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RESEARCH PAPER

# The Association between Awe Experience and Self-Compassion among Educated Young Adults

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**ABSTRACT**

This study aimed to examine the relationship between awe experience and self-compassion among educated young adults aged 18–26 in Pakistan. Self-compassion is associated with emotional well-being, and awe, which is a self-transcendent emotion, has been linked to positive and negative psychological effects. According to the previous studies, awe can improve mindfulness and connectedness, but can also cause self-diminishment. These contradictory directions are critical to attain knowledge about mental health in young adults. It was a quantitative, correlational study that employed a sample of 300 educated young adults, including males (n=150) and females (n=150). The sample was chosen using convenience sampling. The respondents took the Awe Experience Scale and Self-Compassion Scale. The data were studied with the help of descriptive statistics, correlations, and regression analysis. The study analyzed the relationship through Pearson correlation statistical analysis and found that overall awe had a negative correlation with self-compassion. Hierarchical regression analysis indicated that the self-loss component of awe negatively predicted self-compassion, and time perception positively predicted self-compassion, which demonstrates the two-fold influence of awe. The t-test indicated that negative awe generated more self-loss and accommodation than positive awe, but there was no difference in total awe scores. Further, non-medical students had more awe experiences when compared to medical students, and there were no notable differences in self-compassion between the two groups. Positive awe-inducing experiences should also be included in future interventions to enhance emotional regulation. It is suggested to replicate with diverse samples and experimental designs to make the causal pathways clearer.

**Keywords:** Awe Experience, Self-Compassion, Educated Young Adults, Positive Psychology

## Introduction

The world of the 21st century is stressful and demanding; therefore, young adults are exposed to a variety of stressors in their everyday life, which impact their psychological well-being. Regardless of academic pressure or social issues, the issue of stress has become an inescapable part of contemporary life. This has made the mental health of the young adults a rising concern. In this light, positive psychology provides a different perspective by focusing on human strengths and virtues that facilitate well-being and resilience and not just alleviating distress (Seligman & Csikszentmihalyi, 2000). It is one of its major objectives to investigate the role of adaptive emotional

experiences and attitudes in promoting psychological well-being, emotional regulation, and life satisfaction.

One of these emotional phenomena is awe, a complex emotion elicited by observing something very large and beyond ordinary understanding. Depending on its evaluation, awe may stir up the sense of wonder, humility and connection or, on the contrary, fear and insignificance (Keltner & Haidt, 2003). Although psychological studies have been dominated by negative emotions associated with psychopathology, new studies show the potential to change lives of positive and multifaceted emotions such as awe to build resilience and self-development (Fredrickson, 2001; Stellar et al., 2018).

On the contrary, most people are quick to criticize themselves instead of accepting themselves when they fail or go through a setback. Self-criticism, which is commonly perceived as a source of improvement, may negatively affect emotional health and cause more psychological distress (Gilbert et al., 2004; Powers et al., 2007; McIntyre et al., 2018). This appreciation has prompted researchers to examine beneficial emotional resources that have the capacity to reverse such self-critical inclinations. One such resource that has been found to prevent anxiety, depression, and stress is self-compassion, the ability to treat oneself kindly, mindfully, and share humanity in difficult moments (Neff, 2003a; Neff & McGehee, 2010).

Although awe and self-compassion have been separately attributed to well-being, the relationship between the two has not been studied sufficiently. The self-transcendent emotion Awe allows increasing the awareness beyond the self and enhancing the ability to be humble, open, and feel interconnected (Yaden et al., 2019). These attributes are harmonized with the elements of self-compassion that entail self-kindness, mindfulness, and identification of shared humanity (Neff, 2003a, 2003b). The two constructs focus on the decrease of egocentric attention and increase of perspective-taking, but empirical research relating awe to self-compassion directly is limited. The realization of this connection can bring promising findings about emotional resilience and positive mental health.

