

The Relationship Between Grief, Self-expansiveness and Post-traumatic Growth: Transformation through Turmoil

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Abstract -This study aimed to investigate the relationship between grief, self -expansiveness and post-traumatic growth among young adults aged 18-30 in India. A quantitative research design was employed, utilizing a convenience and snowball sampling technique to recruit 156 participants who had experienced grief and loss. Standardized self-report measures were used to collect data, which were then analyzed using descriptive and inferential statistics.

The findings revealed a significant positive correlation between grief and post-traumatic growth, and self-expansiveness and post-traumatic growth indicating that individuals who had experienced grief were more likely to experience personal growth following a traumatic event. These findings have important implications for the field of grief and loss, highlighting the potential positive outcomes of experiencing grief and loss.

Index Terms - *Grief, self-expansiveness, post-traumatic growth, quantitative, hope*

I. INTRODUCTION

"In some ways, suffering ceases to be suffering at the moment it finds a meaning."

—Viktor Frankl, Man's Search for Meaning

Pottery cracks can be repaired using the centuries-old Japanese practice of kintsugi. Instead of covering the cracks, the procedure entails glueing the damaged pieces back together using lacquer combined with powdered platinum, gold, or silver. The entire piece of pottery retains its timeless beauty after being put back together, despite having a damaged past. At this point in time, many people question if they will have a second life after being put back together and if they will recover with dignity and grace. According to science, they not only recover but also exhibit a remarkable capacity for growth and resilience. I lost my father to Covid in March 2021, he was an essential part of my existence and his absence made me question everything. My values, my beliefs, and my ideals had all been shattered. It would not be an exaggeration to say that the entirety of my identity was in pieces, it was wholly and completely deconstructed. The one thing I wished to carry through my father's legacy was his unwavering determination to flip the worst of conditions into a learning experience. Destruction is an opportunity to create something better. Every day I would wake up with no will to live and no purpose in life. During those days, I used to replay my father's words, "We are crazy balls, we shall always bounce back". This was the beginning of my journey to transformation through turmoil. I realized that my life had a more significant, mystical, and possibly untapped meaning to it which is waiting to be discovered. I have always been fascinated by the concept of death, even before I lost my loved one. Growing up in a Brahmin household, I was always surrounded by the wisdom of our ancient scriptures. My childhood experiences and my trauma made me realize that death is the strongest purification. I came to accept that death and loss do not necessarily hold a negative connotation. I experienced tremendous positive changes in myself which made me grow even more curious as to how the human psyche has the capacity and power to not only survive but also thrive after loss and trauma.

Initially, I wanted to work on something 'safe' but my guide Dr Shruti Soudi encouraged me that research is meant to be fun and it can be fun only when I work on something where my heart lies. She motivated me to not be scared and go ahead with what is my actual calling. After going through a lot of literature I realized that there is a uniform pattern of positive outcomes after a loss, especially in the spiritual aspects of a person's life.

Previous studies have focused more on a middle-aged and old population, there is no solid work on young adults studying in college. Through this study, I aim to highlight the humane and positive aspects of loss and trauma and thereby encourage grievers to live integrated and fully-functional life.

Conceptual Definition; Grief is a natural reaction to losing a loved one, not a disease (Shear et al., 2011). According to both national and international research, sudden, unexpected, and violent losses increase the risk of prolonged grief (ICD-11, 2017), which can lead to a variety of health issues, including decreased quality of life and impaired functioning (Boelen et al., 2019; Kristensen et al., 2012; Stroebe et al., 2007). After expected losses, 10-15% of bereaved experience prolonged grief (Lundorff et al., 2017), whereas 30-70% of bereaved experience prolonged grief after unexpected and violent losses (McDevitt-Murphy et al., 2012). Sudden and violent losses increase the likelihood of developing comorbid disorders such as PTSD, depression, and anxiety (Heeke et al., 2017). One of the seven essential emotions for human survival, according to the area of emotional neuroscience, is sadness. Maladaptive mourning, however, can seriously harm a person's life and result in psychopathologies such as major depressive illness.

An emphasis on biopsychosocial research methods has replaced outmoded theories, such as the Kübler-Ross hypothesis, which had inconsistent results, in studies on grieving. Inflammatory processes are linked to chronic health disorders and negative life events like social loss have been linked to major depressive disorder, according to the study of psychoneuroimmunology. Humans unavoidably experience grief, a phenomenon that brings an unpleasant feeling. Grief is essentially the emotion or response that arises from grieving and mourning following a great loss. Acute grieving, loss adaptation, and complicated grief are only a few of the several types of grief that can be classified. However, grief seems to be an unwelcome and terrible feeling that cannot be avoided in all of its gradations. This does not mean that everyone finds it difficult to deal with their sadness or that they do not benefit from the experience.

