AMERICAN PSYCHOLOGICAL ASSOCIATION

Emotion

ISSN: 1528-3542

2025, Vol. 25, No. 5, 1244–1255
https://doi.org/10.1037/emo0001495

Be Kinder to Yourself: Awe Promotes Self-Compassion via Self-Transcendence

Wenying Yuan[1], Junyao Chang[1], Feng Jiang[2], and Tonglin Jiang[1]
[1] Beijing Key Laboratory of Behavior and Mental Health, School of Psychological and Cognitive Sciences, Peking University
[2] School of Business, University of Leicester

Deficits in self-compassion heighten the vulnerability of mental disorders and jeopardize well-being, emphasizing the necessity of fostering self-compassion during unexpected suffering. In this research, we investigate awe as an antecedent for promptly promoting self-compassion. Across five studies (three preregistered), employing various self-compassion metrics (self-report scale and behaviors) and testing in both controlled and natural settings, we found that awe was positively associated with, or promoted, self-reported self-compassion (Studies 1, 2, 4, and 5) and self-compassionate behaviors in real life (Study 5). These effects were distinct from general positive emotions (Studies 1 and 4) or nature exposure (Study 4). We further found that self-transcendence mediated this effect (Studies 2, 4, and 5) beyond self-diminishment (Study 4) and had a causal effect on promoting self-compassion (Study 3). These findings imply that awe enhances self-compassion via self-transcendence.

Keywords: awe, self-compassion, self-transcendence, self-diminishment

Supplemental materials: https://doi.org/10.1037/emo0001495.supp

Imagine when you lose a great promotion due to a personal error; would you self-comfort or resort to self-blame? Often, people gravitate toward self-reproach, as self-criticism is often seen as necessary for growth (Gilbert et al., 2004; Neff, 2023b). Driscoll (1989) suggested that people criticize themselves to understand their limitations and to apply pressure for self-improvement. Empirically, Gilbert et al. (2004) found that people often view self-criticism as a means of self-correction for short, especially for those with higher personal standards (e.g., perfectionism; Gilbert et al., 2006). However, self-criticism impedes personal growth (Powers et al., 2007) and harms health (e.g., McIntyre et al., 2018). For example, self-criticism regarding body weight may incite extreme weight control measures, leading to anorexia (Fennig et al., 2008). Moreover, research has linked self-criticism with a heightened propensity for self-injury and suicide (Glassman et al., 2007; O'Neill et al., 2021). Conversely, self-compassion, the practice of responding to self-failures with kindness (Neff, 2023b; Neff & Pommier, 2013), facilitates personal growth and health. Self-compassion has been tied to motivation for self-improvement (Neff et al., 2005), learning from suffering (Yuhan et al., 2021), and better health (for a review, see Neff, 2023b). Therefore, identifying factors to foster self-compassion, particularly during unexpected suffering, is crucial while it remains in its infancy. To fill this gap, in this research, we proposed and examined whether awe can serve as an antecedent that promptly promotes self-compassion through self-transcendence.

Self-Compassion

Self-compassion refers to the ability to offer oneself compassion amidst personal failures or external difficulties (Neff, 2023b; Neff & Pommier, 2013). Neff (2003a) operationalized self-compassion with three elements: mindfulness (vs. overidentification), common humanity (vs. isolation), and self-kindness (vs. self-judgment). Mindfulness refers to a balanced awareness that acknowledges suffering without avoidance or exaggeration. Common humanity recognizes hardships as a shared human experience. Self-kindness involves extending warmth and support to oneself during suffering. By acknowledging and accepting sufferings without overidentifying

This article was published Online First February 3, 2025.
June Gruber served as action editor.
Wenying Yuan https://orcid.org/0000-0002-2470-2547
Junyao Chang https://orcid.org/0009-0001-2122-8886
Feng Jiang https://orcid.org/0000-0001-9762-5821
Tonglin Jiang https://orcid.org/0000-0002-3588-3195
This research was supported by Major Project Grant awarded to Tonglin Jiang by the National Natural Science Foundation of China (Grant 32271127) and the International Exchanges 2022 Cost Share (National Natural Science Foundation of China) Award for Overseas Travel between Collaborators in the United Kingdom and China, National Natural Science Foundation of China and the Royal Society of the United Kingdom (Grant 32311530059), to Tonglin Jiang and Feng Jiang.

Wenying Yuan played a lead role in conceptualization, data curation, formal analysis, investigation, methodology, validation, visualization, and writing–original draft and a supporting role in writing–review and editing. Junyao Chang played a supporting role in data curation, formal analysis, investigation, and visualization. Feng Jiang played a supporting role in writing–review and editing. Tonglin Jiang played a lead role in funding acquisition, project administration, supervision, and writing–review and editing and an equal role in conceptualization and methodology.

Correspondence concerning this article should be addressed to Tonglin Jiang, Beijing Key Laboratory of Behavior and Mental Health, School of Psychological and Cognitive Sciences, Peking University, No. 5, Yiheyuan Road, Haidian District, Beijing 100871, China. Email: tljiang@pku.edu.cn

with them, connecting personal struggles to universal experiences to lessen isolation, and encouraging kindness toward oneself while reducing self-criticism, individuals can extend compassion toward themselves (Neff, 2023b).

The benefits of self-compassion are well-established (for a review, see Neff, 2023b). It has been shown to play a crucial role in fostering both mental and physical health. In terms of mental health, self-compassion enables individuals to perceive challenges as part of the human experience, maintaining a balanced perspective rather than succumbing to negative emotions, and encouraging self-kindness. This mindset protects people from suffering. Supportively, self-compassion is associated with better emotional resilience (Sbarra et al., 2012), decreased anxiety, and reduced depression (Ferrari et al., 2019). Crucially, self-compassion acts as a buffer against mental disorders (Duarte et al., 2017; Ferrari et al., 2018; Luo et al., 2021). Furthermore, self-compassion promotes physical health. People high in self-compassion tend to keep intrinsic motivation to engage in health-promoting behaviors (Cox et al., 2019; Wong et al., 2021). A meta-analysis has revealed the positive impacts of self-compassion on health-promoting behavior and physical health (Phillips & Hine, 2021).

Extensive research highlights self-compassion's importance for health, promoting the development of interventions to bolster it. One way to bolster self-compassion is briefly manipulating self-compassion through instruction, which has been commonly used to investigate its downstream consequences (e.g., Leary et al., 2007). Additionally, comprehensive interventions, such as compassion-focused therapy and Mindful Self-Compassion, have been applied to both nonclinical populations and psychiatric patients (Ferrari et al., 2019). These studies indicated the malleability of self-compassion.

Another approach to bolster self-compassion involves resorting to its antecedents, while research on its antecedents is still in an early stage, with most studies being correlational (for a review, see Dodson & Heng, 2022). Only a few studies have used experimentally controlled methods to examine the antecedents of self-compassion, thereby providing causal evidence. Specifically, these studies have found that activating support-giving schemas by recalling past experiences of providing support to others or actually providing support (Breines & Chen, 2013), recalling previous support from others (increased self-compassion for highly stressed individuals; Hermanto & Zuroff, 2018), perspective-taking (Boland et al., 2021), and exposure to others' self-compassionate reactions (K. Miller & Kelly, 2020) can facilitate self-compassion.

Developing interventions based on these antecedents of self-compassion is indispensable, as fear of self-compassion, along with the time and efforts required, may deter people from engaging in direct self-compassion interventions. As mentioned above, many people may view self-criticism as the way to self-growth (e.g., Gilbert et al., 2004), thus resisting self-compassion. Additionally, feeling unworthy of kindness can lead to fear of self-compassion (Gilbert et al., 2011). Moreover, direct self-compassion intervention often spans at least 1 week (Ferrari et al., 2019) and requires professional guidance, making them less accessible.

Suffering often arrives without foreshow, necessitating an easily accepted and convenient "first-aid kit" approach to promote self-compassion. Inspired by the research on social-related antecedents of self-compassion, we suggest emotional factors may also serve as potential antecedents. Previous research has found a positive correlation between positive emotions (e.g., hope) and self-compassion (Y. Jiang et al., 2022; Zeng et al., 2020). Moreover, emotion can be easily induced through diverse stimuli, including pictures, videos, music, and imagination (Siedlecka & Denson, 2019), suggesting their convenience for potential intervention. Taken together, these findings prompt our investigation into awe—a self-related emotion—as an antecedent that could rapidly nurture self-compassion.