Awes have been described as a feeling towards objects that are seen as large and demand cognitive accommodation i.e., they demand a challenge on the limits of mental representations and increase knowledge (Keltner & Haidt, 2003). Such experiences may be natural beauty, moral virtue, high skill, or even some supernatural phenomena that bring about awe. It is an ambivalent emotion that can cause a positive (e.g., awe of beauty) and a negative (e.g., awe of threat) reaction to appraisal (Gordon et al., 2017). The conceptualization of awe in the two-factor model developed by Keltner and Haidt (2003) is that of an impression of grandness and an accommodation requirement. In order to be accommodated to, awe results in enlightenment and growth of knowledge; otherwise, it can result in fear or insignificance. In addition to perceived vastness and cognitive accommodation, a more recent framework of awe has also included other characteristics of the construct, such as slowed time perception, physical sensations (e.g., goosebumps, jaw dropping, etc.), connectedness, and self-diminishment (Yaden et al., 2019).

Psychologists, like Fredrickson, in his Broaden-and-Build Theory (2001) treat awe as a positive feeling that expands thought-action repertoires and accumulates permanent individual resources, like resilience and well-being. Similarly, Appraisal Theory (Lazarus, 1991; Roseman & Smith, 2001) describes how the reliance of individual perceptions of awe stimuli, whether threatening or inspiring, determines the results of

emotions and behavior. Favorably rated awe may help to foster humility, acceptance and relatedness, and unfavorably rated awe may cause anxiety or self-criticism.

Neff (2003a, 2003b) defines self-compassion as having three components, which are interrelated, namely, self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. All these dimensions lead to emotional stability and resilience as it makes people perceive suffering as something common to people, treat personal failures with compassion, and be mindful of their emotions without associating themselves with them. Compassionate Mind Theory (Gilbert, 2009) holds that self-compassion triggers the affiliative system of the brain, which lowers threat responses and stimulates a sense of safety and acceptance. More self-compassion also means that people with greater self-compassion tend to be less harsh in their self-criticism and tend to be more adaptively coping and psychologically flexible.

The new evidence indicates that there are psychological overlaps between awe and self-compassion. Awe causes people to disregard the self and have a broader sense by focusing more on the perspectives and makes them feel smaller yet more related to humankind (Bai et al., 2017; Yaden et al., 2017). Such an act of self-transcendence fosters humility and mindfulness, the main components of self-compassion (Dong & Geng, 2022 ;Stellar et al., 2018). The ability of Awe to create a sense of connection in the world makes people aware of suffering as a universal human experience and isolates suffering and makes people kinder to themselves (Kross & Ayduk, 2017; Neff, 2023).

The influence of awe can have different valences, though. Openness, compassion, and emotional development may be promoted by positive awe (e.g., awe of beauty or virtue), and threat-based or negative awe (e.g., awe of power or catastrophe) may be a stimulus of fear and self-doubt (Chirico & Yaden, 2018; Gordon et al., 2017). This duality illustrates why the relationship between various forms of awe and self-compassion is empirically studied in terms of collectivist cultural settings, such as Pakistan, where spiritual and authority-based awe form a significant portion of the awe.

In conclusion, awe and self-compassion are important in the development of emotional resilience and mental health. However, the direct correlation between these constructs especially in non-Western cultures especially among young adults has not been well researched. The current research, thus, seeks to examine the connection between awe experiences and self-compassion among educated young adults in Pakistan, and thus assists in the expanding research area of positive psychology as well as provides information on culturally relevant mental health interventions.

**Literature Review**

Awe has received growing focus in the psychological literature on its transformative effect on the condition of well-being and cognition. The conceptualizations of Keltner and Haidt (2003) has been broadened through empirical research where the intrapersonal and interpersonal advantages of awe have been emphasized. An example is given by Shiota et al. (2007) which indicates that awe diminishes the self and establishes a small self, which in turn encourages a sense of connection to a greater whole. Equally, Stellar et al. (2018) determined that people with high dispositional awe were viewed as less self-centered and humbler and focused on the prosocial and self-transcendent consequences of awe.