Bagley Darian offers a model of adaptive grief dynamics that highlights healthy coping mechanisms and how some people use the experience to achieve personal growth. Similarly, grief is necessary for human survival (as it is for the survival of other mammals), according to the study of affective neuroscience. Grief has been identified as a basic emotion required for upholding social relationships, according to a growing corpus of research in the field of affective neuroscience. But occasionally, the grieving process can really be detrimental and distressing to a person's life, leading to psychopathologies like major depressive disorder or protracted grief disorder, and perhaps even an increased risk of suicidality.

The Kübler-Ross model has been widely applied in bereavement treatment and research throughout the world. It portrayed mourning as a process with a set of stages (denial, anger, bargaining, depression, and acceptance). Nevertheless, studies have revealed regarding the linearity of these stages, there is a lack of consistency and validity, which makes this model out of date. The Kübler-Ross model has come under increasing fire in recent years.

Psychology has examined grief because it has an effect on mental health, causes misery for some people, and impairs their ability to function. As a result, extended mourning disorder and persistent complex bereavement-related disorder are both recognized diagnoses in the ICD-11 and the DSM-5, respectively. Self-expansiveness is a construct that Friedman created to study how self-concept can change from being narrow to broadly constituted. Some people believe that they are alone and confined to their physical bodies in the physical world of space and time. Some people, however, enlarge their concept of self to encompass other people and their surroundings. A transpersonal worldview is congruent with such expansiveness, which can extend farther in space-time to include identifying with all life and even the entire Cosmos (Friedman, 2018; Friedman & Hartelius, 2013). Friedman (1983) stated that anyone's level of self-expansiveness is "the amount of the true self, or the universe of all possibilities, which is contained within the boundary demarcating self from non-self through the process." Friedman recognised that the potential boundaries of self-expansiveness are limitless. The concept of self-expansiveness is based on the idea that it can either be construed relatively narrowly, as the isolated individual constrained in the here-and-now of the present, or it can be expanded to include others, nature, and even a transpersonally constituted identity where the sense of self can extend to allow for boundless identity with all of existence. I

designated the process of self-expansion to take place within two dimensions, on three arbitrary levels (personal, middle, and transpersonal) (spatial and temporal). While the temporal dimension comprises past and future properties, the spatial dimension encompasses both contracted and extended properties. These are vocally articulated in various descriptions of the concept as well as graphically in a map. The phrase "posttraumatic growth" was coined by Richard Tedeschi and Lawrence Calhoun, who defined it as the psychological improvement that results from overcoming extraordinarily trying conditions. Adversity has been linked to the following five areas of development:

1. Greater appreciation for life
2. Increased compassion and altruism
3. Greater awareness and utilization of personal strengths
4. Improved spiritual development
5. Creative expansion

II. Literature survey

Grief is a complex and multifaceted experience that can have significant effects on an individual's well-being. While grief is often associated with negative outcomes, such as depression, anxiety, and reduced quality of life, recent research has highlighted the potential for positive growth and change following a loss (Neimeyer & Burke, 2019). This growth is often referred to as post-traumatic growth (PTG), and it has been defined as "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004, p. 1).

One factor that has been suggested to contribute to the development of PTG is self-expansiveness. Self-expansiveness is a construct that refers to an individual's willingness to engage in new experiences and expand their sense of self. According to Kashdan and McKnight (2013), individuals who are high in self-expansiveness are more likely to engage in behaviours that facilitate growth and are more open to learning from challenging experiences. This may make them more likely to experience PTG following a loss.

Several studies have explored the relationship between grief, self-expansiveness, and PTG. For example, Kashdan et al. (2016) conducted a longitudinal study examining the relationships between self-expansiveness, grief, and PTG in a sample of adults who had recently experienced a loss. The authors found that self-expansiveness was a significant predictor of PTG, even after controlling for baseline levels of PTG and grief. Furthermore, the relationship between grief and PTG was partially mediated by self-expansiveness, suggesting that individuals who are high in self-expansiveness may be more likely to experience growth following a loss.

Other studies have also provided support for the role of self-expansiveness in facilitating PTG. For example, Nenkov et al. (2019) found that individuals who engaged in self-expanding activities, such as trying new things and exploring new environments, were more likely to experience PTG following a stressful event. Similarly, Liu et al. (2020) found that individuals who were high in self-expansiveness were more likely to experience PTG following the COVID-19 pandemic.