Awe, Self-Transcendence, and Self-Compassion

Awe is an emotion elicited by physically or mentally vast stimuli that exceed one's expectations and thus necessitate cognitive adjustment for comprehension (Keltner & Haidt, 2003). Awe can arise from various sources, such as beautiful nature, artistic masterpieces, and grand theories. The peripheral features inherent in these stimuli (e.g., beauty and threat) enrich the hedonic tone of awe experiences, wherein awe co-occurs with positive, negative, or mixed emotions (Gocłowska et al., 2023; Gordon et al., 2017; T. Jiang & Sedikides, 2022; Yuan, Du, & Jiang, 2024). Most awe experiences (around 80%) are positive, in which awe intertwined with general positive emotions like happiness (T. Jiang & Sedikides, 2022; Pan & Jiang, 2023). To examine the unique effect of awe, researchers have utilized both statistical and experimental methods to separate awe's effects from general positive emotions (T. Jiang & Sedikides, 2022; Stamkou et al., 2023; Yuan, Du, & Jiang, 2024).

Awe is an emotion that has significant consequences for the self (T. Jiang et al., 2024). Research indicates that awe exerts profound effects on self-perception in two distinct ways: It both diminishes and transcends the self (e.g., Bai et al., 2017; T. Jiang et al., 2024; Pan & Jiang, 2023). On one hand, awe diminishes the self by making personal concerns and ego seem insignificant in comparison to the external vastness. On the other hand, it also promotes a broad and transcendent view on the self, expanding the boundaries of individuals' self-concept (T. Jiang et al., 2024; Yaden et al., 2017). When people encounter vast stimuli, awe naturally initiates a comparative process between the self and vast stimuli. This comparison typically results in a sense of self-diminishment, where individuals perceive themselves as small and insignificant (Bai et al., 2017; Seo et al., 2023; Shiota et al., 2007; Stamkou et al., 2023). Through such a sense of self-diminishment, awe fosters humility—a realistic and open perception about self and others (Stellar et al., 2018). However, the impact of awe on self-perception extends beyond self-diminishment. Awe also promotes self-transcendence, a mental process characterized by reduced self-salience and increased connectedness to larger entities or concepts, thereby expanding the self (L. Jiang et al., 2018; T. Jiang et al., 2024; T. Jiang & Sedikides, 2022; Yaden et al., 2017). Awe shifts people's focus from the self to the vast surroundings (Shiota et al., 2007), encouraging a nonegocentric perspective on the self (T. Jiang et al., 2024). This nonegocentric perspective reduces the awareness of oneself as a separate entity and facilitates big-picture cognitive processing (Pan & Jiang, 2023), expanding self-boundaries both spatially and temporally. Spatially, experiencing awe fosters a greater connectedness to humanity and larger entities (i.e., increased interconnectedness; Stepanova et al., 2019; Yaden et al., 2019; Yuan, Guo, et al., 2024), encouraging people to describe themselves with more inclusive and broad terms (e.g., as inhabitants of Earth; Shiota et al., 2007). Temporally, the global processing brought by awe enables people to take a holistic view of the self and integrate their past,

present, and future selves, fostering a sense of global self-continuity (Pan & Jiang, 2023). Beyond its impact on self-perception, awe also encourages self-reflection through self-transcendence, prompting individuals to consider their deeper, authentic selves (Nelson-Coffey et al., 2019). This introspection motivates them to pursue their authentic selves (T. Jiang & Sedikides, 2022).

In addition to these effects on self-perception and self-pursuit, awe may also shape self-compassion—the way individuals relate to and interact with themselves, particularly in difficult situations. Unlike self-perception (how one views oneself) or self-pursuit (the self one aims to become), self-compassion involves how individuals respond to their own suffering, failures, or inadequacies (Neff, 2023b). Specifically, self-compassion concerns whether people treat themselves with kindness or judgment, respond to suffering with mindfulness or overidentification, and view their suffering as part of a common human experience or as an isolated one. This research suggests that awe influences not only self-perception and self-pursuit but also how individuals engage in suffering and interact with themselves in moments of difficulty.

We propose that awe promotes self-compassion. First, awe prompts a shift from an egocentric viewpoint to a broader perspective (T. Jiang & Sedikides, 2022; Shiota et al., 2007), fostering a sense of global connectedness to humanity and entire entities (Stepanova et al., 2019; Yaden et al., 2019). This shift enables people to observe their suffering from a detached perspective, increasing acceptance of negative situations (Kross & Ayduk, 2017) and resulting in balanced awareness, akin to increased mindfulness. Supportively, Dong and Geng (2022) found a positive correlation between awe and mindfulness. Second, the sense of global connectedness elicited by awe helps people realize that life's challenges are universally shared, reducing the feeling of isolation and enhancing a sense of common humanity. Third, awe also promotes humility, which can increase self-kindness. Stellar et al. (2018) demonstrated that awe induces humility, allowing for greater acceptance of personal limitations (Chancellor & Lyubomirsky, 2013; Kesebir, 2014). Individuals experiencing awe tend to exhibit a more balanced view of their weaknesses and strengths (Stellar et al., 2018), enabling them to treat themselves with kindness rather than harsh self-judgment. Additionally, through balanced awareness of faults and negative emotions without overidentifications and by connecting personal struggles to universal experiences, people may exert less self-criticism and judgment, thereby fostering a greater self-kindness (Neff, 2003c). In sum, we hypothesize as follows:

Hypothesis 1: Awe promotes self-compassion.

How awe promotes self-compassion remains unknown. To fill this gap, we proposed and examined whether awe promotes self-compassion via self-transcendence. Awe is known to reduce self-salience and enhance the sense of connectedness with something larger than the self (L. Jiang et al., 2018; Stellar et al., 2017; Yaden et al., 2017), both of which are the key defining characteristics of self-transcendence (Yaden et al., 2017). Existing research supports the idea that awe induces self-transcendence (Dai & Jiang, 2024; L. Jiang et al., 2018; T. Jiang & Sedikides, 2022; Pan & Jiang, 2024). In turn, self-transcendence may facilitate self-compassion. Self-transcendence involves reduced self-salience and a sense of self-dissolution by blurring the boundary between the self and the external world (Yaden et al., 2017), allowing for a broader perspective beyond the self. This process enables a decentered perspective, linked to mindfulness (Hayes-Skelton & Graham, 2013; Shoham et al., 2017), allowing for impartial observation of current situations, thereby promoting a balanced perspective without overidentification (Ben Salem & Karlin, 2023). Self-transcendence is also characterized by the sense of connecting to entities beyond oneself, including other people and the environment (Yaden et al., 2017). This sense of interconnectedness encourages common humanity during suffering. The combined processes of enhancing mindfulness and sense of interconnectedness collectively lessen self-judgment and heighten self-kindness (Neff, 2003c). Additionally, previous research has found that self-transcendent experiences increase humility (Mancuso et al., 2024), allowing for the acceptance of personal shortcomings (Chancellor & Lyubomirsky, 2013; Kesebir, 2014) and thus fostering self-kindness. Notably, empirical evidence has directly revealed a positive correlation between self-compassion and self-transcendence (J. T. Miller & Verhaeghen, 2022). Taken together, we hypothesize:

Hypothesis 2: Self-transcendence mediates awe's effect on self-compassion.

The Current Research

We conducted five studies to examine whether awe enhances self-compassion through self-transcendence. In Study 1, we examined the relationship between awe and self-compassion at the trait level. In Studies 2 and 3, we employed a measurement-of-mediation design (Study 2) and an experimental-causal-chain design (Study 3) to provide causal evidence for the proposed mediation model. Specifically, in Study 2 (preregistered), we manipulated awe (vs. neutral) to investigate its causal effect on self-compassion and self-transcendence, and the mediating effect of self-transcendence. In Study 3 (preregistered), we manipulated self-transcendence (the mediator) to examine the causal direction from self-transcendence to self-compassion. In Study 4, we aimed to rule out the potential confounders—general positive emotions and nature exposure—while assessing the scenario-based self-compassion intention. Additionally, we examined whether the mediating effect of self-transcendence is above self-diminishment. In Study 5, we replicated and extended our findings in a more ecologically rich context by conducting a 15-day diary study and tracking real self-compassionate behaviors. In Studies 2 and 4, we conducted mediation analyses with 5,000 iterations of bootstrapping resampling (PROCESS, Model 4; Hayes, 2018).

Transparency and Openness

We obtained ethical approval for our studies from the corresponding author's institution. We reported how we determined our sample size, all data exclusions (if any), all manipulations, and all measures we used in the current research.[1] Data, code, and stimulus materials for the current research are available on the Open Science Framework (https://osf.io/xycaf/?view_only=eaf3719a008a416bbc8402bfaf9080cd; Yuan, Chang, et al., 2024).

[1] Data of Study 1 were part of an awe-related longitudinal study (self-compassion was measured only in Wave 1), in which we aimed to explore awe's antecedents and consequences. Data of Study 5 were part of a diary study, in which we aimed to explore the relationship between emotion, self-compassion, and physical health.

Study 1

In Study 1, we conducted a correlational study to examine the association between awe and self-compassion at the trait level. Moreover, we aimed to control for general positive emotions to examine awe's unique contribution.

