoided the second speech task ($N = 6$) viewed stress more negatively ($M_{Avoid} = 1.29$; $M_{Participate} = 1.70$; $t(5.5) = -1.47$, $p = .20$) and viewed themselves as less resilient ($M_{Avoid} = 3.19$; $M_{Participate} = 3.39$; $t(5.9) = -0.73$, $p = .49$). However, individuals who avoided the second speech task were also marginally less anxious ($M_{Avoid} = 5.67$; $M_{Participate} = 5.88$; $t(5.6) = -0.11$, $p = .92$), had a lesser perceived need for safetyism ($M_{Avoid} = 46.44$; $M_{Participate} = 48.81$; $t(8.7) = -0.97$, $p = .36$), and believed less strongly that words can harm ($M_{Avoid} = 42.22$; $M_{Participate} = 46.59$; $t(5.9) = -0.59$, $p = .58$). None of these differences were statistically significant, however this analysis was significantly underpowered ($1 - \beta$ error probability = .47) to detect even a large effect (Cohen's $d = 0.8$).

Does exposure to intellectual safetyism predict a greater likelihood of avoiding the second public speaking task? We computed a binomial logistic regression with avoidance of the speech task at endpoint assessment (coded as a dummy variable, where 0 = avoided and 1 = did not avoid) as a dependent variable, and the average intellectual safetyism exposure across all timepoints as a predictor variable. A Hosmer-Lemeshow test revealed that the model fit the data well, $\chi^2(8, N = 107) = 7.64$, $p = .47$. However, the overall model was not statistically significant. Exposure to intellectual safetyism did not significantly predict the likelihood of avoiding the public speaking task at endpoint assessment ($\beta = 0.003$, $z = 0.117$, $p = .90$).

Discussion

The current study is the first to longitudinally test how exposure to a broad range of intellectual safetyism-inspired campus practices impacts student resilience. Ultimately, we find no evidence of a relationship between exposure to safetyism-inspired practices and the various components of resilience that we investigated. However, our findings can still inform debates about the merits and drawbacks of intellectual safetyism in higher education and provide useful insight into the prevalence of its constituent practices.

Main Analyses

Contrary to our hypotheses, we found no evidence that exposure to intellectual safetyism adversely affected students' perceptions of their resilience or mindsets towards stress. Further, exposure to intellectual safetyism did not lead students to appraise a potentially stressful public speaking task more negatively or experience greater anxiety in anticipation of the task. Despite finding no significant impact of safetyism exposure in these regards, we believe that the absence of a relationship is informative in its own right. On one hand, our findings fail to support Lukianoff and Haidt's hypothesis that safetyism-inspired practices undermine student resilience. However, our results likewise fail to support the notion that safetyism supports students by bolstering their ability to cope with challenges. In the context of the debate regarding whether these practices help or hinder students, our results suggest that they do neither.

One body of research very relevant to our results is that on the efficacy of trigger warnings. The nonsignificant effects that we find with regard to safetyism exposure align with a recent meta-analysis finding that trigger warnings have virtually no effect on individuals' response to distressing material (Bridgland et al., 2023). Although trigger warning research provides a useful comparison to our results, it is important to note that

our study examined the aggregated effects of ten safetyism-inspired practices, including trigger warnings, and our results do not necessarily reflect the individual effects of trigger warnings.

Our finding that safetyism exposure did not change students' stress mindsets is somewhat inconsistent with prior research, which has demonstrated that stress mindsets can be influenced by cues about the positive or negative effects of stress (Crum et al., 2013). One possible explanation of this null effect may be that implicit cues about the nature of stress have a weaker influence on stress mindsets compared to explicit cues. For example, being offered a safe space *might* be interpreted as a sign that stress is harmful, but not necessarily so. Previous research has found that explicit cues, such as viewing a video of an expert discussing the negative effects of stress, can change stress mindsets (Crum et al., 2013). However, as far as we know, no research has yet shown that implicit environmental cues can have the same effect. Further, it is worth noting that our sample had a predominantly negative stress mindset overall. Given that most people endorse a stress-is-debilitating mindset to begin with, cues that challenge this perspective may be more powerful in affecting mindsets than cues that reinforce it (Crum et al., 2013). This possibility aligns with multiple studies showing that interventions designed to facilitate a negative stress mindset have null effects, rather than negative effects, in areas where positive stress mindset interventions have benefits (Crum et al., 2013; Goyer et al., 2021).