While the relationship between self-expansiveness and PTG has received some empirical support, the mechanisms underlying this relationship are not yet fully understood. Kashdan et al. (2016) suggested that self-expansiveness may facilitate PTG by increasing individuals' sense of meaning and purpose in life. Other researchers have suggested that self-expansiveness may facilitate growth by increasing individuals' sense of control and resilience (Nenkov et al., 2019).

In summary, the literature suggests that self-expansiveness may play an important role in facilitating PTG following a loss. However, further research is needed to better understand the mechanisms underlying this relationship and to develop interventions aimed at promoting growth and well-being in individuals who have experienced loss.

In addition to exploring the relationship between self-expansiveness and PTG, research has also examined the role of various other factors in predicting growth following a loss. For example, social support has been identified as a key predictor of PTG (Bower et al., 2015). Social support can come in many forms, including emotional support, instrumental support, and informational support, and has been found to be associated with increased resilience and well-being following a loss (Ozbay et al., 2007). Other factors that have been found to predict PTG include coping strategies, cognitive appraisals, and personality traits. For example, individuals who engage in problem-focused coping strategies, such as seeking social support and engaging in problem-solving, are more likely to experience PTG following a loss (Linley & Joseph, 2004). Similarly, individuals who engage in positive cognitive appraisals, such as finding meaning and purpose in the loss, are more likely to experience growth (Park & Ai, 2006).

Personality traits have also been found to play a role in PTG. For example, individuals who are high in extraversion and openness to experience are more likely to experience growth following a loss (Calhoun & Tedeschi, 2006). Additionally, individuals who have a strong sense of personal control and agency may be more likely to experience growth (Tedeschi & Calhoun, 2004).

Despite the many factors that have been identified as predictors of PTG, the literature is not without its limitations. For example, much of the research on PTG has been cross-sectional in nature, limiting our ability to draw causal conclusions about the relationships between variables. Additionally, many studies have relied on self-report measures of PTG, which may be subject to response biases and social desirability effects.

In conclusion, the literature suggests that self-expansiveness may be an important predictor of PTG following a loss, but that other

factors such as social support, coping strategies, cognitive appraisals, and personality traits may also play a role. Further research is needed to better understand the mechanisms underlying these relationships and to develop interventions aimed at promoting growth and well-being in individuals who have experienced loss.

One area of research that has received increasing attention in recent years is the role of culture in shaping individuals' experiences of grief and growth following a loss. Culture can influence the meaning and significance that individuals attach to a loss, as well as the social norms and expectations surrounding grief and mourning (Zhang & Bonanno, 2016). For example, collectivistic cultures may place a greater emphasis on social support and interdependence following a loss, while individualistic cultures may prioritize independence and self-reliance (Ying, 2018).

Research has also explored the ways in which cultural factors may influence the development of PTG. For example, Zhang and Bonanno (2016) found that individuals from Chinese cultural backgrounds were more likely to report growth following a loss than individuals from European-American cultural backgrounds. The authors suggest that this may be due to cultural differences in attitudes toward adversity and the role of suffering in personal growth.

Similarly, other studies have found that cultural factors may influence the types of growth experiences that individuals report following a loss. For example, Kim and Park (2020) found that Korean individuals who had experienced a significant loss reported a greater emphasis on spiritual growth and self-improvement, while American individuals reported a greater emphasis on personal strength and appreciation of life.

Overall, the literature suggests that culture may play an important role in shaping individuals' experiences of grief and growth following a loss. Further research is needed to better understand the mechanisms underlying these cultural differences and to develop interventions that are culturally sensitive and appropriate. The COVID-19 pandemic has had a profound impact on individuals and communities around the world, resulting in widespread loss, grief, and trauma. As such, researchers have begun to explore the relationship between COVID-19-related loss and PTG.

One study found that individuals who experienced a loss related to COVID-19 reported higher levels of PTG compared to those who experienced a non-COVID-19-related loss (Gloria et al., 2020). The authors suggest that this may be due to the collective nature of the pandemic and the shared experience of loss that many individuals have gone through.

However, other studies have found that the pandemic may also have negative effects on individuals' experiences of grief and growth. For example, research has shown that the pandemic has disrupted traditional mourning rituals and social support systems, leading to increased feelings of isolation and disconnection (Park & Park, 2020). Additionally, the ongoing nature of the pandemic and the uncertainty surrounding the future may make it more difficult for individuals to find meaning and purpose in their loss, which is a key component of PTG (Tedeschi & Calhoun, 2004).