Further studies on awe, which are naturalistic, can be used to support the ability of awe to help in changing self-perception and alleviating stress. Bai et al. (2017, 2021) conducted a series of experiments: in these studies, lower levels of stress and increased levels of life satisfaction were linked to awe experiences (either triggered by natural scenery or daily events), which were mediated by a reduced level of self-focus. Similarly, in line with these findings, Piff et al. (2015) verified by various studies that state and trait awe lead to prosocial motivation, showing that awe reduces self-importance and increases concern towards other people.

Other than psychological consequences, awe has an effect on cognitive flexibility and curiosity. As Anderson et al. (2019) also found the positive relationship between dispositional awe and curiosity and academic engagement. Even though the awe is described as a positive feeling, researchers recognize both positive and negative aspects of awe. Gordon et al. (2017) established that awe perceived to be uncontrollable or threatening caused a physiological response of stress, whereas awe perceived positively improved well-being. This is further supported by neuroscientific evidence. Takano and Nomura (2020) found distinct neural responses to positive and negative awe wherein positive awe was found to be associated with aesthetic appreciation and reward processing, and negative awe with threat and uncertainty.

Awe also goes hand in hand with spirituality and transcendence. Valdesolo and Graham (2014) found that awe enhanced the belief in supernatural agency when there was uncertainty. In the context of collectivist culture, like in Pakistan, Ateeq et al. (2025) established that spiritual intelligence was more likely to explain awe, there were cultural effects on the elicitors and experiences of awe.

Awe has always been associated with psychological strength and being in the present. Rudd et al. (2012b) discovered that awe enlarges the time perception, improves patience and prosocial behavior. Equally, Thompson (2023) highlighted similarities of awe and mindfulness-based interventions by demonstrating that contemplation of awe-related events promoted mindfulness and emotion regulation.

In line with the analysis of awe, self-compassion has turned into a crucial concept of positive psychology. Meta-analytic and experimental research always proves that an increased level of self-compassion is associated with a decreased level of psychopathology. Indicatively, in one of their studies, MacBeth and Gumley (2012) discovered a negative and significant association between self-compassion and depression, anxiety, and stress. Leary et al. (2007) also demonstrated that respondents who scored high on self-compassion responded more to failure or embarrassment with less negative affect and more acceptance.

Self-compassion has also been proven to cope with significant life stresses. Finlay-Jones et al. (2017) found that Mindful Self-Compassion (MSC) interventions had a significant positive impact on self-compassion and decreased anxiety and depression. Meta-analyses by Ferrari et al. (2019) and Kirby et al. (2017) established that compassion-based interventions have medium to large effects on the psychological well-being of different populations and cultures.

Although the two constructs continue to gain more research, very few studies have been conducted to determine their direct relationship. Awe decreases egoism and enhances mindfulness, which may lead to self-benevolence and general humanity (Bai et al., 2017; Stellar et al., 2018). This correlation is starting to be proved empirically.

According to the report by Yuan et al. (2025), awe was positively predictive of self-compassion, which was mediated by self-transcendence in five studies. Likewise, Cavallaro and Rivera (2025) discovered that there is a complex relationship between awe and self-compassion. Whereas awe proneness predicts greater self-compassion its effects are in counter directions, where self-diminution decreases self-compassion, and connectedness increases self-compassion. In general, awe may reinforce and undermine self-compassion based on its experience. Awe and self-compassion have also been seen to differ due to demographic differences. Studies indicate that women are more likely to feel awe, particularly when it comes to spiritual situations (Ateeq et al., 2025; Bussing et al., 2021), although physiological reactions of goosebumps might vary across genders (Quesnel & Riecke, 2018). With respect to self-compassion, Yarnell et al. (2015) discovered that women receive a smaller score than men, which may be explained by the presence of more socialized self-criticism. Nonetheless, self-compassion seems to be positively correlated with age; older people in Neff and McGehee (2010) and Phillips and Ferguson (2013) reported greater self-compassion and less distress, which is better emotional regulation with age. Overall, awe would seem to influence self-compassion by both cognitive (perspective broadening and accommodation) and affective (humility and connectedness) mechanisms. Whereas positive awe can raise self-kindness and mindfulness, threat awe can raise fear and self-blame. there are very few studies on this direct relation, both in collectivist societies, especially among educated young adults, during which awe and compassion are usually combined with spirituality and moral superiority.