Exposure to intellectual safetyism did not make students more likely to avoid the public speaking task at the end of the study. It is noteworthy that practices seemingly aimed at shielding students from experiencing emotional discomfort did not appear to make students shy away from completing a potentially challenging and stressful task.

However, this analysis was significantly underpowered to detect an effect due to the small proportion of participants who avoided the speech task.

We found no impact of intellectual safetyism on students' overall challenge or threat appraisal of the public speaking task, which contradicts the idea that safetyism leads students to view otherwise manageable challenges as threats. However, further exploratory analysis revealed that exposure to intellectual safetyism was uniquely associated with heightened demand appraisals of the speech task. Interestingly, students with less exposure to intellectual safetyism perceived the second speech task to be less demanding after having confronted the same task four weeks prior, whereas students with higher exposure perceived the second task to be roughly as demanding as the first. No such effect of safetyism was found on students' appraisals of their coping resources. While we urge caution in interpreting this result prior to replication in future research, it seems to be generally supportive of Lukianoff and Haidt's view that safetyism hinders students' ability to develop resilience by learning and growing from challenging experiences.

It is interesting that safetyism exposure prevented natural decreases in demand appraisals but did not affect students' anticipatory anxiety response to the speech task. The biopsychosocial (BPS) model gives us a framework for interpreting this result (Blascovich & Tomaka, 1996; Lazarus & Folkman, 1984). According to the BPS, a negative state of threat is only experienced when a situation is perceived as demanding *relative to* one's ability to cope with it. For example, an individual might appraise a stressful task as extremely demanding but also have a strong confidence in their ability to cope with it, ultimately experiencing a challenge state. Since safetyism exposure only

affected demand appraisals but not overall stress appraisals (i.e., the ratio of perceived demands to resources), it is perhaps unsurprising that exposure did not lead to increases in anticipatory anxiety response.

Exploratory Moderation Analyses

A strength of this study was our ability to examine whether the effects of intellectual safetyism varied for different individuals. We found no evidence of a differential impact of safetyism-inspired practices on individuals who had high levels of anxiety, a strong perceived need for intellectual safetyism, or a strong belief that words can cause harm. Although these practices are often aimed at supporting vulnerable students, we did not find that they provided any benefit to the students they are intended to support. It is interesting that even individuals who believed most strongly that they needed intellectual safetyism in order to function well on campus did not benefit from these practices. This is important to consider in light of increasing student requests for trigger warnings, safe spaces, and speaker cancellations (Lukianoff & Haidt, 2018).

Prevalence of Intellectual Safetyism

Our data provide insight into the prevalence of intellectual safetyism-inspired practices, which may be of use to educators and researchers. On average, weekly exposure to safetyism-inspired practices (M = 21.08 out of a possible 100) was substantially below our scale midpoint of 3-4 times per week. Indeed, no individual item on our exposure scale achieved an average score above the midpoint of 3-4 times per week. This suggests that while intellectual safetyism is certainly experienced by students, most practices are experienced on a weekly basis as opposed to a daily basis.

The most controversial and widely publicized forms of intellectual safetyism include trigger warnings, safe spaces, and speaker cancellations. We find that exposure to trigger warnings ($M = 20.35$) and safe spaces ($M = 19.81$) was low but not negligible, while cancellations of presentations, talks, or classes due to distressing content or offensive viewpoints was the least frequently reported practice ($M = 6.5$). These results align with anecdotal evidence that these practices are prevalent on college campuses (Lukianoff & Haidt, 2018), but suggests that exposure is relatively low for the average student.

Notably, the two practices most frequently reported by students were (1) being informed of campus mental health resources ($M = 31.54$) and (2) being encouraged to seek out mental health resources if they experience school-related stress ($M = 24.63$). This is relevant in light of Haslam's (2021) concern that we are increasingly pathologizing common experiences of psychological distress. Indeed, the assumption that school-related stress requires psychiatric intervention seems to reflect a rather expansive conception of mental disorder. Haslam regards the expansion of psychiatric concepts as potentially contributing to over-diagnosis and greater psychological vulnerability among the general population. However, he also acknowledges potential benefits, including reduced stigma and increased willingness to seek help (Haslam et al., 2021; Tse & Haslam, 2021). Our results suggest that among safetyism-inspired practices, there seems to be a particular commitment to heightening student awareness to the availability of mental health resources and encouraging their utilization. One interesting possibility is that increasing students' awareness of mental health services is beneficial to a certain extent, whereas excessive emphasis on mental health might cause individuals to

misinterpret normal psychological states through the lens of mental disorder. Further research is needed explore the effectiveness of these efforts and distinguish between the potential positive and negative outcomes described by Haslam.