Method

Participants

Per Schönbrodt and Perugini's (2013) recommendations, we required at least 250 participants to detect a stable bivariate correlation. We recruited 459 Chinese students from a high school in Nanyang, Henan Province, China. We excluded 73 students who failed both attention check questions, leaving 386 participants (179 boys and 207 girls; M_{age} = 15.84 years, SD_{age} = 0.65 years).

Materials and Procedure

We adopted the six-item Dispositional Awe Subscale from the Dispositional Positive Emotions Scale (e.g., "I often look for patterns in the objects around me."; 1 = *strongly disagree*, 7 = *strongly agree*; M = 5.01, SD = 1.21, α = .87; Shiota et al., 2006) and Self-Compassion Scale Short Form (e.g., "I try to see my failings as part of the human condition."; 1 = *almost never*, 5 = *almost always*; M = 3.11, SD = 0.55, α = .60; Raes et al., 2011) to measure dispositional awe and self-compassion, respectively. We measured general positive emotions with five items from the Positive and Negative Affect Schedule Short Form (e.g., "determined"; 1 = *not at all*, 5 = *extremely*; M = 3.07, SD = 0.91, α = .82; Thompson, 2007).

Results and Discussion

Results showed a positive association between dispositional awe and dispositional self-compassion, β = .23, p < .001, 95% CI [0.13, 0.33]. After controlling for general positive emotions, this positive association remained significant, β = .14, p = .015, 95% CI [0.03, 0.25] (Supplemental Table S1). These results indicate a positive relationship between awe and self-compassion at the trait level, independent of general positive emotions.

Study 2

In Study 2, we manipulated awe to examine its causal effect on self-compassion and the mediating role of self-transcendence. We preregistered this study (https://aspredicted.org/QJT_35J).

Method

Participants

At least 172 participants were needed to detect a medium effect size (f = .25) with power at the level of .90 (α = .05) in a between-subjects design (Faul et al., 2007). As preregistered, we recruited 180 Chinese participants via Credamo. We excluded four participants who failed the attention check (two each from the awe and neutral conditions), leaving 176 participants (74 men and 102 women; M_{age} = 28.60 years, SD_{age} = 8.37 years). We randomly assigned them to the awe condition (n = 88) or the neutral condition (n = 88).

Materials and Procedure

Consistent with previous research (Hornsey et al., 2018; T. Jiang & Sedikides, 2022), participants in the awe condition watched a 184-s video comparing Earth to other celestial bodies, and participants in the neutral condition watched a 181-s video presenting an ordinary street scene. Then, we assessed state self-compassion and self-transcendence with the adapted Self-Compassion Short Form (e.g., "I'm trying to see my failings as part of the human condition"; 1 = *strongly disagree* to 7 = *strongly agree*; M = 4.92, SD = 0.82, α = .83; Raes et al., 2011) and the four-item self-transcendence measurement (e.g., "I want to make sense of the world"; 1 = *strongly disagree* to 7 = *strongly agree*; M = 5.49, SD = 0.85, α = .69; L. Jiang et al., 2018) by emphasizing "Right now," respectively. Finally, we measured the feeling of awe by asking participants to answer two questions: "To what extent do you feel awe right now?" and "To what extent did the video make you feel awe?" The scores were averaged to represent the feeling of awe (1 = *not at all* to 7 = *extremely*; M = 5.02, SD = 1.72), r(174) = .88, p < .001.

Results and Discussion

Awe Manipulation Check

As expected, participants in the awe condition (M = 6.36, SD = 0.77) reported stronger feelings of awe than those in the neutral condition (M = 3.68, SD = 1.33), F(1, 174) = 266.73, p < .001, η_p^2 = .61. Our manipulation was successful.

Self-Transcendence and Self-Compassion

Our preregistered one-way analyses of variance showed that participants in the awe condition (self-transcendence: M = 5.65, SD = 0.66; self-compassion: M = 5.20, SD = 0.74) reported higher self-transcendence, F(1, 174) = 6.49, p = .012, η_p^2 = .04, and self-compassion, F(1, 174) = 22.42, p < .001, η_p^2 = .11, than those in the neutral condition (self-transcendence: M = 5.33, SD = 0.98; self-compassion: M = 4.64, SD = 0.81).

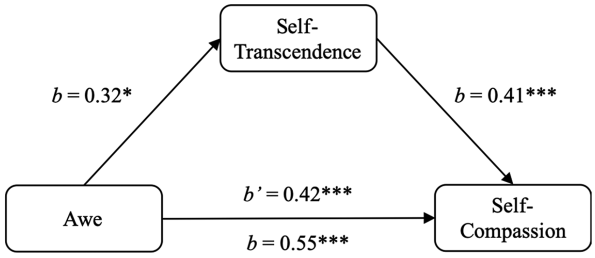
Mediation Analysis

As preregistered, we entered awe as the independent variable (1 = *awe condition*, 0 = *neutral condition*), self-transcendence as the mediator, and self-compassion as the dependent variable. The results revealed a significant indirect effect of self-compassion, b = 0.13, SE = 0.05, 95% CI [0.03, 0.25] (Figure 1). In sum, our findings suggest that awe causally improves self-compassion by promoting self-transcendence.

Study 3

So far, we found that awe was positively associated with, or promoted, self-compassion, with Study 2 suggesting a mediating effect of self-transcendence. However, our measurement-of-mediation approach could not provide causal evidence for the direction between self-transcendence and self-compassion. To fill this gap, in Study 3, we employed an experimental-causal-chain design, aiming to provide causal evidence for the proposed mediation model. Consistent with previous research (L. Jiang et al., 2018; T. Jiang & Sedikides, 2022), we found the causal direction from awe to

Figure 1
Mediation Analysis in Study 2



$^{*}p < .05$. $^{***}p < .001$.

self-transcendence in Study 2. Thus, in Study 3, we experimentally manipulated self-transcendence to examine the causal relationship between self-transcendence and self-compassion. We preregistered this study (https://aspredicted.org/Z82_V16).

Method

Participants

We determined the sample size as the same as we did in Study 2. Per our preregistration, we recruited 180 Chinese participants via Credamo and excluded 15 participants who failed instruction or attention check (11 in the self-transcendence condition and four in the neutral condition). A total of 165 participants were included in the final analyses (109 women and 56 men; M_{age} = 29.81 years, SD_{age} = 8.56 years); we randomly assigned them to the self-transcendence condition (n = 79) or the neutral condition (n = 86).[2]

Materials and Procedure

We employed a recall task to manipulate self-transcendence. In the self-transcendence condition, we provided the definition of self-transcendence (adapted from Yaden et al., 2017) to ensure clarity: Self-transcendence is characterized by reducing attention that is limited to self. Rather, it allows people to attend to something beyond self and leads to a feeling of connecting to these things, including other people, the human community, the environment, and even the whole entity. Then, we asked participants to recall and describe an experience that evoked a self-transcendent feeling and their accompanied thoughts. In the neutral condition, we asked participants to recall and describe a typical Wednesday forenoon and their accompanied thoughts during that time. Following our preregistration, we measured self-compassion by adapting six items from the Self-Compassion Short Form (e.g., "I try to be understanding and patient towards those aspects of my personality I don't like"; 1 = *strongly disagree* to 7 = *strongly agree*; M = 5.44, SD = 0.97, α = .83; Raes et al., 2011). Finally, we measured self-transcendence to examine the effectiveness of our manipulation as we did in Study 2 (M = 5.57, SD = 0.89, α = .76). We emphasized "Right now" for all items.

Results and Discussion

Manipulation Check

Participants in the self-transcendence condition (M = 5.80, SD = 0.67) felt more self-transcendence than those in the neutral condition (M = 5.37, SD = 1.01), $F(1, 163) = 10.13$, p = .002, η_p^2 = .06, suggesting the effectiveness of our manipulation.

Self-Transcendence and Self-Compassion

Preregistered one-way analysis of variance showed that participants reported more self-compassion in the self-transcendence condition (M = 5.68, SD = 0.79) than the neutral condition (M = 5.23 and SD = 1.07), $F(1, 163) = 9.19$, p = .003, η_p^2 = .05, indicating the causal direction from self-transcendence to self-compassion and providing causal evidence for our proposed mediation model.

Study 4

In Study 4, we extended our findings in three ways. First, we aimed to examine whether awe's effect on self-compassion is distinct from general positive emotions and nature exposure, both of which are linked to self-compassion (Swami et al., 2019; Tran et al., 2022). To do so, we contrasted nature-induced awe with nature-induced amusement. Amusement is a traditional way to induce general positivity, such as happiness (Bartlett & DeSteno, 2006; Piff et al., 2015). Additionally, amusement, like awe, is induced when an experience differs from expectation (Morreall, 1989). Therefore, amusement is regarded as a conventional control for general positive emotions in awe-related research (e.g., Pan & Jiang, 2023; Piff et al., 2015; Yuan, Du, & Jiang, 2024). Second, we examined whether self-transcendence's mediating effect would surpass that of self-diminishment, which has been linked to a variety of awe's beneficial effects (e.g., Bai et al., 2021; Piff et al., 2015) and might stand out as an alternative mediator. As mentioned above, awe leads to the feeling of self-diminishment. The feeling of self as small and insignificant may lessen personal concerns and sufferings, potentially leaving room for increased self-compassion. Third, we included a scenario-based measure of self-compassion to assess awe's potential to enhance self-compassion in situations of personal failures.