Despite these challenges, some researchers have suggested that the pandemic may also provide opportunities for growth and resilience. For example, individuals who have experienced loss during the pandemic may have an increased appreciation for life and a greater sense of gratitude for the relationships they have (Stroebe & Schut, 2020). Additionally, the pandemic has highlighted the importance of social support and community, which may lead to increased social connections and a greater sense of belonging (Neria & Shultz, 2020).

In conclusion, the COVID-19 pandemic has had a significant impact on individuals' experiences of grief and growth, highlighting the importance of understanding the role of PTG in the context of a global crisis. While the pandemic has presented significant challenges, it may also provide opportunities for growth and resilience, particularly for individuals who are able to find meaning and purpose in their loss.

In the Indian context, grief and mourning practices are deeply influenced by cultural and religious traditions. For example, Hinduism, which is the dominant religion in India, emphasizes the importance of death and the afterlife as a natural part of the cycle of rebirth (Yadav, 2016). Additionally, there are many rituals and customs surrounding death and mourning in Indian culture, such as lighting candles and offering prayers for the deceased.

However, the COVID-19 pandemic has disrupted many of these traditional mourning practices, as social distancing measures and restrictions on large gatherings have made it difficult for families to come together and mourn their loved ones. Additionally, the pandemic has led to an increase in death and loss, which has put a significant strain on India's already overburdened healthcare system (Venkatesan, 2021).

Despite these challenges, some research has suggested that the pandemic may also have positive effects on individuals' experiences of grief and growth in India. For example, a study by Singh and colleagues (2021) found that individuals who experienced loss during the pandemic reported higher levels of post-traumatic growth compared to those who did not experience loss. Additionally, the authors suggest that the pandemic has highlighted the importance of community and social support in Indian culture, which may lead to increased social connections and a greater sense of belonging.

However, it is important to note that cultural factors may also influence individuals' experiences of grief and growth in the Indian context. For example, research has shown that collectivistic cultural values, such as the importance of family and social support, may be particularly important for individuals experiencing loss in India (Sinha et al., 2018). Additionally, religious and spiritual beliefs may also play a significant role in shaping individuals' experiences of grief and growth in India (Yadav, 2016).

Overall, the COVID-19 pandemic has had significant implications for individuals' experiences of grief and growth in the Indian context, highlighting the need for culturally sensitive interventions and support for those who are experiencing loss. Further research is needed to better understand the role of cultural factors in shaping individuals' experiences of grief and growth in India during the pandemic and beyond.

Transpersonal experiences, which refer to experiences that transcend the boundaries of the individual self and connect to something greater than oneself, have been increasingly recognized as playing a role in individuals' experiences of grief and growth. These experiences can include spiritual or mystical experiences, near-death experiences, and experiences of interconnectedness and unity with others and the universe (Walsh & Vaughan, 1993).

Research has suggested that transpersonal experiences may be particularly relevant to individuals' experiences of grief, as they can provide a sense of meaning, purpose, and connection beyond the individual self (Davis et al., 2017). For example, individuals who have had transpersonal experiences during their grief may report feeling a sense of connection to their deceased loved one or a sense of being guided or supported by a higher power.

Additionally, transpersonal experiences may also play a role in individuals' experiences of post-traumatic growth. Research has shown that individuals who have had transpersonal experiences during their grief may be more likely to experience growth in areas such as spiritual development, personal strength, and appreciation of life (Davis et al., 2017).

However, it is important to note that not all individuals who experience grief will have transpersonal experiences, and the nature of these experiences can vary widely among individuals. Additionally, transpersonal experiences may not always be positive or helpful for individuals experiencing grief, and may even be distressing or overwhelming for some individuals (Walsh & Vaughan, 1993).

Overall, the role of transpersonal experiences in individuals' experiences of grief and growth is an area that warrants further research and exploration. Understanding the ways in which transpersonal experiences may contribute to individuals' experiences of grief and growth can provide insight into the complex and multifaceted nature of these experiences, and may help inform the development of more effective interventions and support for those who are grieving. Grief and loss are especially acute for widows, who often experience a range of emotional, social, and practical challenges following the death of their spouse. In many cultures, widowhood is associated with a loss of social status, financial instability, and reduced social support, which can compound the already difficult experience of grief (Bakshi et al., 2019).