Who Believes They Need Intellectual Safetyism?

In our sample, females reported a significantly higher need for intellectual safetyism, while age was negatively correlated with perceived need. Ethnic minorities reported a higher need for safetyism, but this effect fell just short of the conventional level of statistical significance. On average, individuals who endorsed a greater perceived need for intellectual safetyism viewed themselves as less resilient, believed more strongly that words can harm, and perceived the public speaking task administered at baseline to be more threatening. These results suggests that individuals who doubt their capacity for resilience and perceive the potential for harm in relatively minor stressors are more likely to feel that they require intellectual safetyism to ensure their emotional well-being.

One possibility suggested by our findings is that student requests for intellectual safetyism-inspired practices (e.g., trigger warnings; safe spaces) may be driven by a genuine belief that they require these practices to function well on campus. However, it is worth re-emphasizing that students with a stronger perceived need for safetyism did not benefit from its protective practices. This highlights the need for a nuanced and informed approach to addressing student requests for protection from emotionally challenging experiences.

Limitations and Future Directions

One limitation of the current study was our use of an online public speaking task to measure students' stress response as opposed to an in-person lab task, which is

considered the gold standard. For example, the Trier Social Stress Test requires participants give an in-person speech to a panel of cold and unemotional judges (Allen et al., 2017). We opted to administer our stress task online along with the rest of the surveys in order to minimize participant attrition and provide an ecologically valid, minimally invasive way of tracking participants in their natural environment. However, we found that anxiety increases in response to our task were small or nonexistent for most participants, suggesting that the task had minimal success in eliciting a stress response.

In our original IRB-approved study design, we planned to collect baseline data before students arrived in August, and then begin measuring students' safetyism exposure immediately upon their arrival to campus. Somewhat ironically, we were unable to carry out our proposed design due to campus administrators' concerns that our survey might be too stressful for students to complete before orientation. We adapted our design by recruiting students on a rolling basis during the semester, meaning that we were unable to capture any effects of safetyism exposure that occurred prior to students' study enrollment. It is possible that orientation and the first weeks of college are a period of high safetyism during which the outcome variables we measured (e.g., mindsets and beliefs) are more prone to being manipulated.

Some researchers have cautioned against the use of questionnaires to measure resilience (e.g., Bonanno, 2021b). While self-reported resilience measures demonstrate cross-sectional correlations with mental health, they tend to have limited ability to predict future mental health or resilience (Bonanno et al., 2021b). One study found that individuals who reported having traits associated with resilience experienced less self-reported distress following a stressful lab task but were no different from so-called non-

resilient individuals in their behavioral and physiological indicators of stress (Roth & Herzberg, 2017). The researchers concluded that individuals who self-report resilience may simply have a general tendency to respond to questionnaires in socially desirable ways, as opposed to being genuinely more resilient (Roth & Herzberg, 2017).

In this vein, although we included the public speaking task as a behavioral test of resilience, all outcome measures were self-reported. Given that our study is the first to longitudinally measure college students' exposure to various safetyism-inspired practices, one exciting opportunity for future research would be collect follow-up data on objective indicators of mental health and performance within this cohort. It would be interesting, for example, to examine whether differences in intellectual safetyism exposure during the first semester predict subsequent mental health service usage, likelihood of psychiatric diagnosis following stressful life events, and college GPA. Given the relatively short time span of our study (i.e., four weeks), follow-up data would be valuable in assessing longer-term benefits or harms associated with exposure to intellectual safetyism. Other researchers might consider employing longer longitudinal designs in other college samples.

Prior to this study, research has only ever assessed the efficacy of individual safetyism-inspired practices (e.g., trigger warnings). We intentionally cast a wider net in the study of intellectual safetyism by examining a broad range of campus practices conceivably aimed at shielding students from potentially distressing words, ideas, and experiences. In doing so, we hoped to understand how college students might be affected by an environment in which they are encouraged to avoid, rather than embrace or engage with, emotional discomfort. One drawback of our methodological approach is that our

results can only speak to the aggregated impact of safetyism-inspired practices, but not the individual effects of specific practices. To this end, we recommend that future investigators consider studying the effects of individual practices that we identify. For example, while there is now a substantial amount of research on trigger warnings (see Bridgland et al., 2023), virtually no research has investigated the efficacy of safe spaces (however, see Gainsburg & Earl, 2022). Future research should further explore the impact of these practices on students' perceptions of the demands of stressors in their environment, as our findings suggest that exposure to intellectual safetyism may have an effect.