Method

Participants

According to the Monte Carlo power analysis for indirect effects (https://schoemanna.shinyapps.io/mc_power_med/; Schoemann et al., 2017), at least 385 participants were required to reach a power of .90 for the parallel mediation model with assumed correlations of r = .25 (SD = 1) among the variables. We advertised the study on social media, and 432 undergraduate students responded (235 women and 197 men; M_{age} = 20.67 years, SD_{age} = 1.34 years). We randomly assigned them to the awe condition (n = 213) or the amusement condition (n = 219).

Materials and Procedure

Consistent with previous research (e.g., Bai et al., 2017; Valdesolo & Graham, 2014; Yuan, Du, & Jiang, 2024), participants in the awe

[2] Contrary to our expectations, 14 participants did not pass the attention check, which reduced the number of valid participants to less than the anticipated 172. Despite this reduction, our analysis retained substantial statistical power. Specifically, we achieved a power of 85.38% for detecting the effect of self-transcendence on self-compassion within the full sample.

condition watched a 3-min video, showcasing magnificent natural landscapes. In the amusement condition, participants watched a 3-min amusement video, which described wild animals with voice actors dubbing them with interesting dialogues. Next, participants were instructed to vividly imagine a scenario where they were experiencing suffering due to personal faults and write down their feelings and thoughts (related to the undergraduate study; for details, see Supplemental Materials).

Then, we assessed self-compassion intentions based on this scenario with six items adapted from the Self-Compassion Short Form by emphasizing "Right now" (e.g., "I would do things to punish myself, such as not allowing myself to eat my favorite food."; 1 = *strongly disagree*, 9 = *strongly agree*; $M = 6.24$, $SD = 1.45$, $\alpha = .78$; Raes et al., 2011). We measured self-transcendence ($M = 5.15$, $SD = 1.13$, $\alpha = .80$), as in Study 2, and used a five-item scale from Bai et al. (2017) to capture self-diminishment, comprising two narrative items (e.g., "I feel relatively small") and three pictorial items (circles, full-body drawings, and signatures with different sizes). All responses ranged from 1 to 7. After reverse-coding the pictorial items, we averaged the scores to index self-diminishment ($M = 4.41$, $SD = 1.24$, $\alpha = .82$). Finally, participants reported their current feelings of awe ("awe" and "amazement"), happiness ($M = 4.46$, $SD = 1.54$), and amusement ($M = 3.42$, $SD = 2.33$) on a 7-point scale (1 = *not at all* to 7 = *extremely*). We averaged the scores on awe and amazement to index feelings of awe ($M = 4.76$, $SD = 1.71$), $r(430) = .73$, $p < .001$.

Results and Discussion

Manipulation Check

Participants in the awe condition ($M = 5.85$, $SD = 1.02$) felt more awe than those in the amusement condition ($M = 3.69$, $SD = 1.58$), $F(1, 430) = 280.31$, $p < .001$, $\eta_p^2 = .39$. Participants in the amusement condition reported more feelings of amusement ($M = 5.22$, $SD = 1.69$) than participants in the awe condition ($M = 1.58$, $SD = 1.15$), $F(1, 430) = 681.58$, $p < .001$, $\eta_p^2 = .61$. Our manipulation was successful.

Besides, participants in the amusement condition reported more feelings of happiness ($M = 4.87$, $SD = 1.57$) than participants in the awe condition ($M = 4.03$, $SD = 1.39$), $F(1, 430) = 34.60$, $p < .001$, $\eta_p^2 = .07$, indicating our amusement manipulation induced more general positivity.

Awe and the Self-Compassion Intention

Participants in the awe condition reported more self-compassion intentions ($M = 6.39$, $SD = 1.41$) than those in the amusement condition ($M = 6.09$, $SD = 1.49$), $F(1, 430) = 4.71$, $p = .031$, $\eta_p^2 = .01$.

Awe, Self-Transcendence, and Self-Diminishment

Participants in the awe condition (self-transcendence: $M = 5.40$, $SD = 0.96$; self-diminishment: $M = 4.96$, $SD = 1.18$) reported greater feelings of self-transcendence, $F(1, 430) = 21.70$, $p < .001$, $\eta_p^2 = .05$, and self-diminishment, $F(1, 430) = 101.06$, $p < .001$, $\eta_p^2 = .19$, than those in the amusement condition (self-transcendence: $M = 4.91$, $SD = 1.23$; self-diminishment: $M = 3.88$, $SD = 1.05$).

Mediation Analysis

We subsequently tested the mediating effect of self-transcendence and whether it is established above self-diminishment. We entered awe as the independent variable (1 = *awe condition*, 0 = *amusement condition*), self-transcendence and self-diminishment as the parallel mediators, and self-compassion intention as the dependent variable. As expected, the indirect effect of self-transcendence was significant, $b = 0.19$, $SE = 0.05$, 95% CI [0.11, 0.30], and the indirect effect of self-diminishment was significant but negative, $b = -0.30$, $SE = 0.07$, 95% CI [−0.44, −0.16] (Figure 2).

Taken together, the findings from Study 4 indicate that awe's effect on self-compassion is distinct from general positive emotions and nature exposure. Awe uniquely bolsters self-compassion. Moreover, self-transcendence mediates awe's effect on self-compassion beyond self-diminishment.

Study 5

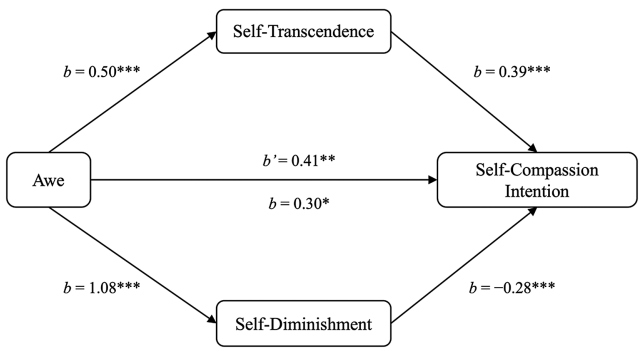
So far, we have demonstrated that awe was associated with, or increased, self-compassion via self-transcendence (Studies 1, 2, and 4). We have also provided causal evidence of the proposed mediating effect by demonstrating that self-transcendence increased self-compassion (Study 3). Additionally, we ruled out potentially confounding effects of general positive emotions (Studies 1 and 4) or nature exposure (Study 4). In Study 5, we aimed to replicate our findings and provide more ecologically valid evidence through a 15-day diary study. In addition to self-report measures, we incorporated actual self-compassionate behaviors as a more objective and ecologically valid indicator of self-compassion. We preregistered this study (https://aspredicted.org/XK4_JT2).

Method

Participants

Consistent with previous research (Bai et al., 2021; Stellar et al., 2018; J. Zhang et al., 2024), we aimed to recruit 150 participants via social media in China. Anticipating potential attrition, we recruited 156 participants, which resulted in a total of 2,247 diaries. We excluded two participants who failed the attention check for all responded diaries, leaving 154 participants (95 women and 59 men;

Figure 2
Mediation Analysis in Study 4



* $p < .05$. ** $p < .01$. *** $p < .001$.

M_{age} = 22.05 years, SD_{age} = 4.20 years). Per our preregistration, we excluded those diaries where participants failed the attention check, resulting in 2,077 diaries.

Materials and Procedure

Initially, participants reported demographics. For 15 consecutive days, we sent an online survey around 5:00 p.m., remaining accessible until 9:00 a.m. the subsequent day. In this survey, we provided a definition of awe (derived from Keltner & Haidt, 2003) to ensure precise understanding: People experience awe when they encounter physically or mentally vast stimuli that necessitate a mental adjustment to make sense of the stimuli. Then, we measured the daily awe ("I feel awe"; across all responses: $M = 3.53$, $SD = 1.81$) and self-transcendence ("I feel I transcend my current situation and feel connected to things bigger than me"; across all responses: $M = 3.67$, $SD = 1.79$) by emphasizing "Today" (1 = *strongly disagree*, 7 = *strongly agree*).