## Material and Methods

### Research Design

The research design used in this study is a correlational, cross-sectional study.

### Participants

The sample size of the study was 300 young adults (18-26 years old) who were pursuing their studies in both the public and private sector universities in Faisalabad. A sample of 300 people (150 males and 150 females) was taken at first. Nevertheless, in the process of data cleaning, 17 outliers were discovered and eliminated so as to make the research results accurate and reliable. The last sample was composed of 283 participants, who were 142 males and 141 females. Convenience sampling was used to select the participants.

### Inclusion and exclusion criteria

The inclusion criteria of the participants were as follows: A participant should be aged between 18 and 26 years old, be fluent in English, and have no known physical or psychiatric disorder. Those who failed to comprehend the study procedures or could not provide informed consent were also excluded in the study.

### Instruments /Materials

The following instruments were used in this study:

### Awe Experience Scale (AWE-S; Yaden et al., 2019)

It is a 30-item Awe Experience Scale that seeks to gain a total score to the awe experience.it is a 7-point Likert scale, using the response categories strongly disagree (1), moderately disagree (2), somewhat disagree (3), neutral (4), somewhat agree (5), moderately agree (6), strongly agree (7). This scale has six subscales, which are time perception, self-loss, connectedness, perceived vastness, physiological changes, and accommodation. All subscales have 5 items. The researcher found high internal consistency (α =0.93) and validity of the scale. The alpha ranges from 80 to .88 for internal consistency of subscales.

**Self-Compassion Scale (Neff, 2003)**

It is a 26-item Self-Compassion Scale. This measure consists of six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification; nevertheless, the total averaged score is calculated. It is a 5-point Likert scale ranging from 1=almost never to 5 =almost always. The internal consistency of SCS was reported to be 84, and the internal consistency of subscales was found to be between .58-.64

**Demographic sheet**

Respondents were asked to fill out a short demographic sheet which included age, gender, total family size, family system, education and previous experiences of awe, positive or negative.

**Procedure**

To start with, the authors of the Awe Experience Scale and Self-Compassion Scale were contacted and allowed to participate in the research. Ethical approval was obtained from the Institutional Review Board of Faisalabad Medical University. Data were collected from university classrooms and common areas after obtaining teachers' consent. Participants were briefed on the concept of awe using examples of positive (e.g., nature, kindness) and negative (e.g., disasters, fear) awe. After signing informed consent, they recalled a personal awe experience and completed the AWE-S, SCS, and demographic form. Data collection took approximately 15–20 minutes and spanned three months. Participation was voluntary and confidential.

**Statistical analysis**

Data was entered in SPSS version 25(statistical software) for the analysis. The descriptive statistics were used to analyze the demographics of the participants, the mean and standard deviation of the awe experience, and self-compassion. Inferential Statistics, such as the Pearson correlation coefficient, were used to determine the relationship between awe experience and self-compassion. Regression analysis was used to test the predictive relationship between awe experience and self-compassion. *t*-tests were used to compare awe experience and self-compassion scores across gender, degree, family system, and type of awe experience.

**Results and Discussion**

The study measures are reliable, and the data are normally distributed as per Kline's criteria (2011), supporting the validity of further statistical analyses conducted in the study.