Conclusion and Implications for Higher Education

Our results do not indicate that efforts to protect students from potentially distressing words, ideas, and experiences have a negative impact on their resilience. However, to the extent that these practices are aimed at supporting students in their ability to master challenging situations, our findings suggest that they are not effective in achieving this goal. Accordingly, we advocate for the use of evidence-based practices to support the well-being of students in higher education settings.

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Appendix A

Demographic Questionnaire

1. Please specify your gender.
    a. Male
    b. Female
    c. Other (please specify: _____)
2. Please specify your age.
3. Please specify the sexual orientation you most closely identify with.
    a. Straight
    b. Gay or lesbian
    c. Bisexual
    d. Not listed above (please specify: _____)
4. Please specify your ethnicity.
    a. White
    b. Hispanic or Latino
    c. Asian
    d. Black or African American
    e. Native Hawaiian or Pacific Islander
    f. Other (please specify: _____)

Appendix B

Psychiatric History

1. Have you ever been diagnosed with a psychiatric or psychological problem?
    a. Yes
    b. No
2. (If yes) Please select all the diagnoses that apply.
    a. Major Depression
    b. Dysthymic Disorder
    c. Seasonal Affective Disorder
    d. Bipolar Disorder
    e. Generalized Anxiety Disorder
    f. Posttraumatic Stress Disorder
    g. Panic Disorder
    h. Social Anxiety Disorder
    i. Phobic Disorder
    j. Schizophrenic or other Psychotic Disorder
    k. Personality Disorder (e.g., Borderline, Schizoid, Histrionic)
    l. Attention Deficit Disorder
    m. Learning Disorder (e.g., reading, writing, mathematics)
    n. Dementia or other cognitive disorder
    o. Alcohol Use Disorder
    p. Drug Use Disorder
    q. Autism or Asperger's
    r. Other (please specify: _____)

Appendix C

Exposure to Intellectual Safetyism Scale

Below are a number of events that a student might experience in the classroom, within their residence, or during extracurricular activities. Please indicate how often you experienced each event in any of these contexts in the past week.

(*Sliding scale: 0 = never; 50 = 3-4 times; 100 = Daily or more often*).

(F) = Filler items that don't count towards scoring.

1. I went to office hours to get extra help for a course. (F)
2. I was informed of the campus mental health resources available to me.
3. I had so much homework that I had to sacrifice spending time with others. (F)
4. I was given a trigger warning or content warning to notify me of potentially distressing material.
5. My teacher made certain distressing course content optional to students.
6. I felt as though I couldn't cope with the stress of college. (F)
7. It was emphasized that I should avoid the stress associated with college.
8. A teacher/administrator arranged a time or place intended to help students deal with distressing course material or campus events (e.g., a "safe space").
9. I was unable to complete an assignment by the deadline. (F)
10. I was encouraged to seek out mental health resources in the event that I experience school-related stress.
11. My teacher emphasized their willingness to accommodate students in order to minimize course-related stress (e.g., make a test open-book, remove assignments from the syllabus, etc.).
12. I was disappointed by my grade on an assignment. (F)
13. A teacher/administrator emphasized the importance of my emotional safety.
14. A presentation, talk, or class was canceled due to distressing content or offensive viewpoints.
15. I was informed of the academic help resources available to me on campus. (F)
16. It was emphasized that my emotional well-being is as important as my physical safety.

Appendix D

Perceived Need for Safetyism Scale (PNSS)

Please read the following statements and indicate your level of agreement with each one. (*Sliding Scale: 0 = strongly disagree; 100 = strongly agree*).

1. Receiving a trigger warning can help me mentally prepare for distressing content.
2. Campus practices designed to ensure emotional safety are an invaluable part of my education.
3. It is the responsibility of campus administrators to ensure that I feel emotionally safe on campus.
4. It is the responsibility of campus administrators to prevent me from becoming upset or emotionally harmed.
5. It is my own responsibility to monitor and manage my emotional well-being. *
6. I need a highly supportive environment in order to thrive.
7. I tend to thrive in highly stressful and challenging environments. *
8. If campus administrators did not provide accommodations for dealing with offensive speech and triggering topics, my academic and social functioning would suffer.

* = *reverse coded*

Appendix E

Words Can Harm Scale – Modified (Bellet et al., 2018)

Italicized items were reworded from the original measure to refer to the self or exclude mention of others. One of the ten items from the original measure ("There is great power in the words I am exposed to, either to heal me or permanently harm me") was inadvertently excluded when building the survey.