We measured daily self-compassion with self-reported self-compassion tendency and real self-compassionate behaviors. All items were emphasized "Today," ranging from 1 (*strongly disagree*; for behaviors: *not at all*) to 7 (*strongly agree*; for behaviors: *very much*). For self-compassion, we adapted three items from the State Self-Compassion Scale (e.g., "I give myself the caring and tenderness I need"; across all responses: $M = 5.07$, $SD = 1.02$; within-person $\omega = .45$, between-person $\omega = .73$).[3] For daily self-compassionate behaviors, we first provided the definition (based on Neff, 2023b): Self-compassionate behaviors refer to acts of kindness toward oneself during failure, inadequacy, or suffering, giving examples like watching favorite TV to comfort oneself after a work mistake. We listed seven kinds of self-compassionate behaviors, also allowing for additional unlisted behaviors. Frequency of engagement in these behaviors was captured (across all responses: $M = 4.23$, $SD = 1.15$; within-person $\omega = .66$, between-person $\omega = .93$). Self-compassionate behaviors showed a moderate-to-strong positive correlation with self-compassion, with correlation coefficients ranging from .30 to .54 ($ps < .001$; Supplemental Table S2). Additionally, the average self-compassion scores and self-compassionate behaviors, reported by each participant over a period of 15 days, exhibited a strong positive correlation, $r(152) = .50$, $p < .001$. These findings indicated the validity of the measures of self-compassionate behaviors.

Results and Discussion

Awe, Self-Transcendence, Self-Compassion, and Self-Compassionate Behaviors

Per our preregistration, we analyzed our data (daily measurements were nested within participants) using multilevel models with random intercepts and fixed slopes. All measures were centered within participants. We used the "nlme" package in R to estimate these models (Version 4.2.3; R Core Team, 2023).

As predicted, daily awe was positively correlated with daily self-transcendence, $b = 0.58$, $SE = 0.02$, 95% CI [0.54, 0.62]; daily self-compassion, $b = 0.04$, $SE = 0.01$, 95% CI [0.01, 0.07]; and daily self-compassionate behaviors, $b = 0.07$, $SE = 0.01$, 95% CI [0.04, 0.09]. Furthermore, daily self-transcendence was positively correlated with daily self-compassion, $b = 0.09$, $SE = 0.01$, 95% CI [0.06, 0.11], and daily self-compassionate behaviors, $b = 0.07$, $SE = 0.01$, 95% CI [0.05, 0.10].

Mediation Analyses

To examine the mediating role of self-transcendence, in line with previous research (Stavrova et al., 2022; Visserman et al., 2022; Yuan, Du, & Jiang, 2024), we regressed awe on self-transcendence to estimate Path *a* and separately regressed self-transcendence on self-compassion or self-compassionate behaviors (controlling for awe) to estimate Path *b*. The Monte Carlo method with 20,000 simulations determined the 95% confidence interval around the indirect effect ($a \times b$). The results revealed the significant mediating effects of self-transcendence on self-compassion, indirect effect = 0.05, 95% CI [0.04, 0.07] (Figure 3a), and self-compassionate behaviors, indirect effect = 0.04, 95% CI [0.02, 0.05] (Figure 3b).

Our findings suggest that awe contributes to more self-compassion and self-compassionate behaviors in a naturalistic context, mediated by self-transcendence.

General Discussion

Though self-compassion is critical for overall health, few studies have provided causal evidence on potential antecedents that could enhance it during unexpected suffering. Across five studies, we demonstrated that awe was positively correlated with, or promoted, self-compassion both in experimental settings and daily life (Studies 1, 2, 4, and 5). Self-transcendence mediated this effect (Studies 2, 4, and 5) and causally increased self-compassion (Study 3), thereby providing causal evidence for the mediation model. Beyond the experimental context, we further bolstered ecological validity by discovering that people who experienced more awe engaged in more self-compassionate behaviors in real-life scenarios (Study 5). By integrating both statistical and experimental methodologies, we further substantiated that awe's effect on self-compassion was distinct from general positive emotions (Studies 1 and 4) and nature exposure (Study 4) and found that the mediating effect of self-transcendence established beyond self-diminishment (Study 4).

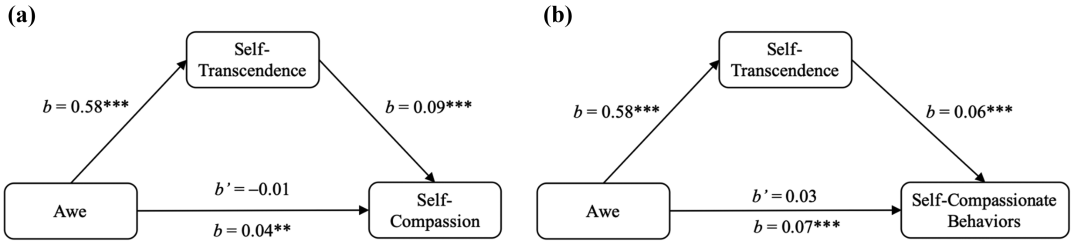
Implications

This research enriches the self-compassion and awe literature in four ways. First, it identified awe as an antecedent of self-compassion, demonstrated that awe's unique effect goes beyond general positive emotions or nature exposure, and uncovered self-transcendence as the pivotal mechanism driving this effect. Together, these findings advance the understanding of self-compassion and pave the way for future inquiries to explore other self-transcendent emotions, such as gratitude and elevation (Stellar et al., 2017), as potential antecedents of self-compassion.

Second, our findings suggest awe may serve as a timely, novel, and easily accessible tool for promoting self-compassion during suffering. To our knowledge, most self-compassion research primarily concentrates on documenting its benefits (Phillips & Hine, 2021; Turk & Waller, 2020; J. W. Zhang et al., 2020) and developing therapeutic interventions of self-compassion, spanning at least 1 week, to

[3] We estimated the reliabilities for multilevel data by employing the multilevelTools package in R (Geldhof et al., 2014; Wiley, 2020).

Figure 3
Mediation Analyses in Study 5



** $p < .01$. *** $p < .001$.

improve the general capabilities of self-compassion (Ferrari et al., 2019; Neff, 2023b). Nevertheless, during unforeseen suffering, immediately available tools are required. Awe can be conveniently evoked in daily life through visiting (or merely viewing videos of) natural landscapes (T. Jiang & Sedikides, 2022; Yin et al., 2024), appreciating music (Yaden et al., 2019), taking outdoor awe walks (Sturm et al., 2022), or having spiritual encounters (Yaden et al., 2019). This implies that awe could serve as a haven in a tempest source of self-compassion for people amidst sufferings.

Third, our findings also extend the understanding of awe as a self-related emotion. Previous research documented that awe alters self-perception and self-pursuit, increasing the sense of self-diminishment (Bai et al., 2021; Seo et al., 2023; Stamkou et al., 2023), leading people to identify with more inclusive groups such as humanity (Yaden et al., 2019; Yuan, Guo, et al., 2024), inducing a sense of global self-continuity (i.e., integrating past, present, and future selves; Pan & Jiang, 2023), and promoting authentic self-pursuit (T. Jiang & Sedikides, 2022). Our findings extend these findings by demonstrating awe influences the realm of self-interaction, promoting compassionate self-interaction.

Fourth, our research also enhances self-compassion measurement by introducing a more objective and ecologically valid approach. Traditional measures of self-compassion, such as the Self-Compassion Scale (or adaptive versions; Neff, 2023b, 2023c), focus on capturing a general tendency and abstract behavior (e.g., being kind to oneself). In contrast, in Study 5, we assessed how often participants engage in specific self-compassionate behaviors (e.g., listening to favorite music during hard times) in real life. We suggest that this frequency of such behaviors offers a more objective indicator of real-life self-compassion levels.

Limitations and Future Directions

Although we employed diverse methodologies, our research has certain limitations. First, whether and how threat-based awe, characterized by both fear and awe as the dominant emotions (Chaudhury et al., 2022), impacts self-compassion remains unknown. Previous research has found that fear involved in threat-based awe disrupts the effect of awe, especially when fear and awe influence the outcome in different directions (e.g., Yin et al., 2024; Yuan, Du, & Jiang, 2024). Therefore, the effect of threat-based awe on self-compassion may depend on how fear impacts self-compassion, while it is not yet well understood. Preliminary evidence found a negative association between perceived COVID-19 threat and self-compassion (Kavakli et al., 2020). Given that threat is one appraisal theme of fear (LaBar, 2016), we speculate that fear may decrease self-compassion. Thus, threat-based awe may simultaneously increase self-compassion via awe while decreasing it via fear. Future investigation is required to examine this possibility and the intricate interplay between threat-based awe, fear, and self-compassion.

Future research could explore awe's potential therapeutic application in the context of mental disorders. Deficits in self-compassion are commonly observed among people suffering from mental disorders (Døssing et al., 2015; Krieger et al., 2013; Messer et al., 2021), which are associated with more severe symptoms (Krieger et al., 2013; MacBeth & Gumley, 2012; Messer et al., 2021) and hinder therapeutic intervention efficacy (Kelly et al., 2013). A meta-analysis confirms that interventions targeting self-compassion reduce psychopathology (Wilson et al., 2019). Building upon our findings in nonclinical samples, future research may examine the potential of the awe-based intervention to promote self-compassion in clinical populations, contributing to innovative therapeutic approaches.