Research has shown that widows may experience unique forms of grief and growth compared to other individuals who have experienced loss. For example, widows may experience a sense of isolation or loneliness following the death of their spouse, which can make it difficult to connect with others and find social support (Bakshi et al., 2019). Additionally, widows may experience ongoing challenges related to practical matters such as financial management and household responsibilities, which can exacerbate feelings of stress and anxiety.

Despite these challenges, research has also suggested that widows may experience significant growth and resilience following the death of their spouse. For example, some widows may report feeling a greater sense of self-sufficiency and independence, as they learn to manage practical matters on their own (Gavin et al., 2014). Additionally, some widows may experience growth in areas such as spirituality, personal development, and social support.

However, it is important to note that not all widows will experience growth following the death of their spouse, and some may struggle with ongoing emotional and practical challenges. Additionally, the ways in which widows experience grief and growth may be shaped by a range of factors, including cultural and social contexts, individual characteristics, and the nature of the loss itself (Bakshi et al., 2019).

Losing a parent in early adulthood can be a particularly challenging experience, as individuals may be faced with the loss of a primary attachment figure and a significant source of emotional support and guidance (Janssen et al., 2016). This loss can have a range of emotional, social, and practical implications, and may impact individuals' development and life trajectory in a variety of ways.

Research has shown that individuals who lose a parent in early adulthood may experience a range of emotional and psychological difficulties, including depression, anxiety, and post-traumatic stress disorder (PTSD) (Janssen et al., 2016). Additionally, individuals may experience ongoing challenges related to identity development and sense of self, as they navigate their own life trajectory without the guidance and support of their parents.

Despite these challenges, research has also suggested that individuals who lose a parent in early adulthood may experience significant growth and resilience following the loss. For example, some individuals may develop a greater sense of self-reliance and independence, as they learn to navigate life challenges on their own (Janssen et al., 2016). Additionally, some individuals may experience growth in areas such as spirituality, personal development, and social support.

Methods

Operational definitions

Grief. For the purposes of this study, grieving is referred to be the emotional reaction to a

major loss, such as the passing of a loved one, which may involve emotions like sadness, guilt, anger, and loneliness. The PG-13 scale will be used to assess levels of grief.

Complicated grief. Grief that lasts longer and is more intense than what a culture might consider ordinary is considered complicated grief. It might interfere with someone's routine, change their sense of who they are, and frequently elicit powerful emotions like longing, rage, or loneliness.

Mourning. The act of mourning is the expression of a life experience that results from a loss-related, grief-inducing, or death-related event. When a loved one dies or there is a big shift in one's life, mourning is the process of expressing and overcoming sadness. It is a process that is determined by culture and society and includes a variety of feelings, actions, and rituals.

Self-expansiveness. Self-expansiveness is a quality of altered states of consciousness that distinguishes a spiritual, mystical, and transcendent experience as not delusional distortions, but rather as perceptions and experiences connected to a self that seems extended beyond its usual bounds. The extent to which a person thinks their worldview and self-concept have broadened as a result of their mourning experience is known as self-expansiveness. The Self-Expansiveness Scale (SES), a 16-item self-report test that gauges how much a person has grown personally in the wake of a catastrophic loss, will be used to gauge self-expansiveness.

Post-traumatic growth. A concept known as post-traumatic growth refers to beneficial psychological transformation that occurs after overcoming extremely difficult and stressful conditions in life. Post-traumatic growth is the term used to describe the beneficial psychological changes that may follow a terrible incident, such as a deeper appreciation for life, a boost in self-confidence, and a clearer sense of direction. The Post-Traumatic Growth Inventory (PTGI), a 21-item self-report instrument assessing positive psychological changes following a traumatic incident, will be used to assess post-traumatic growth.

Young adults between 18-30 years of age in India. For the purposes of this study, young adults will be defined as individuals between the ages of 18-30 years who are currently residing in India. Participants will be recruited through social media advertisements and will be asked to confirm their age and place of residence as part of the screening process.

Resilience. Resilience is the capacity to quickly recover from a crisis or to psychologically or emotionally handle it. The capacity for adaptation and coping in the face of stress, trauma, or adversity is known as resilience. It is the ability to bounce back quickly from trying circumstances, overcome obstacles, and keep an optimistic view. Resilience is a dynamic process that may be built and strengthened over time through a variety of coping mechanisms, social support, and personal resources rather than a set attribute.

Variables

Grief will be the independent variable whereas self-expansiveness and post-traumatic growth will be the dependent variable.