**Table 1**
**Frequency and Percentage Distribution of Demographic Variables and Type of Awe Experience (N=283)**

| | | Gender | | |
|---|---|---|---|---|
| | | **Male** | **Female** | **Total** |
| | | ***f* (%)** | ***f* (%)** | |
| Family system | Nuclear | 112(78.8) | 106(75.1) | 218(77) |
| | Joint | 30(21.1) | 34(24.1) | 64(22.6) |
| | Total | 142(50.1) | 141(49.8) | 283(100.0) |
| Educational background | Medical | 85(59.8) | 1(0.7) | 86(30.3) |
| | Non-medical | 57(40.1) | 140(99.2) | 197(69.6) |
| | Total | 142(50.1) | 141(49.8) | 283(100.0) |
| Awe Experience | Positive | 124(87.3) | 116(82.2) | 240(84.8) |
| | Negative | 18(12.6) | 25(17.7) | 43(15.1) |
| | Total | 142(50.1) | 141(49.8) | 283(100.0) |

Table 1 gives the frequency and percentage distribution of the participants in terms of demographic variables and type of Awe Experience. The sample consisted of 283 educated young adults (142 males, 50.1% and 141 females, 49.8%). In terms of the family system, 77 percent of the respondents were in nuclear families, and 22.6 percent of the respondents were in joint families. In educational background, 30.3 percent of the respondents were medically educated, and 69.6 percent were non-medically trained. In regard to the Awe Experience Scale, 84.8% of the participants had a positive awe experience, and 15.1% had a negative awe experience.

**Table 2**
**Pearson correlation for Awe Experience, Self-Compassion, and Their Subscales**

| | SCS | SK | SJ | CH | I | MF | OI |
|---|---|---|---|---|---|---|---|
| AWE | -.170*** | .329*** | -.456*** | .395*** | -.441*** | .332*** | -.524*** |
| T | -.049 | .286*** | .332*** | .388*** | -.343*** | .351*** | -.429*** |
| SL | -.277*** | .141* | -.318*** | .198** | -.382*** | .094 | -.373*** |
| C | .045 | .312*** | -.226*** | .272*** | -.371** | .092 | -.299*** |
| V | -.117* | .240*** | -.371*** | .309*** | -.305*** | .272*** | -.388*** |
| PC | -.144* | .173** | -.342*** | .211*** | -.239*** | .237*** | -.351*** |
| A | -.178** | .287*** | -.385*** | .340*** | -.447*** | .244*** | -.431*** |

*Note.* * $p$<.05. ** $p$<.01. *** $p$<.001, AWE= Awe Experience; SCS = Self Compassion; T= Time Perception; SL= Self loss; C = Connectedness; V= Vastness; PC = Physiological Changes; A = Accommodation; SK = Self Kindness; SJ = Self judgment; CH= Common Humanity; I= Isolation; MF= Mindfulness; OI= Overidentification.

Table 2 shows the results of the Pearson correlation revealed a significant negative relationship between awe experience and self-compassion. Further negative correlation was found between awe experience and the maladaptive subscale of self-compassion, i.e. self-judgment, isolation, and overidentification. The table also shows that awe experience has a significant positive relationship between awe experience and self-compassion adaptive subscales, i.e., self-compassion, common humanity, and mindfulness.

**Table 3**
**Hierarchical Multiple Regression Predicting Self-Compassion from Awe Subscales**

| **Variables** | **B** | ***SE*** | ***β*** | ***t*** | **$R^2$** | **$\Delta R^2$** |
|---|---|---|---|---|---|---|
| | | | **Step 1** | | | |
| Self-loss | -.05 | .012 | -.277 | -4.83*** | 0.77 | .07 |
| | | | **Step 2** | | | |
| Self-loss | -.07 | .014 | -.356 | -.5.24*** | .09 | .08 |

| | | | | |
|---|---|---|---|---|
| Time perception | .03 | .014 | .145 | 2.13* |

*Note.* Step 1: F (1, 283) = 23.41, $p < .001$. Step 2: F (2, 283) = 14.12, $p < .001$.