Please read the following statements and indicate your level of agreement with each one. (*Sliding scale: 0 = strongly disagree, 100 = strongly agree*).

1. I could be left emotionally scarred by something I read.
2. I could be traumatized without ever being touched, just through someone's hurtful words.
3. *Reading a book can be emotionally damaging, depending on what is in it.*
4. *I could develop posttraumatic stress disorder or at least some of its symptoms from something I read.*
5. *People should be careful about what they say, as it could permanently damage my emotional health.*
6. *I should not be exposed to certain kinds of speech, as this might harm me.*
7. Even if I try to think about them in a different way, hurtful words could be damaging nonetheless.
8. *Being exposed to a triggering idea can seriously damage my mental health.*
9. *Even a simple phrase can be emotionally traumatizing for me.*

Appendix F

Acute Stress Appraisal Scale (ASAS) (Mendes et al., 2007)

Now we are interested in how you are feeling right now regarding the task you are about to complete. Please read the following statements and indicate your level of agreement with each one.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. The upcoming task is very demanding.
2. I am very uncertain about how I will perform during the upcoming task.
3. The upcoming task will take a lot of effort to complete.
4. The upcoming task is very stressful.
5. I have the abilities to perform the upcoming task successfully.
6. It is very important to me that I perform well on this task.
7. I'm the kind of person who does well in these types of situations.
8. A poor performance on this task would be very distressing for me.
9. I expect to perform well on this task.
10. I feel as if I am in complete control of my performance.

Items 1, 2, 3, 4, and 8 assess demand appraisals. Items 5, 6, 7, 9, and 10 assess resource appraisals.

Appendix G

Momentary Anxiety Scale

Below are a number of statements that describe different emotions a person can feel. Please indicate the degree to which you feel each emotion right now; that is, in the present moment.

(*Sliding scale: 0 = not at all, 100 = Extremely*).

(*"I feel anxious" is the only item scored for this measure*).

1. I feel sad.
2. I feel happy.
3. I feel afraid.
4. I feel anxious.
5. I feel angry.
6. I feel content.
7. I feel disgusted.

Appendix H

Lottery Compensation Structure

Participants were entered into an additional cash lottery for each survey they participated in. For instance, participants who completed all five surveys were entered into all of the following lotteries:

Eligibility	Format
1 Survey Completed	20 $5 Prizes
2 Surveys Completed	15 $10 Prizes
3 Surveys Completed	10 $20 Prizes
4 Surveys Completed	10 $25 Prizes
5 Surveys Completed	6 $50 Prizes

Appendix I

Exploratory Moderation Analyses

Trait Anxiety

The cross-product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of (1) changes in perceived resilience ((t[103] = 0.02, p = .99); F[3, 103] = 0.36, p = .78, R^2 = .01)[9], (2) changes in stress mindset ((t[103] = 0.89, p = .37); F[3, 103] = 0.49, p = .69, R^2 = .01), (3) changes in acute stress appraisal of the speech task ((t[69] = 0.17, p = .86); F[3, 69] = 1.07, p = .37, R^2 = .04)[10], or (4) changes in anxiety response to the speech task ((t[69] = –1.84, p = .07); F[3, 69] = 2.23, p = .09, R^2 = .09)[11].

We ran an additional interaction test controlling for the significant differences between males and females in stress mindset change. The cross product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of changes in stress mindset when controlling for gender ((t[98] = 0.42, p = .68); F[4, 98] = 1.47, p = .22, R^2 = .06).

We also ran an additional interaction test controlling for the significant correlation between age and changes in anxiety response to the speech task. The cross product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of

[9] When two outliers detected in our outlier detection procedure were removed from the model, the cross product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of changes in perceived resilience ((t[101] = 0.23, p = .82); F[3, 101] = 0.51, p = .68, R^2 = .01).

[10] When eight outliers detected in our outlier detection procedure were removed from the model, the cross product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of changes in acute stress appraisal ((t[61] = 1.52, p = .13); F[3, 61] = 3.18, p = .03, R^2 = .14).

[11] When two outliers detected in our outlier detection procedure were removed from the model, the cross product of trait anxiety and exposure to intellectual safetyism was not a significant predictor of changes in anxiety response ((t[67] = –1.88, p = .06); F[3, 67] = 2.49, p = .07, R^2 = .10).

changes in anxiety response to the speech task when controlling for age ((*t*[68] = –1.84, *p* = .07); *F*[4, 68] = 2.76, *p* = .03, R^2 = .14).