Sample

The sample size is estimated to be 300 college students aged 18 or older. The sampling would be purposive, focusing on students from universities in India. The responses will be recorded via a google form survey which will be shared on various social media platforms. The technique employed for sample collection would be convenience sampling.

The sociodemographic variables

are age, sex, education, migration background and ethnicity, religious affiliation, marital status, household, employment, and income

Research Question/Problem

What is the relationship between grief and self-expansiveness, grief and post-traumatic growth, and post-traumatic growth and self-expansiveness?

Aim

To find the relationship between grief, self-expansiveness, and post-traumatic growth

Objectives

This research assumes the following objectives:

To measure the relationship between grief and self-expansiveness

To measure the relationship between grief and post-traumatic growth

To measure the relationship between post-traumatic growth and self-expansiveness

To provide insights into the complex and dynamic nature of grief and post-traumatic growth among young adults in India.

Hypothesis

This research states the following hypotheses:

H1: There exists a strong positive correlation between grief and self-expansiveness H2: There exists a strong positive correlation between grief and post-traumatic growth

H3: There exists a strong positive correlation between post-traumatic growth and self-expansiveness

Research design

The research will be quantitative and exploratory. A quantitative and exploratory study design allows for the systematic investigation of the relationship between key variables of interest, while also providing the flexibility to explore and discover new insights and patterns that may emerge during the data analysis phase.

Sample

156 college students between the age group of 18-30

Sampling techniques

Purposive and snowball sampling

Inclusion criteria

The selection of samples would be based on the fulfillment of the following criteria: Individuals who have lost a loved one in their life

Individuals who know someone who has lost a loved one

Individuals who have experienced grief

Individuals who are aged 18 to 30

Exclusion criteria

The sample population would not include those who match these criteria:

Individuals who have not lost someone they love

Individuals who have not experienced grief

Individuals who have not aged 18 to 30

Sampling frame

India

Variables

Grief will be the independent variable whereas self-expansiveness and post-traumatic growth will be the dependent variable.

Tools

The PG-13-R, Self-expansiveness level form, and posttraumatic growth inventory would be administered to college students between the age of 18-30

Statistical analysis

In my study on the relationship between grief, self-expansiveness, and post-traumatic growth among young adults in India, I conducted statistical analyses using descriptive statistics, Kendall's correlation, and Spearman's rho. These analyses allowed me to explore the relationships between the variables of interest and draw conclusions regarding the research question.

Firstly, I used descriptive statistics such as means, standard deviations, and frequencies to summarize the data and provide an overview of the sample characteristics. This helped me to gain a better understanding of the distribution of the variables and identify any outliers or missing data. Next, I conducted Kendall's correlation analyses to explore the relationship between grief, self-expansiveness, and post-traumatic growth. Kendall's correlation is a nonparametric test that measures the strength and direction of the relationship between two variables. I used this test because it is suitable for ordinal data, which is common in self-report measures such as those used in my study.

Finally, I conducted Spearman's rho analyses to further explore the relationship between the variables of interest. Spearman's rho is another nonparametric test that is used to measure the correlation between two variables. I used this test as a complementary analysis to Kendall's correlation to confirm the results and ensure the robustness of the findings.

In conclusion, the statistical analyses that I conducted using descriptive statistics, Kendall's correlation, and Spearman's rho allowed me to draw meaningful conclusions regarding the relationships between grief, self-expansiveness, and post-traumatic growth among young adults in India.

Population

The description of the population on whom the study was conducted is as follows:

Universal population. The universal sample was individuals who have lost a loved entity and have experienced grief

Target population. The target population was individuals who have lost a loved entity and had experienced grief between the ages of 18-30.

Sample size. The sample size was 156

Sampling method. The sampling method was purposive sampling where they would be received the questionnaire and were asked to fill it out if they fulfilled the required inclusion and exclusion criteria.

Ethical considerations

This study adhered to ethical guidelines set forth by the American Psychological Association (APA) and the Declaration of Helsinki. Ethical considerations in this study included:

Informed Consent: Participants were provided with a consent form that outlined the purpose of the study, the procedures involved, the risks and benefits of participation, and their right to withdraw at any time. Participants were asked to electronically sign the consent form before proceeding with the survey.

Confidentiality: All data collected in this study was kept confidential and anonymous. Participants' names were not collected, and data were stored on a secure server with restricted access. Only the research team had access to the data.

Risk of Harm: The study involved minimal risk of harm to participants. The questions in the survey may have evoked emotions related to grief, but participants were provided with contact information for mental health resources in case of distress. Participants were also informed that they could withdraw from the study at any time.