Table 3 shows Multiple Linear Regression indicating Awe Experience and its subscales i.e., self-loss and time perception, as predictors of Self-Compassion among educated young adults. Self-loss predicted lower self-compassion in step 1 ($\beta$ = –.277, $p < .001$), which accounts for 7% variance ($\Delta R^2 = .07$). In next step self-loss ($\beta$ = –.356, $p < .001$) and time perception ($\beta$ = .145, $p = .034$) both significantly predicted self-compassion by explaining 8% of the variance ($\Delta R^2 = .08$).

**Table 4**
**Independent Samples t-test Comparing Awe Experience (AWE), Self-Compassion Scale (SCS) and Their Subscales Between Positive and Negative Awe (N=283)**

| DVs | Awe Experience | | | | | 95% CI | | Cohen's d |
|---|---|---|---|---|---|---|---|---|
| | Positive | Negative | *t* | *p* | *Df* | | | |
| | *M(SD)* | *M(SD)* | | | | *LL* | *UL* | |
| SL | 3.33(1.57) | 4.36(1.42) | -4.30*** | .000 | 61.778 | -1.515 | -.554 | 0.688 |
| A | 4.10(1.49) | 4.60(1.47) | -2.03* | .046 | 58.484 | -.988 | -.008 | 0.337 |

*Note*. Only significant subscales are shown. SL =Self-loss, A = Accommodation.

The above table shows the mean, standard deviation, and t-value for only significant subscales. The table indicates there was a significant difference between types of awe experience on the self-loss $t$ (-4.30) = .000, $p < .001$ and accommodation subscale, $t$ (-2.03) = .046, $p < .05$.

**Table 5**
**Independent Samples t-test Comparing Awe Experience (AWE), Self-Compassion Scale (SCS) and Their Subscales across Educational Background (Medical Vs Non-medical students)**

| DVs | Educational background | | | | | 95% *CI* | | Cohen's *d* |
|---|---|---|---|---|---|---|---|---|
| | Medical | Non-medical | *t* | *p* | *Df* | | | |
| | *M(SD)* | *M(SD)* | | | | *LL* | *UL* | |
| AWE | 3.74(1.00) | 4.13(1.10) | -2.90** | .004 | 176.71 | -.654 | -.125 | 0.371 |
| T | 3.68(1.55) | 4.16(1.49) | -2.43* | .016 | 155.92 | -.876 | -.090 | 0.315 |
| C | 3.67(1.37) | 4.23(1.38) | -3.16** | .002 | 163.72 | -.916 | -.213 | 0.407 |
| PC | 3.89(1.45) | 4.26(1.47) | -2.00* | .046 | 164.81 | -.750 | -.006 | 0.253 |
| A | 3.89(1.37) | 4.30(1.53) | -2.23* | .027 | 180.61 | -.774 | -.048 | 0.282 |
| OI | 3.15(.80) | 2.92(.87) | 2.11* | .036 | 173.73 | .014 | .437 | 0.275 |

*Note*. Only significant subscales are shown. AWE=Awe Experience Scale, T=Time, C= Connectedness, PC= Physical Changes, A= Accommodation, OI= Overidentification

The table indicated that significant differences were found between medical and non-medical students on the awe experience scale t (-2.90) = .004, p < .05. Table also indicated that there were significant differences on its subscales, such as time perception $t$ (-2.43) = .016, $p < .05$, connectedness $t$(-3.16) = .002, $p < .05$, physical changes $t$ (-2.00) = .046, $p < .05$, and accommodation $t$ (-2.23) = .027, $p < .05$. Additionally, the table shows that there were significant differences regarding educational background on the self-compassion subscale, i.e. overidentification $t$ (2.11) = .036, $p < .05$.

**Discussion**

The purpose of this study was to the relationship between awe experiences and self-compassion, including demographic differences across educational background (i.e., medical vs. non-medical), and other characteristics. The present study aimed to examine the complex associations between awe experience and self-compassion in a sample of educated young adults ranging in age from 18 to 26 years.