Perceived Need for Intellectual Safetyism

The cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of (1) changes in perceived resilience ((*t*[103] = –0.18, *p* = .86); *F*[3, 103] = 0.33, *p* = .80, R^2 = .01)[12], (2) changes in stress mindset ((*t*[103] = 0.34, *p* = .73); *F*[3, 103] = 0.91, *p* = .44, R^2 = .03)[13], (3) changes in acute stress appraisal of the speech task ((*t*[69] = 0.22, *p* = .83); *F*[3, 69] = 0.59, *p* = .63, R^2 = .02)[14], or (4) changes in anxiety response to the speech task ((*t*[69] = 0.68, *p* = .50); *F*[3, 69] = 1.53, *p* = .22, R^2 = .06)[15].

We ran an additional interaction test controlling for the significant difference between males and females in stress mindset change. The cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in stress mindset when controlling for gender ((*t*[98] = 0.61, *p* = .54); *F*[4, 98] = 1.70, *p* = .16, R^2 = .06).

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[12] When seven outliers detected in our outlier detection procedure were removed from the model, the cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in perceived resilience ((*t*[96] = 0.82, *p* = .41); *F*[3, 96] = 0.36, *p* = .78, R^2 = .01).

[13] When five outliers detected in our outlier detection procedure were removed from the model, the cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in stress mindset ((*t*[98] = 0.03, *p* = .97); *F*[3, 98] = 0.77, *p* = .51, R^2 = .02).

[14] When 12 outliers detected in our outlier detection procedure were removed from the model, the cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in acute stress appraisal ((*t*[57] = –0.37, *p* = .72); *F*[3, 57] = 0.73, *p* = .54, R^2 = .04).

[15] When six outliers detected in our outlier detection procedure were removed from the model, the cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in anxiety response ((*t*[63] = –0.64, *p* = .52); *F*[3, 63] = 1.77, *p* = .16, R^2 = .08).

We also ran an additional interaction test controlling for the significant correlation between age and changes in anxiety response to the speech task. The cross product of perceived need for intellectual safetyism and exposure to intellectual safetyism was not a significant predictor of changes in anxiety response to the speech task when controlling for age ((*t*[68] = 0.54, *p* = .59); *F*[4, 68] = 1.87, *p* = .13, R^2 = .10).

The Belief That Words Can Harm

The cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of (1) changes in perceived resilience ((*t*[102] = –0.23, *p* = .78); *F*[3, 102] = 0.14, *p* = .93, R^2 = .004)[16], (2) changes in stress mindset ((*t*[102] = 1.14, *p* = .26); *F*[3, 102] = 0.61, *p* = .61, R^2 = .02), (3) changes in acute stress appraisal of the speech task ((*t*[68] = 0.31, *p* = .76); *F*[3, 68] = 0.83, *p* = .48, R^2 = .04)[17], or (4) changes in anxiety response to the speech task ((*t*[68] = –0.49, *p* = .63); *F*[3, 68] = 0.99, *p* = .40, R^2 = .04)[18].

We ran an additional interaction test controlling for the significant differences between males and females in stress mindset change. The cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of changes in stress mindset when controlling for gender ((*t*[97] = 0.82, *p* = .41); *F*[4, 97] = 1.76, *p* = .14, R^2 = .07).

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[16] When two outliers detected in our outlier detection procedure were removed from the model, the cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of changes in perceived resilience ((*t*[100] = –0.39, *p* = .70); *F*[3, 100] = 0.42, *p* = .74, R^2 = .01).
[17] When seven outliers detected in our outlier detection procedure were removed from the model, the cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of changes in acute stress appraisal ((*t*[61] = –0.61, *p* = .54); *F*[3, 61] = 0.48, *p* = .70, R^2 = .02).
[18] When two outliers detected in our outlier detection procedure were removed from the model, the cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of changes in anxiety response ((*t*[66] = –0.64, *p* = .52); *F*[3, 66] = 1.57, *p* = .21, R^2 = .07).

We also ran an additional interaction test controlling for the significant correlation between age and changes in anxiety response to the speech task. The cross product of the belief that words can harm and exposure to intellectual safetyism was not a significant predictor of changes in anxiety response to the speech task when controlling for age ((*t*[67] = –0.28, *p* = .78); *F*[4, 67] = 1.56, *p* = .20, R^2 = .08).