Contrary to our prediction, we found a negative link between self-diminishment and self-compassion. We speculated that this negative correlation might be due to people feeling unworthy of kindness when they feel insignificant, which leads to a fear of self-compassion (Gilbert et al., 2011). However, we suggest caution in interpreting this finding. Previous research on the mediating effect of self-diminishment has yielded inconsistent results. While some research has found that self-diminishment mediates the positive effects of awe (e.g., Bai et al., 2021; Piff et al., 2015), emerging research suggests that self-diminishment induced by awe is sometimes negatively associated with the beneficial outcomes (e.g., Kim et al., 2022, Study 6; Rivera et al., 2020; Yuan, Du, & Jiang, 2024). The definition of "self" in the context of self-diminishment may help explain these contradictory findings. The self is a complex and multilayered structure, while self-diminishment seems to be not clear enough about what is meant by "self" (Perlin & Li, 2020). Understanding which elements of the self become small and insignificant is crucial for comprehending the effects of self-diminishment. For instance, when one's obstacles become small and insignificant in the face of awe, the obstacles seem manageable. Conversely, if one's capabilities become small and insignificant, the obstacles appear unmanageable (Le et al., 2019). Future research is needed to further clarify the definition of self-diminishment and then examine the link between self-diminishment and self-compassion with more caution.

Coda

During unexpected adversity, the common belief that self-criticism is crucial for personal growth often leads to an undervaluation of self-compassion. Paradoxically, this tightfisted application of self-compassion increases vulnerability to suffering, thereby hindering actual growth potential. Herein, we provide awe as a "first-aid kit," promptly promoting self-compassion, thereby better equipping individuals to cope with challenging times.

References

Bai, Y., Maruskin, L. A., Chen, S., Gordon, A. M., Stellar, J. E., McNeil, G. D., Peng, K., & Keltner, D. (2017). Awe, the diminished self, and collective engagement: Universals and cultural variations in the small self. *Journal of Personality and Social Psychology*, *113*(2), 185–209. https://doi.org/10.1037/pspa0000087

Bai, Y., Ocampo, J., Jin, G., Chen, S., Benet-Martínez, V., Monroy, M., Anderson, C., & Keltner, D. (2021). Awe, daily stress, and elevated life satisfaction. *Journal of Personality and Social Psychology*, *120*(4), 837–860. https://doi.org/10.1037/pspa0000267

Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science*, *17*(4), 319–325. https://doi.org/10.1111/j.1467-9280.2006.01705.x

Ben Salem, M., & Karlin, N. J. (2023). Dispositional mindfulness and positive mindset in emerging adult college students: The mediating role of decentering. *Psychological Reports*, *126*(2), 601–619. https://doi.org/10.1177/00332941211061705

Boland, L., Campbell, D., Fazekas, M., Kitagawa, W., MacIver, L., Rzeczkowska, K., & Gillanders, D. (2021). An experimental investigation of the effects of perspective-taking on emotional discomfort, cognitive fusion and self-compassion. *Journal of Contextual Behavioral Science*, *20*, 27–34. https://doi.org/10.1016/j.jcbs.2021.02.004

Breines, J. G., & Chen, S. (2013). Activating the inner caregiver: The role of support-giving schemas in increasing state self-compassion. *Journal of Experimental Social Psychology*, *49*(1), 58–64. https://doi.org/10.1016/j.jesp.2012.07.015

Chancellor, J., & Lyubomirsky, S. (2013). Humble beginnings: Current trends, state perspectives, and hallmarks of humility. *Social and Personality Psychology Compass*, *7*(11), 819–833. https://doi.org/10.1111/spc3.12069

Chaudhury, S. H., Garg, N., & Jiang, Z. (2022). The curious case of threat-awe: A theoretical and empirical reconceptualization. *Emotion*, *22*(7), 1653–1669. https://doi.org/10.1037/emo0000984

Cox, A. E., Ullrich-French, S., Tylka, T. L., & McMahon, A. K. (2019). The roles of self-compassion, body surveillance, and body appreciation in predicting intrinsic motivation for physical activity: Cross-sectional associations, and prospective changes within a yoga context. *Body Image*, *29*, 110–117. https://doi.org/10.1016/j.bodyim.2019.03.002

Dai, Y., & Jiang, T. (2024). Inspired by Awe: Awe promotes inspiration via self-transcendence. *The Journal of Positive Psychology*, *19*(4), 647–661. https://doi.org/10.1080/17439760.2023.2254737

Dodson, S., & Heng, Y. (2022). Self-compassion in organizations: A review and future research agenda. *Journal of Organizational Behavior*, *43*(2), 168–196. https://doi.org/10.1002/job.2556

Dong, X., & Geng, L. (2022). The role of mindfulness and meaning in life in adolescents' dispositional awe and life satisfaction: The broaden-and-build theory perspective. *Current Psychology*, *42*(33), 28911–28924. https://doi.org/10.1007/s12144-022-03924-z

Driscoll, R. (1989). Self-condemnation: A comprehensive framework for assessment and treatment. *Psychotherapy*, *26*(1), 104–111. https://doi.org/10.1037/h0085394

Døssing, M., Nilsson, K. K., Svejstrup, S. R., Sørensen, V. V., Straarup, K. N., & Hansen, T. B. (2015). Low self-compassion in patients with bipolar disorder. *Comprehensive Psychiatry*, *60*, 53–58. https://doi.org/10.1016/j.comppsych.2015.03.010

Duarte, C., Pinto-Gouveia, J., & Stubbs, R. J. (2017). Compassionate attention and regulation of eating behaviour: A pilot study of a brief low-intensity intervention for binge eating. *Clinical Psychology & Psychotherapy*, *24*(6), O1437–O1447. https://doi.org/10.1002/cpp.2094

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Fennig, S., Hadas, A., Itzhaky, L., Roe, D., Apter, A., & Shahar, G. (2008). Self-criticism is a key predictor of eating disorder dimensions among inpatient adolescent females. *International Journal of Eating Disorders*, *41*(8), 762–765. https://doi.org/10.1002/eat.20573

Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, *10*(8), 1455–1473. https://doi.org/10.1007/s12671-019-01134-6

Ferrari, M., Yap, K., Scott, N., Einstein, D. A., & Ciarrochi, J. (2018). Self-compassion moderates the perfectionism and depression link in both adolescence and adulthood. *PLOS ONE*, *13*(2), Article e0192022. https://doi.org/10.1371/journal.pone.0192022

Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, *19*(1), 72–91. https://doi.org/10.1037/a0032138

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British Journal of Clinical Psychology*, *43*(1), 31–50. https://doi.org/10.1348/014466504772812959

Gilbert, P., Durrant, R., & McEwan, K. (2006). Investigating relationships between perfectionism, forms and functions of self-criticism, and sensitivity to put-down. *Personality and Individual Differences*, *41*(7), 1299–1308. https://doi.org/10.1016/j.paid.2006.05.004

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*(3), 239–255. https://doi.org/10.1348/147608310X526511

Glassman, L. H., Weierich, M. R., Hooley, J. M., Deliberto, T. L., & Nock, M. K. (2007). Child maltreatment, non-suicidal self-injury, and the mediating role of self-criticism. *Behaviour Research and Therapy*, *45*(10), 2483–2490. https://doi.org/10.1016/j.brat.2007.04.002

Gocłowska, M. A., Elliot, A. J., van Elk, M., Bulska, D., Thorstenson, C. A., & Baas, M. (2023). Awe arises in reaction to exceeded rather than disconfirmed expectancies. *Emotion*, *23*(1), 15–29. https://doi.org/10.1037/emo0001013

Gordon, A. M., Stellar, J. E., Anderson, C. L., McNeil, G. D., Loew, D., & Keltner, D. (2017). The dark side of the sublime: Distinguishing a threat-based variant of awe. *Journal of Personality and Social Psychology*, *113*(2), 310–328. https://doi.org/10.1037/pspp0000120

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.