The findings of the current research indicate the negative relationship between the overall awe experience and self-compassion. This finding might seem to contradict the growing Western body of literature that defines awe as a self-transcendent feeling that facilitates prosociality, emotional, and positive self-related functions (Stellar et al., 2017; Yang et al., 2018). Nevertheless, a more subtle image was formed on the subscale level: awe was positively linked to the positive subscales of self-compassion (self-kindness, common humanity, mindfulness) and negatively linked to the negative subscales of self-compassion (self-judgment, isolation, overidentification). This, however, points out that there is a mixed valence character to awe that is in agreement with the appraisal theories (Roseman & Smith, 2001). According to the appraisal theory of awe, awe has the potential of producing positive self-transcendence or negative self-diminution that is dependent on cognitive appraisal of the experience (Keltner & Haidt, 2003). Awe promotes mindfulness and compassion towards self when it is felt to be spacious (e.g., beauty, virtue, spirituality). Nevertheless, awe can trigger feelings of insignificance and vulnerability when it is perceived as a threat or overwhelming (e.g. fear-based religious awe or natural disasters), which in turn reduces self-compassion (Gordon et al., 2017; Stellar et al., 2018).

The results of positive awe are interconnectedness, perspective-taking, and humility, which is similar to the self-compassion model by Neff (2003a). The self is widened and the ego-focused concentration is shortened by such awe, leading to the growth of the acceptance and emotional stability levels (Stellar et al., 2018). Nevertheless, fear and self-devaluation (e.g., because of natural disasters, autocratic leaders, etc.) can also be generated through awe and is congruent with harsh self-critical characteristics (Gordon et al., 2017). In a collectivist culture, particularly in Pakistan, where awe is commonly related to religious (e.g., reverence of God) and social hierarchies (respect of authority), awe can have both reverence and fear. This cultural background might be the reason why awe reduces general self-compassion at times, especially when an interpretation of fear is predominant.

The result of the Regression analyses indicated that self-loss, the feeling of the self-shrinking or merging with something larger, was a significant negative predictor of self-compassion. While time perception was found to be a positive predictor of awe experience. The negative impact of self-loss suggests that self-diminishment is related to having less self-compassion which is consistent with more recent studies that have found awe to have negative indirect effects on intrapersonal outcomes via the small self (Edwards et al., 2024; Rivera et al., 2020; Zhang & Lin, 2023). This suggests that perhaps instead of a diminished sense of self being indicative of a nonthreatening reduced daily self and concerns (Yuan et al., 2023), a diminished sense of self may be indicative of a threat to the self and one's feelings of significance. This is because humans typically view themselves as meaningful and significant (Heintzelman & King, 2014), but feelings of self-diminishment during awe may challenge this belief and disrupt one's usual self-view. This sense of insignificance from a diminished sense of self could thus feel threatening, potentially making it harder to maintain self-compassion. Although self-

loss has been linked to self-transcendence and pro-sociality in Western samples (Yaden et al., 2019), in Pakistan it may be experienced as a threatening loss of control or as submission to authority, which could reduce self-compassion.

In contrast, time perception, i.e., the subjective sense of time expanding or slowing, was a small but significant positive predictor of self-compassion. This means that people who experience awe with a change in perception of time, especially the slowness of time, may also have greater self-kindness and self-acceptance. This is consistent with the previous research that present moment awareness expanded time perception (Vohs & Schmeichel, 2003). This is supported by the extended-now theory, this theory suggests that focusing on the present moment expands the perception of time, which in turn allows people to experience less pressure and more mindfulness. (Vohs & Schmeichel, 2003). Similarly, Rönnlund et al. (2019) found in their study that time expansion is associated with mindfulness and present moment awareness, which may promote self-acceptance, which is a key component of self-compassion and emotional regulation. (Neff, 2003b). These findings suggest that not all awe components operate similarly; some, such as time perception, may enhance self-compassion, while others, such as self-loss, may reduce it.