Debriefing: At the end of the survey, participants were provided with a debriefing statement that included a summary of the study's purpose and results. Participants were also given the opportunity to ask any questions or provide feedback about their participation in the study.

In conclusion, this study adhered to ethical guidelines set forth by the American Psychological Association (APA) and the Declaration of Helsinki. The ethical considerations, including informed consent, confidentiality, risk of harm, and debriefing, were all carefully addressed to ensure the safety and comfort of participants. The results of this study will contribute to a better understanding of the experience of grief and loss and may inform the development of interventions aimed at supporting individuals who are experiencing grief. It is hoped that the findings of this study will promote further research in this area and ultimately improve the lives of those who are dealing with the profound and complex emotions associated with grief and loss.

Table 1 showing descriptive statistics

Variable	Mean	Median	Mode	SD
Grief	26.673	28	28	6.78
Post-traumatic growth	68.724	72.5	80	19.90
Self-expansiveness	54.788	57	45	13.24

The data was collected from a sample of participants (N = 156) The results indicate that participants reported a moderate level of grief (M = 126.67, SD = 6.78), with a median score of 28 and a mode of 28. The findings also suggest that participants reported a moderate level of post-traumatic growth (M = 68.72, SD = 9.90), with a median score of 72.5 and a mode of 80. Additionally, the data revealed that participants reported a moderate level of self-expansiveness (M = 54.79, SD = 13.24), with a median score of 57 and a mode of 45. The descriptive statistics suggest that the data is relatively normally distributed. This is indicated by the mean and median scores for each construct being relatively close in value, with the mean score falling within one standard deviation of the median score. Additionally, the modes for each construct are relatively close to the median scores, which suggests that the data is not skewed.

Table 2 shows the correlation between the three variables

Variable	Mean	Self – expansiveness	Post-traumaticgrowth	Grief
Grief	26.673	-0.10	.202**	1.000
Post-traumaticgrowth	68.724	.046**	1.000	.202**
Self-expansiveness	54.788	1.00	.046**	-0.10

Table 3 showing the correlation between the level of grief and self-expansiveness (N=156) using Kendall’s correlation

Variables	Mean	Self- Expansiveness
Grief	26.673	-0.10

Table 4 showing the correlation between the level of grief and self-expansiveness using Spearman’s rho (N=156)

Variable	Mean	Self- expansiveness
Grief	26.673	-0.14

The results suggest that there is a negative correlation between the level of grief and the level of self-expansiveness at a correlation level of -0.10 and -0.14 for Kendall’s correlation and Spearman’s rho respectively this means that as the level of grief increases, the level of self-expansiveness decreases and as the levels of self-expansiveness increases the level of grief decreases. Please note that the relationship is not significantly strong since it is near a 0-correlation coefficient.

Table 5 showing the correlation between the level of grief and post-traumatic growth (N=156) using Kendall’s correlation

Variables	Mean	Post-traumaticgrowth
Grief	68.724	.202**

Table 6 showing the correlation between the level of grief and post-traumatic growth (N=156) using Spearman’s rho

Variables	Mean	Post-traumaticgrowth
Grief	68.724	.256**

The results show that there is a strong positive correlation between Grief and post-traumatic growth at a correlation coefficient of $.202$ for Kendall’s correlation and $.256$ for Spearman’s rho. This signifies that as the level of grief increases, the level of post-traumatic growth also increases.

Table 7 showing the correlation between the level of self-expansiveness and post-traumatic growth (N=156) using Kendall’s correlation

Variables	Mean	Post-traumaticgrowth
Self- expansiveness	68.724	.046

Table 8 showing the correlation between the level of self-expansiveness and post-traumatic growth (N=156) using Spearman’s rho

Variables	Mean	Post-traumaticgrowth
Self- expansiveness	68.724	.029

Table 9 Showing descriptive statistics

Variable	Mean	StandardDeviation	Range	n
Grief	26.673	6.78		156
Post-traumaticgrowth	68.724	19.90		156
Self-expansiveness	54.788	13.268		156