Hayes-Skelton, S., & Graham, J. (2013). Decentering as a common link among mindfulness, cognitive reappraisal, and social anxiety. *Behavioural and Cognitive Psychotherapy*, *41*(3), 317–328. https://doi.org/10.1017/S1352465812000902

Hermanto, N., & Zuroff, D. C. (2018). Experimentally enhancing self-compassion: Moderating effects of trait care-seeking and perceived stress. *The Journal of Positive Psychology*, *13*(6), 617–626. https://doi.org/10.1080/17439760.2017.1365162

Hornsey, M. J., Faulkner, C., Crimston, D., & Moreton, S. (2018). A microscopic dot on a microscopic dot: Self-esteem buffers the negative effects of exposure to the enormity of the universe. *Journal of Experimental Social Psychology*, *76*, 198–207. https://doi.org/10.1016/j.jesp.2018.02.009

Jiang, L., Yin, J., Mei, D., Zhu, H., & Zhou, X. (2018). Awe weakens the desire for money. *Journal of Pacific Rim Psychology*, *12*, Article e4. https://doi.org/10.1017/prp.2017.27

Jiang, T., Hicks, J. A., Yuan, W., Yin, Y., Needy, L., & Vess, M. (2024). The unique nature and psychosocial implications of awe. *Nature Reviews Psychology*, *3*(7), 475–488. https://doi.org/10.1038/s44159-024-00322-z

Jiang, T., & Sedikides, C. (2022). Awe motivates authentic-self pursuit via self-transcendence: Implications for prosociality. *Journal of Personality and Social Psychology*, *123*(3), 576–596. https://doi.org/10.1037/pspi0000381

Jiang, Y., Ren, Y., Zhu, J., & You, J. (2022). Gratitude and hope relate to adolescent nonsuicidal self-injury: Mediation through self-compassion and family and school experiences. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, *41*(2), 935–942. https://doi.org/10.1007/s12144-020-00624-4

Kavakli, M., Ak, M., Uguz, F., & Türkmen, O. O. (2020). The mediating role of self-compassion in the relationship between perceived COVID-19 threat and death anxiety. *Turkish Journal of Psychiatry*, *23*(1), 15–23. https://doi.org/10.5505/kpd.2020.59862

Kelly, A. C., Carter, J. C., Zuroff, D. C., & Borairi, S. (2013). Self-compassion and fear of self-compassion interact to predict response to eating disorders treatment: A preliminary investigation. *Psychotherapy Research*, *23*(3), 252–264. https://doi.org/10.1080/10503307.2012.717310

Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and Emotion*, *17*(2), 297–314. https://doi.org/10.1080/02699930302297

Kesebir, P. (2014). A quiet ego quiets death anxiety: Humility as an existential anxiety buffer. *Journal of Personality and Social Psychology*, *106*(4), 610–623. https://doi.org/10.1037/a0035814

Kim, J., Holte, P., Martela, F., Shanahan, C., Li, Z., Zhang, H., Eisenbeck, N., Carreno, D. F., Schlegel, R. J., & Hicks, J. A. (2022). Experiential appreciation as a pathway to meaning in life. *Nature Human Behaviour*, *6*(5), 677–690. https://doi.org/10.1038/s41562-021-01283-6

Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, *44*(3), 501–513. https://doi.org/10.1016/j.beth.2013.04.004

Kross, E., & Ayduk, O. (2017). Self-distancing. *Advances in Experimental Social Psychology*, *55*, 81–136. https://doi.org/10.1016/bs.aesp.2016.10.002

LaBar, K. S. (2016). Fear and anxiety. In L. F. Barrett, M. Lewis, & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (4th ed., pp. 751–773). Guilford Press.

Le, P. Q., Saltsman, T. L., Seery, M. D., Ward, D. E., Kondrak, C. L., & Lamarche, V. M. (2019). When a small self means manageable obstacles: Spontaneous self-distancing predicts divergent effects of awe during a subsequent performance stressor. *Journal of Experimental Social Psychology*, *80*, 59–66. https://doi.org/10.1016/j.jesp.2018.07.010

Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, *92*(5), 887–904. https://doi.org/10.1037/0022-3514.92.5.887

Luo, X., Che, X., Lei, Y., & Li, H. (2021). Investigating the influence of self-compassion-focused interventions on posttraumatic stress: A systematic review and meta-analysis. *Mindfulness*, *12*(12), 2865–2876. https://doi.org/10.1007/s12671-021-01732-3

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*(6), 545–552. https://doi.org/10.1016/j.cpr.2012.06.003

Mancuso, E. J. K., Trammell, J., & Harriger, J. (2024). Affective, cognitive, and environmental inductions of humility and intellectual humility that center on self-transcendence. *The Journal of Positive Psychology*, *19*(6), 947–965. https://doi.org/10.1080/17439760.2023.2257680

McIntyre, R., Smith, P., & Rimes, K. A. (2018). The role of self-criticism in common mental health difficulties in students: A systematic review of prospective studies. *Mental Health & Prevention*, *10*, 13–27. https://doi.org/10.1016/j.mhp.2018.02.003

Messer, M., Anderson, C., & Linardon, J. (2021). Self-compassion explains substantially more variance in eating disorder psychopathology and associated impairment than mindfulness. *Body Image*, *36*, 27–33. https://doi.org/10.1016/j.bodyim.2020.10.002

Miller, J. T., & Verhaeghen, P. (2022). Mind full of kindness: Self-awareness, self-regulation, and self-transcendence as vehicles for compassion. *BMC Psychology*, *10*(1), Article 188. https://doi.org/10.1186/s40359-022-00888-4

Miller, K., & Kelly, A. (2020). Is self-compassion contagious? An examination of whether hearing a display of self-compassion impacts self-compassion in the listener. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, *52*(2), 159–170. https://doi.org/10.1037/cbs0000150

Morreall, J. (1989). Enjoying incongruity. *Humor: International Journal of Humor Research*, *2*(1), 1–18. https://doi.org/10.1515/humr.1989.2.1.1

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85–101. https://doi.org/10.1080/15298860309032

Neff, K. D. (2023b). Self-compassion: Theory, method, research, and intervention. *Annual Review of Psychology*, *74*(1), 193–218. https://doi.org/10.1146/annurev-psych-032420-031047

Neff, K. D. (2003c). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223–250. https://doi.org/10.1080/15298860309027

Neff, K. D., Hsieh, Y., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*(3), 263–287. https://doi.org/10.1080/13576500444000317

Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, *12*(2), 160–176. https://doi.org/10.1080/15298868.2011.649546

Nelson-Coffey, S. K., Ruberton, P. M., Chancellor, J., Cornick, J. E., Blascovich, J., & Lyubomirsky, S. (2019). The proximal experience of awe. *PLOS ONE*, *14*(5), Article e0216780. https://doi.org/10.1371/journal.pone.0216780

O'Neill, C., Pratt, D., Kilshaw, M., Ward, K., Kelly, J., & Haddock, G. (2021). The relationship between self-criticism and suicide probability. *Clinical Psychology & Psychotherapy*, *28*(6), 1445–1456. https://doi.org/10.1002/cpp.2593

Pan, X., & Jiang, T. (2023). Awe fosters global self-continuity: The mediating effect of global processing and narrative. *Emotion*, *23*(6), 1618–1632. https://doi.org/10.1037/emo0001187

Pan, X., & Jiang, T. (2024). A tale of self-transcendence: Awe fosters optimism. *The Journal of Positive Psychology*. Advance online publication. https://doi.org/10.1080/17439760.2024.2394458

Perlin, J. D., & Li, L. (2020). Why does awe have prosocial effects? New perspectives on awe and the small self. *Perspectives on Psychological Science*, *15*(2), 291–308. https://doi.org/10.1177/1745691619886006

Phillips, W. J., & Hine, D. W. (2021). Self-compassion, physical health, and health behaviour: A meta-analysis. *Health Psychology Review*, *15*(1), 113–139. https://doi.org/10.1080/17437199.2019.1705872

Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology*, *108*(6), 883–899. https://doi.org/10.1037/pspi0000018

Powers, T. A., Koestner, R., & Zuroff, D. C. (2007). Self–criticism, goal motivation, and goal progress. *Journal of Social and Clinical Psychology*, *26*(7), 826–840. https://doi.org/10.1521/jscp.2007.26.7.826

R Core Team. (2023). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.R-project.org

Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy*, *18*(3), 250–255. https://doi.org/10.1002/cpp.702

Rivera, G. N., Vess, M., Hicks, J. A., & Routledge, C. (2020). Awe and meaning: Elucidating complex effects of awe experiences on meaning in life. *European Journal of Social Psychology*, *50*(2), 392–405. https://doi.org/10.1002/ejsp.2604

Sbarra, D. A., Smith, H. L., & Mehl, M. R. (2012). When leaving your ex, love yourself: Observational ratings of self-compassion predict the course of emotional recovery following marital separation. *Psychological Science*, *23*(3), 261–269. https://doi.org/10.1177/0956797611429466

Schoemann, A. M., Boulton, A. J., & Short, S. D. (2017). Determining power and sample size for simple and complex mediation models. *Social Psychological & Personality Science*, *8*(4), 379–386. https://doi.org/10.1177/1948550617715068

Schönbrodt, F. D., & Perugini, M. (2013). At what sample size do correlations stabilize? *Journal of Research in Personality*, *47*(5), 609–612. https://doi.org/10.1016/j.jrp.2013.05.009

Seo, M., Yang, S., & Laurent, S. M. (2023). No one is an island: Awe encourages global citizenship identification. *Emotion*, *23*(3), 601–612. https://doi.org/10.1037/emo0001160

Shiota, M. N., Keltner, D., & John, O. P. (2006). Positive emotion dispositions differentially associated with Big Five personality and attachment style. *The Journal of Positive Psychology*, *1*(2), 61–71. https://doi.org/10.1080/17439760500510833

Shiota, M. N., Keltner, D., & Mossman, A. K. (2007). The nature of awe: Elicitors, appraisals, and effects on self-concept. *Cognition and Emotion*, *21*(5), 944–963. https://doi.org/10.1080/02699930600923668

