

Decoding The Emotional Landscape of Grief: Behavioural, Neural and Cultural Perspectives

Srishti Tripathi

Introduction

Grief is a natural reaction after losing a loved one, but it's never an easy experience to go through. While it is a natural part of the human experience, it remains complex and difficult to navigate. Despite the inevitability of death and the widespread experience of grief, our scientific understanding of this emotion is still limited. Most emotion research has traditionally centered on emotions such as happiness, anger, and sadness, often subsuming grief under the category of sadness. However, emerging perspectives suggest that grief may constitute a distinct basic emotion in its own right. In light of this, the present study sought to investigate grief as a unique emotional construct, distinct from sadness, by drawing on behavioral data, neurobiological evidence, and cultural insights. Mainly the thesis is structured around three central questions: 1) can grief be classified as a basic emotion? 2) how does grief differ from sadness in perception and underlying neural processing? 3) how grief severity and screening for PGD can be reliably measured in non-WEIRD (Western, Educated, Industrialized, Rich, and Democratic) contexts (India)? Each question addressed in a dedicated chapter using theoretical, empirical, and applied approaches.

Methods

Chapter 2 is centered on the question whether grief can be classified as a basic emotion? To answer this, I synthesized behavioral, neurological, and cross-cultural evidence to argue for grief's classification as a basic emotion. Chapter 3 empirically investigates how does grief differ from sadness in perception, and neural processing across cultures? While 21 participants from Asian and Western cultural background categorized sad facial expressions preceded by grief-related (e.g., graveyards) or neutral contextual primes, brain activity was recorded using functional near-infrared spectroscopy (fNIRS). Measures included explicit (valence, arousal ratings) and implicit (reaction times and brain activity) responses. Chapter 4 addresses the critical gap in culturally appropriate assessment tools for PGD in non-WEIRD contexts, with a focus on the India, where cultural and linguistic diversity significantly influences grief expression. To address this issue, I identified the need for a linguistically and contextually relevant tool and subsequently developed and validated a Hindi version of the Traumatic Grief Inventory–Self Report Plus (TGI-SR+) for use among Hindi-speaking individuals, the third most spoken language globally. The instrument was administered to a sample of 137 bereaved participants. Psychometric evaluation involved confirmatory factor analysis to assess the tool's structural validity, and its reliability and concurrent validity were examined by correlating scores with established measures of psychological distress, including the Depression Anxiety Stress Scales (DASS-21) and the PTSD Checklist (PCL-5).

Results

Chapter 2 identified grief as fulfilling key criteria for basic emotions: universal elicitors (e.g., interpersonal loss), present in other non-human primates, distinct behavioral, physiological and neural markers, and adaptive social functions. Results of Chapter 3 showed that while explicit behavioral ratings (valence, arousal) showed no differences, but implicit measures—reaction times—highlighted faster response for grief condition images. Neuroimaging data identified increased oxyhemoglobin in the right dorsolateral prefrontal cortex (DLPFC) during grief conditions, implicating this region in grief-specific emotion processing. Cultural variations emerged, with Asian participants exhibiting heightened DLPFC activity for grief stimuli, underscoring sociocultural influences on emotion processing. Further, results of Chapter 4 demonstrated strong psychometric properties for the Hindi TGI-SR+, including high internal consistency and significant correlations with psychological distress measures. The tool effectively captured PGD in a culturally sensitive manner.

Discussion

Collectively, these findings advance our understanding of grief by demonstrating its status as a basic emotion, its neural and perceptual distinction from sadness, and the importance of culturally sensitive assessment tools. By synthesizing behavioral, neurological, and cross-cultural evidence, this thesis challenges the traditional exclusion of grief from basic emotion theories and highlights its universal triggers, unique neural signatures, and adaptive social functions. The empirical differentiation between grief and sadness—both in implicit processing and neural activation, particularly within the right dorsolateral prefrontal cortex—underscores the need to treat grief as a distinct affective state rather than a subset of sadness. Furthermore, the observed cultural variations in neural responses emphasize that sociocultural context shapes grief emotion perception, reinforcing the necessity for culturally tailored research and clinical practices. The successful development and validation of the Hindi TGI-SR+ provide a robust, reliable tool for assessing Prolonged Grief Disorder in Indian populations, addressing a significant gap in global mental health diagnostics. Together, these studies not only broaden the theoretical framework for understanding grief but also offer practical implications for emotion research, cross-cultural psychology, and the development of targeted interventions for grief-related disorders.

Conclusion

This thesis redefines grief by establishing its theoretical, neurobiological, and clinical distinctiveness. By identifying grief as a basic emotion, differentiating it from sadness through empirical data, and developing a culturally validated assessment tool, the research contributes to more inclusive models of emotion and advances culturally equitable mental health care.