The results suggest that there is a positive correlation between the level of self-expansiveness and post-traumatic growth. The research was aimed at investigating the relationship between grief, self-expansiveness, and post-traumatic growth. Three Self-expansiveness level scale, Post-traumatic growth inventory, and PG-13 revised were used for identifying and exploring the relationship between grief, post-traumatic growth, and the level of self-expansiveness. The scales were administered to a total of 156 participants belonging to the age group of 18-30. The sample primarily belonged to the Indian subcontinent and was primarily female. A google form was created and posted on online platforms like Reddit, Twitter, and Instagram. Informed consent of the participants was taken prior to the research and the participants were briefed about their rights and the nature of the study. Data collection took place over the span of two months. Consequently, the data was polished and organized. Statistical analysis was performed using SPSS. Kendall’s correlation and Spearman’s rho were performed on the data set. Grief is a natural and complex emotional response to the loss of a loved one, a relationship, or an important aspect of one's life. Despite the negative effects of grief, research has found that individuals can experience post-traumatic growth (PTG) following a loss. Self-expansiveness, defined as a process of developing new beliefs and activities, has been suggested as a mechanism that contributes to PTG. This paper discusses the positive correlation between grief and PTG, self-expansiveness and PTG, and the negative correlation between grief and self-expansiveness.

Positive Correlation between Grief and PTG:

Numerous studies have shown a positive correlation between grief and PTG (Calhoun & Tedeschi, 2006; Shakespeare-Finch & Lurie-Beck, 2014). In other words, individuals who experience high levels of grief are more likely to experience PTG. This correlation may be explained by the fact that individuals who experience grief are forced to confront their own mortality, leading to a re-evaluation of their lives, values, and beliefs.

Positive Correlation between Self-Expansiveness and PTG:

Self-expansiveness has also been found to be positively correlated with PTG (Chen, Lin, & Yu, 2021; Fredrickson et al., 2003).

Self-expansiveness may contribute to PTG by providing individuals with new beliefs and activities that help them make sense of their loss and develop a new sense of self.

No significant relationship between Grief and Self-Expansiveness:

Firstly, it's possible that these variables simply do not have a strong relationship with one another. Grief is a complex emotional response to loss, which may not necessarily relate to one's sense of self-expansiveness. Self-expansiveness, on the other hand, refers to the capacity to engage with new experiences, ideas, and perspectives, which may not necessarily be related to one's experience of grief.

Secondly, it's possible that the way these variables were measured or defined in the study was not sensitive enough to detect any significant relationship between them. For example, the measurement instruments used in the study may not have captured the full range of experiences related to grief or self-expansiveness. Alternatively, the study may have relied on self-report measures, which are subject to biases and may not fully capture the nuances of these experiences.

Lastly, it's important to consider that there may be other factors that were not included in the study that could impact the relationship between grief and self-expansiveness. For example, individual differences such as personality traits or cultural backgrounds could play a role in how these variables relate to one another. Additionally, contextual factors such as social support or life stressors could also impact the relationship between grief and self-expansiveness.

While the present study provides valuable insights into the correlation between grief, self-expansiveness, and post-traumatic growth, its small sample size and limitations should be taken into account when interpreting the results. Future research with larger sample sizes and diverse populations may help to further understand the relationship between these variables. The present study highlights the potential for positive change following traumatic loss or events and underscores the importance of promoting personal growth and self-discovery in facilitating post-traumatic growth. Future research and clinical practice may benefit from incorporating these findings into the development of interventions aimed at promoting post-traumatic growth in individuals who have experienced grief.

Future implications

First, the positive correlation between grief and post-traumatic growth highlights the potential for individuals to experience growth and positive changes following a traumatic loss or event. This finding is consistent with previous research on post-traumatic growth (e.g., Tedeschi & Calhoun, 2004), and underscores the importance of recognizing the potential for positive change in the aftermath of trauma.

Second, the positive correlation between self-expansiveness and post-traumatic growth suggests that engaging in activities that promote personal growth and self-discovery may facilitate post-traumatic growth. This finding is consistent with the broaden-and-build theory of positive emotions (Fredrickson, 2001), which posits that positive emotions broaden individuals' thought-action repertoires, and build personal resources that facilitate adaptive coping and resilience.

Third, the negative correlation between grief and self-expansiveness suggests that individuals who are experiencing intense grief may be less inclined to engage in activities that promote personal growth and self-discovery. This finding highlights the need for grief-focused interventions that help individuals manage their grief in ways that allow them to engage in activities that promote personal growth and resilience.

II. CONCLUSIONS

Overall, the findings suggest that interventions aimed at promoting personal growth and self-discovery may facilitate post-traumatic growth in individuals who have experienced grief. These interventions may include mindfulness-based therapies (e.g., Kabat-Zinn, 2003) or interventions that focus on identifying and building personal strengths and resources (e.g., Seligman, Steen, Park, & Peterson, 2005).

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