Shoham, A., Goldstein, P., Oren, R., Spivak, D., & Bernstein, A. (2017). Decentering in the process of cultivating mindfulness: An experience-sampling study in time and context. *Journal of Consulting and Clinical Psychology*, *85*(2), 123–134. https://doi.org/10.1037/ccp0000154

Siedlecka, E., & Denson, T. F. (2019). Experimental methods for inducing basic emotions: A qualitative review. *Emotion Review*, *11*(1), 87–97. https://doi.org/10.1177/1754073917749016

Stamkou, E., Brummelman, E., Dunham, R., Nikolic, M., & Keltner, D. (2023). Awe sparks prosociality in children. *Psychological Science*, *34*(4), 455–467. https://doi.org/10.1177/09567976221150616

Stavrova, O., Ren, D., & Pronk, T. (2022). Low self-control: A hidden cause of loneliness? *Personality and Social Psychology Bulletin*, *48*(3), 347–362. https://doi.org/10.1177/01461672211007228

Stellar, J. E., Gordon, A. M., Piff, P. K., Cordaro, D. T., Anderson, C. S., Bai, Y., Maruskin, L. A., & Keltner, D. (2017). Self-transcendent emotions and their social functions: Compassion, gratitude, and awe bind us to others through prosociality. *Emotion Review*, *9*(3), 200–207. https://doi.org/10.1177/1754073916684557

Stellar, J. E., Gordon, A., Anderson, C. L., Piff, P. K., McNeil, G. D., & Keltner, D. (2018). Awe and humility. *Journal of Personality and Social Psychology*, *114*(2), 258–269. https://doi.org/10.1037/pspi0000109

Stepanova, E. R., Quesnel, D., & Riecke, B. E. (2019). Understanding AWE: Can a virtual journey, inspired by the overview effect, lead to an increased sense of interconnectedness? *Frontiers in Digital Humanities*, *6*, Article 9. https://doi.org/10.3389/fdigh.2019.00009

Sturm, V. E., Datta, S., Roy, A. R. K., Sible, I. J., Kosik, E. L., Veziris, C. R., Chow, T. E., Morris, N. A., Neuhaus, J., Kramer, J. H., Miller, B. L., Holley, S. R., & Keltner, D. (2022). Big smile, small self: Awe walks promote prosocial positive emotions in older adults. *Emotion*, *22*(5), 1044–1058. https://doi.org/10.1037/emo0000876

Swami, V., Barron, D. J., Hari, R., Grover, S., Yang, L., & Furnham, A. (2019). The nature of positive body image: Examining associations between nature exposure, self-compassion, functionality appreciation, and body appreciation. *Ecopsychology*, *11*(4), 243–253. https://doi.org/10.1089/eco.2019.0019

Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS). *Journal of Cross-Cultural Psychology*, *38*(2), 227–242. https://doi.org/10.1177/0022022106297301

Tran, M. A. Q., Vo-Thanh, T., Soliman, M., Khoury, B., & Chau, N. N. T. (2022). Self-compassion, mindfulness, stress, and self-esteem among Vietnamese university students: Psychological well-being and positive emotion as mediators. *Mindfulness*, *13*(10), 2574–2586. https://doi.org/10.1007/s12671-022-01980-x

Turk, F., & Waller, G. (2020). Is self-compassion relevant to the pathology and treatment of eating and body image concerns? A systematic review and meta-analysis. *Clinical Psychology Review*, *79*, Article 101856. https://doi.org/10.1016/j.cpr.2020.101856

Valdesolo, P., & Graham, J. (2014). Awe, uncertainty, and agency detection. *Psychological Science*, *25*(1), 170–178. https://doi.org/10.1177/0956797613501884

Visserman, M. L., Muise, A., Righetti, F., Horne, R. M., Le, B. M., Côté, S., & Impett, E. A. (2022). Lightening the load: Perceived partner responsiveness fosters more positive appraisals of relational sacrifices. *Journal of Personality and Social Psychology*, *123*(4), 788–810. https://doi.org/10.1037/pspi0000384

Wiley, J. F. (2020). *Multilevel and mixed effects model diagnostics and effect sizes* (R package multilevelTools Version 0.1.1) [Computer software]. https://cran.r-project.org/web/packages/multilevelTools/index.html

Wilson, A. F., Mackintosh, K., Power, K., & Chan, S. W. Y. (2019). Effectiveness of self-compassion related therapies: A systematic review and meta-analysis. *Mindfulness*, *10*(6), 979–995. https://doi.org/10.1007/s12671-018-1037-6

Wong, M. H., Chung, P., & Leung, K. N. (2021). The relationship between physical activity and self-compassion: A systematic review and meta-analysis. *Mindfulness*, *12*(3), 547–563. https://doi.org/10.1007/s12671-020-01513-4

Yaden, D. B., Haidt, J., Hood, R. W., Jr., Vago, D. R., & Newberg, A. B. (2017). The varieties of self-transcendent experience. *Review of General Psychology*, *21*(2), 143–160. https://doi.org/10.1037/gpr0000102

Yaden, D. B., Kaufman, S. B., Hyde, E., Chirico, A., Gaggioli, A., Zhang, J., & Keltner, D. (2019). The development of the Awe Experience Scale (AWE-S): A multifactorial measure for a complex emotion. *The Journal of Positive Psychology*, *14*(4), 474–488. https://doi.org/10.1080/17439760.2018.1484940

Yin, Y., Yuan, W., Hao, C., Du, Y., Xu, Z., Hicks, J. A., & Jiang, T. (2024). Awe fosters positive attitudes toward solitude. *Nature Mental Health*, *2*(6), 717–727. https://doi.org/10.1038/s44220-024-00244-y

Yuan, W., Chang, J., Jiang, F., & Jiang, T. (2024). *Be kinder to yourself: Awe promotes self-compassion via self-transcendence*. https://osf.io/xycaf/?view_only=eaf3719a008a416bbc8402bfaf9080cd

Yuan, W., Du, Y., & Jiang, T. (2024). How and when awe improves meaning in life: The role of authentic-self pursuit and trait authenticity. *Emotion*, *24*(2), 412–430. https://doi.org/10.1037/emo0001278

Yuan, W., Guo, T., Jiang, T., & Wang, F. (2024). Online social pain reliever: Online Awe-Intervening approach promotes recovery via the global sense of connectedness. *Computers in Human Behavior*, *158*, Article 108283. https://doi.org/10.1016/j.chb.2024.108283

Yuhan, J., Wang, D., Canada, A. L., & Schwartz, J. D. (2021). Growth after trauma: The role of self-compassion following hurricane harvey. *Trauma Care*, *1*(2), 119–129. https://doi.org/10.3390/traumacare1020011

Zeng, P., Wang, P., Nie, J., Ouyang, M., & Lei, L. (2020). Gratitude and cyberbullying perpetration: The mediating role of self-compassion and moral disengagement. *Children and Youth Services Review*, *119*, Article 105608. https://doi.org/10.1016/j.childyouth.2020.105608

Zhang, J. W., Chen, S., & Tomova Shakur, T. K. (2020). From me to you: Self-compassion predicts acceptance of own and others' imperfections. *Personality and Social Psychology Bulletin*, *46*(2), 228–242. https://doi.org/10.1177/0146167219853846

Zhang, J., Howell, R. T., Razavi, P., Shaban-Azad, H., Chai, W. L., Ramis, T., Mello, Z. R., Anderson, C. S., & Keltner, D. (2024). Awe is associated with creative personality, convergent creativity, and everyday creativity. *Psychology of Aesthetics, Creativity, and the Arts*, *18*(2), 209–221. https://doi.org/10.1037/aca0000442

Received December 9, 2023
Revision received November 14, 2024
Accepted December 6, 2024 ■

Retraction of "The Well-Being Paradox: Comparing Prosocial and Self-Kindness Interventions for Mental Health Benefits" by Naclerio et al. (2024)

The following article is being retracted: Naclerio, M. E., Lazar, L., Hornstein, E. A., & Eisenberger, N. I. (2024). The well-being paradox: Comparing prosocial and self-kindness interventions for mental health benefits. *Emotion*. Advance online publication. https://doi.org/10.1037/emo0001460.

This retraction was requested by all authors. After publication, the first author became aware that data for the self-kindness condition at the postintervention timepoints for the depression and anxiety measures did not match the output originally exported from Qualtrics. The second author reported that when they were merging Qualtrics outputs into a single data file for analyses, they experienced repeated software crashes. This technical issue likely caused data cells to be incorrectly merged for the self-kindness condition at the postintervention timepoint. Due to the corrupted data, the findings related to the self-kindness group at the postintervention timepoint (for depression and anxiety) are incorrect. Data from the other groups and timepoints remain unaffected.

Editor's Note. Paula R. Pietromonaco served as the action editor for this article.—NIE

https://doi.org/10.1037/emo0001522