An interesting trend was observed when comparing participants with positive and negative awe experiences. Individuals experiencing negative awe rated much higher on self-loss and accommodation, indicating that awe based on threat can make people feel weaker and require more cognitive restructuring. This finding aligns with results from Gordon et al. (2016), who distinguished between beauty-based awe and threat-based awe, revealing that the former evokes positive feelings, while the latter elicits fear and self-devaluation. The t-test also shows that accommodation scores in the current study are higher in negative awe experiences, consistent with the appraisal tendency framework, which suggests that awe, especially its negative form, indicates a need to adjust one's schema (Keltner & Haidt, 2003). In Pakistan, there is a high prevalence of both frequent natural disasters (e.g., floods, earthquakes) and longstanding authoritarian forms of governance, which together may contribute to more fear-based or negative awe experiences rather than purely positive ones (Hoover Institution 2024; Ikram 2024; Mansoor Raza 2022; Taj et al. 2014). These factors might explain why people who report experiencing negative awe report more self-loss and accommodation than those who report experiencing positive awe.

The *t*-test showed that there were also significant differences in awe experience between medical and non-medical students. Non-medical students scored higher in awe experience, showing particularly significant differences in the subscales of time perception, connectedness, physical changes, and accommodation. This suggests greater emotional openness to awe-stimulating events. This might be because of medical students may be exposed to awe-inhibiting conditions due to intense academic demand, emotional numbing, and witnessing suffering and death. (Egnew et al., 2018; Khan & Sethi, 2020; Lisai-Goldstein & Shaulov, 2024) Chronic stress and clinical detachment (Lisai-Goldstein & Shaulov, 2024) could also limit the attentional capacity and curtail receptiveness to transcendent or emotionally expansive experience. On the other hand, non-medical students, especially in fields like humanities and social sciences, can be exposed to more chances of wonder, inspiration, and interest in art, literature, and nature, which are associated with awe (Schnell & Keeler, 2018). Their minds are less burdened by study stress and medical concerns, which in turn may retain more cognitive flexibility and aesthetic sensitivity, promote awe and wonder when encounter nature, creativity, and abstract ideas (Dou et al., 2025; Rudnik et al., 2025). In contrast, in self-

compassion, medical students showed higher scores in the overidentification subscale. This may suggest a tendency toward self-critical rumination. This may align with the previous research that found that medical students with greater self-judgment and over-identification exhibited larger discrepancies between their "ideal good doctor" image and their self-perception. (Světlák et al., 2021). Similarly, it was emphasized that the culture of medicine often equates success with perfection, which encourages impractical self-assessment and self-blame among trainees that may make them fail to exhibit self-kindness (Eley et al., 2022; Rallis et al., 2022). This can also be associated with severe self-criticism and fear of failure, and low self-compassion.

On the contrary, awe promotes broader thinking and emotional acceptance by fostering self-transcendent meaning among non-medical students. (Bai et al., 2019). Since the medical education in Pakistan is too competitive and students are under pressure, their abilities to experience awe and self-compassion may be compromised. Non-medical students, conversely, may have less restraint on their autonomy, intellectual activity, and interpersonal relationships that facilitate awe experiences and self-compassion.

## Conclusion

In general, this research helps to conclude that awe is protective and disruptive, depending on its type (positive or negative) and the cultural and emotional system of a person. Incorporating positive awe-inducing practices in education, therapy, and community life may enhance self-acceptance and resilience among educated young adults.

## Recommendations

This study needs to be replicated in future research that uses larger and more heterogeneous populations to enhance lifespan generalizability. The causal effects of awe on self-compassion also require experimental designs in order to establish the causal effects. Researchers can also consider possible mediators, including humility, mindfulness, spiritual orientation, and religiosity, to elucidate the role of awe on self-compassion. There is the option of having qualitative approaches, including narrative interviews, to aid in introducing the subjective meaning of awe between different cultures.

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